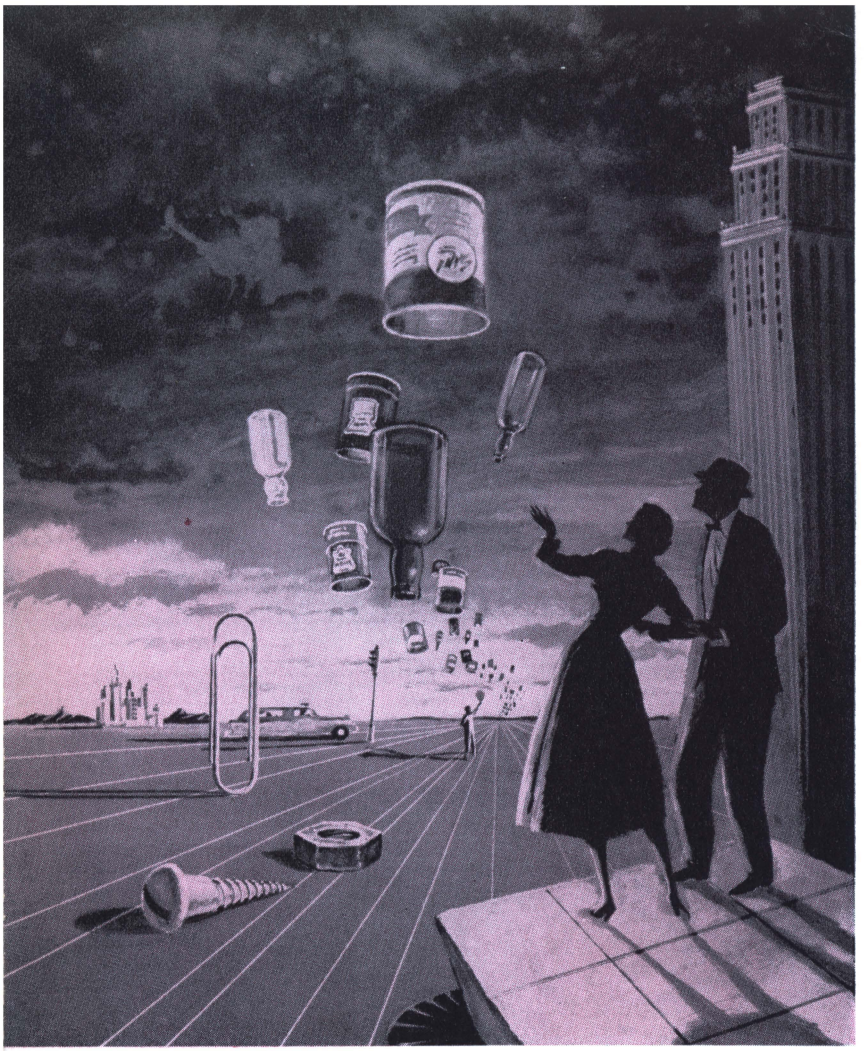
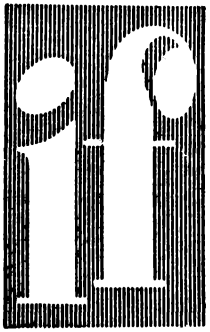

if
WORLDS OF
SCIENCE FICTION
JUNE 1955
35 CENTS
THE
STRANGERS
By ALGIS BUDRYS



PREVIEW—What happens when billions of minute metal particles start "bleeding" back from the fourth dimension, perforating with fatal results the population of America? The above reproduction (black on red tint) is made from the full color cover painting, by Kenneth Rossi, which illustrates a scene from the story BLEED-BACK, by Winston Marks. This splendid satire of a problem of mysterious magnitude which is finally solved by simplicity itself is in the next issue of IF. Watch for this unusual cover, in full color, on your nearest newsstand.



WORLDS of SCIENCE FICTION

JUNE 1955

All Stories New and Complete

Editor: JAMES L. QUINN

Assist. Editors: EVE WULFF, ROBERT W. GREENE

Art Editor: ED VALIGURSKY

NOVELETTES

SHORT STORIES

FEATURES

COVER:

By Kelly Freas: illustrating "The Strangers"

IF is published bi-monthly by Quinn Publishing Company, Inc. Volume 5, No. 4. Office of publication, 8 Lord Street, Buffalo, New York. Entered as Second Class Matter at Post Office, Buffalo, New York. Subscription $3.50 for 12 issues in U.S. and Possessions; Canada $4 for 12 issues; elsewhere $4.50. Allow four weeks for change of address. All stories appearing in this magazine are fiction; any similarity to actual persons is coincidental. Not responsible for unsolicited artwork or manuscripts. 35c a copy. Printed in U.S.A.

EDITORIAL AND BUSINESS OFFICES, KINGSTON, NEW YORK

Next issue on sale June 14th

A CHAT WITH THE EDITOR

NEWS ABOUT science fiction conventions all over the country has been flowing across our desk in an almost continuous stream ever since we started IF. Seems as though there are people everywhere who are really inveterate science fiction hobbyists, and they really go all out for it in more ways than just reading the stuff. The favorite gambit at these shindigs seems to be the auction at which fans vie with each other to bid for mint copies of some magazine, or an original illustration or manuscript. The fans are really out to add to their collections, and woe betide the guy or gal who tries to beat them out of the one particular cover or illo that they want.

On second thought that kind of enthusiasm isn't surprising—recent surveys show that "hobbying" (to coin a word) is the nation's biggest industry. Sounds absurd, doesn't it? But in a broad sense the "big" industries—steel, transportation, communication, construction, etc., all have to take a back seat. Of course, anything that diverts your mind and gives you mental and physical stimulation or relaxation is a hobby—whether it be sport cars, do-it-yourself, collecting science fiction illustrations or bird watching. And taken in the aggregate it is physically and morally a bigger industrial giant than any listed on the stock exchanges.

NO OTHER NATION in the world has so many ways to relax and so much leisure time to relax as we do. Here in America the poorest man as well as the richest can take some time out to get his mind off business or personal problems—if he wants to. Which is one of the reasons that we have the strongest nation the world has ever seen. A nation that can relax, can rebound; a man with a hobby or two to relax him now and again isn't so brittle that he'll crack when tension is applied.

This "hobbying" really makes for a titanic industry. According to recent figures, the do-it-yourself business alone has grown to something like $6,000,000,000 annually. That's six billion bucks spent during the past year for tools and gimmicks to make home-made chairs, tables, doll houses, doghouses, playroom bars, etc. Hardware manufacturers, paint makers, building material fabricators provide the materials and even produce "do-it-yourself" kits for the hobbyist who likes to work with wood and metal. More millions have gone into a rash of publica-

tions that have sprung up like mushrooms around this business. They give you simplified directions, advise you what tools you need, advise you on technique and even provide patterns and blueprints for anything from a shoeshine box to a ten room house. Industrial exhibits put on for do-it-yourself enthusiasts draw millions of viewers every year.

So, despite the fact that we might wind up by having the carpenter, electrician, plumber or mason to do it all over again—that's beside the point; at least we have had the fun of monkeying with it ourselves. Sure, some folks spend a hundred or two hundred bucks for tools and make something they couldn't get 38 cents for—but it was a lot of fun and diverted the tensions for a while.

A guy can spend a lot of dough for fishing equipment and fish for two or three years before he catches enough fish to make a healthy breakfast—but ask any fisherman if he can count his fun by the number of fish he caught. The same is true of those who hunt, or play golf, or collect butterflies, or do crossword puzzles. I know someone who collects the covers on paper matches—does it with a passion—and it's a really fascinating collection. You never knew so many different messages and pictures could be put on match book covers. And this person, who spends very little now and then for scotch tape and loose leaf sheets, gets as much kick out of this collection, which comes from all over the world, as the man who spends thousands of dollars on his gun collection. My wife collects miniature porcelain rabbits and I've found out that the porcelain type is darn near as prolific as the meat and fur type. If you think about it for a minute you'll realize that almost everyone you know collects something . . . from buttons to furniture.

BUT THE IDEA of this isn't to enumerate hobbies or the expenses involved. The point is that a hobby, or some form of relaxation, is important business and, what's more vital, is excellent and important therapy for all of us who live in a tense world. Discuss a person's hobby and watch him glow, watch the animation that lights his face whether he's listening or talking. Try a business conversation gambit with a stranger on a train and the fountain of talk dries up pretty fast; he's relaxing at the moment and doesn't want to get tied up in mental knots or petty shop talk. Look around, take stock of some of the folks you know both socially and in a business way . . . we'll wager a "do-it-yourself" kit that the cranks, the malcontents are the ones who haven't got a hobby.

So, three bows to the hobby industry, may it grow even bigger and bigger. Its products are probably the closest thing to a cure-all that Mankind has yet come across. The relaxation afforded by a change of pace in thinking, in physical effort, in mental approach, makes America and Americans healthier—in every way. —jlq

BY ALGIS BUDRYS

THE STRANGERS

Though he had been molded, he had also been broken. Yet, as they laughed at him, they feared him—for they shared a knowledge he didn't know he possessed.

SPENCER set the ice-filled glass back on the bar and flicked the two bent and sodden straws that hung over the lip. "Happy Birthday to me," he whispered to himself, and hit the straws so sharply that they danced halfway around the inside of the glass.

So much for the past twenty-four years. Eighteen years of having it good, six of having it bad.

He raised a finger at the bartender and pushed his glass forward. The man nodded and began to mix a fresh drink.

Six years of being half a man. After eighteen years of training to be something more than a man.

Spencer hitched his bad leg awkwardly around on the stool, fumbling in his pockets for a match.

"Mr. Laban is dead, I'm afraid." The voice was quiet, but firmly modulated—the voice of that rare

Illustrated by Kelly Freas

animal, the trained elocutionist.

Or the operatic singer, Spencer thought inanely as his head snapped around and he looked at the man who suddenly sat beside him.

His hair was gray—prematurely so, to judge by his tanned, lean face, which was neither lined nor rough-skinned. His eyes sparked with the poise and confidence implicit in the graceful carriage of his body. He was not consciously drawn up for inspection. He simply radiated unshakable grace and capability.

"How do you know and how'd you find me?" Spencer demanded.

The man reached out, metal glittering in his tapered fingertips, and lit Spencer's cigarette. "He died of a heart attack early this morning."

For the first time, Spencer realized how much alcohol was at work in his system. He was finding it difficult to concentrate. Sustained thought was impossible.

"What's your name, fellow?" he asked harshly.

The graceful man smiled. "It doesn't mean anything to you? Mr. Laban's death?"

"What kind of a question is that? Of course it means something—if it's true. I knew him for a long time. He did a lot for me. I'm as human as the next guy."

The man raised his eyebrows in polite arches. "Ah?" Then he smiled fleetingly. "I'm sorry. You seem to have misunderstood my meaning." He laughed—a surprisingly bass sound that filled the small bar for a brief moment, dying out before it attracted attention. "All right," he said as though something Spencer said had pleased him very much "Good night." He slipped off his stool.

"Wait a minute! Where's his body?"

The graceful man shook his head. "I don't know. I don't suppose it really matters." He stepped away, and with a wave of his hand, was gone up the shadowy stairs to the street.

Spencer looked after him, frowning. He shook his head sharply to wipe some of the fog out of his forebrain and half pushed himself off his stool, but the bartender touched his arm.

"Your drink, sir."

"Uh? Oh, thanks—what do I owe you?"

He gulped the drink while the bartender made change, and got up the stairs as rapidly as he could, but the graceful man was out of sight by then.

Spencer cursed his drinking. He'd picked a fine time.

On the other hand, if he hadn't been in the bar, the graceful man wouldn't have found him.

That seemed a thin thesis, somehow. Very thin. The man had found him here—he could have found him anywhere else.

Spencer couldn't decide what to do now. All his thought processes seemed trapped in some maze that let them scurry around and around, with never a clear channel in which to flow. And now the complicated emotions of grief, regret, and remembrance, with their attendant hosts of bitterness, were

crowding into the maze, leaving no room for anything more.

He wondered, fleetingly, what the graceful man's purpose might have been, but he had to let that curiosity pass for the moment. In any case, whatever the graceful man had been trying to accomplish, he had failed.

Except that he hadn't seemed disappointed. On the contrary.

Spencer frowned again. He threw away his cigarette and lit a fresh one. Walking awkwardly, lost in thought, his shoe-sole slurring on the sidewalk, he made his way down the dark street.

HE FOUND himself on a bench in Washington Square.

Let us go back, he thought as he leaned his forehead on his palms. *Let us review the case.*

> Westen Hillyard Spencer, b. 1/9/32, d.?
> Hgt: 5′, 11″ Wght: 178 lb.
> Eyes: brwn. Hair: blonde.
> Legs: 1½
> Distinguishing Marks: Extreme scarification of the ideals; Deformation of the soul.

He coughed smoke out of his raw throat and smiled sardonically. He was going to hate himself in the morning.

"Which," he said aloud to the Borough of Manhattan, "is not strictly unprecedented."

On three drinks?

His forehead knotted convulsively. It had been only three, hadn't it? What was happening to his liquor capacity?

But his consciousness was drifting away from his surroundings and he was surrendering to the tide of memory.

Mr. Laban had been a strange man. Where had he come from? Spencer frowned as he tried to remember the answer and could not find it. It seemed as though his family had always known the carefully-dressed man with the gold-headed stick which he carried almost like a sword, and behind whose eyes burned the unusual fire of some extraordinary drive. Certainly, he had been a visitor in the Spencer home since the beginning of Westen's memories.

No—Mr. Laban had certainly visited the Spencer home, but he was not a visitor, in the ordinary sense of the word. Nor was it Westen's parents that he came to see. But there seemed no adequate way of describing precisely what that complicated relationship between them had been.

His visits had been all alike, no matter where the Spencers happened to be living. Unannounced and unexpected, there would be the thump of the stick on the doormat, and then the knock on the door. . .

"George! It's Mr. Laban!" His mother's voice—suddenly tense and uneasy.

"I heard it!" His father—suddenly irritated. Then his father's sigh, and a look of resignation crossing his features. "You want to

answer it, Madge?"

"Can't you? Just this once? I mean. . . I'm wearing this awful apron—"

And his father would sigh once more, and go to the door where Mr. Laban waited without knocking again, as if sure there was someone coming to let him in, as there always was. And his mother would dart into the kitchen. Sometimes, she didn't come out until Mr. Laban was gone. If Mr. Laban ever noticed her absence, or overheard the fretful discussion that followed his knock, he gave no sign of it.

George Spencer would open the door.

"Hello, George, how are you?" Mr. Laban's voice was a deep, confident bass, resonant with vigor and self-assurance. "Is Westen at home?"

"Hello, Mr. Laban. Yes, he's home." Westen noticed that his father never added that, somehow, Westen was always at home when Mr. Laban came. He merely took Mr. Laban's hat and stick, and then called: "Westen! Wes! Mr. Laban's here." Westen always knew it was Mr. Laban as soon as he heard the thump of the stick outside the door. He would come into the parlor, where Mr. Laban was standing in the middle of the rug, smiling and waiting for him.

Then, out of Mr. Laban's pockets would come the candy bars and the bright packages of chewing gum—"Mind, Westen, save the wrappers to throw the gum away in."—and the shining half-dollars —"I won't have time to stay and take you to the movies, Westen, but *Great Expectations* is playing downtown, and I'd like you to see it. See what you can learn from it. If you like it, go down to the library afterwards and borrow the book. There are some valuable things in it—some very valuable things."

He had never been sure of how he really felt about Mr. Laban. Mr. Laban was like aunts and uncles—he was there, and he was thereby unquestionable. It was a long time before he even began to wonder why, if his parents were so upset by Mr. Laban's visits, those visits continued. But, all through his youth, it was a part of his life to come downstairs whenever he was called and told that the dignified, dark-haired man—in the suits that were much better tailored than George Spencer's—was waiting to see him. He would wait until the first rush of candy and half-dollars was over, for then he and Mr. Laban could sit down on the sofa. Mr. Laban would talk to him, choosing his words and expressions carefully, in a quiet and measured tone that his father never seemed to use with him.

"Well, Westen, have you thought over what we talked about last time?"

"About the chrysalids, sir?"

"That's right, Westen. Did you take the books out of the library?"

"Yes, sir. The lady thought it was funny for me to take them out —she thought I was a *little* boy, and she wanted me to take out one of those books they have. . . You know, like in primary grades. But

I told her you wanted me to read them, and she said she guessed—she *supposed*—it was all right. Are you my tutor?"

"Why, yes, Westen, I suppose I am. It's perfectly all right for you to say so, at any rate, as long as that'll get you the books. That's something else for you to remember. Sometimes it's all right to tell people things they think are so, even if they aren't, as long as you know you're doing it for a good purpose. But what did you learn from the books?"

"Well, sir, there are certain kinds of insects that make a sort of shell around themselves, and live in it until they're ready to come out, and then they're moths. The shell is called a chrysalis, and it's sort of hard inte—in*te*gument. And—"

"That's fine, Westen. I don't expect you to be able to tell me all you've learned, because it's not necessary. If you've read the books carefully, all the information has been stored in your brain, and will be available all your life, even if you seem to forget it after a while. Remember what I told you about background?"

"Yes, sir. I don't have to memorize everything—not like poems, or multiplication tables. It's still in me, even if I can't just say it right off, and every time I learn something new it gets added to my old background, and all the pieces of what I know get hooked together. Then, when I grow up, I'll be able to use all those hooked-together pieces without really remembering every piece all the way through. I'll just *know* what to do."

"That's right, Westen. When you grow up, you'll know what to do."

AS HE thought of it now, Westen still could not understand how his parents could have been so ineffectual. Certainly, they must have resented Mr. Laban. Admittedly, there had been something uncomfortable to them in Mr. Laban's interest. It had been a strange sort of interest, too—somewhat like that of the rich, resented uncle who was not really doing too much for his favorite poor nephew *now,* but who, in the future, might. . .

The train of implication was obvious.

And yet, Mr. Laban had never said anything of that nature, or even hinted at it. There had simply been a manner in his attitude toward Wes, a tone in the words he spoke to him, that seemed to trace the far-off but definite outlines of a wonderful and exciting future. With each of Mr. Laban's visits, varied in length and frequency as they had been, that atmosphere of expectation had grown more tangible, and the shape of the future had seemed more real.

"Well, now, Westen, I suppose you'd like to go on to college?" Mr. Laban was older now. His hair had grayed slightly, but his eyes still glowed with their unfathomable drive, and his expression showed no lessening of the quiet confidence he felt in that future whose sketchy

outlines were taking on more and more concreteness.

Spencer shuffled his feet awkwardly. In the past few years he had become increasingly aware of the discomfort Mr. Laban's visits brought to his home. But he enjoyed his talks with the quiet man whose sentences fell into measured paragraphs, building verbal structures of logic and thought. As his parents lapsed into a gray anonymity of word and action, he found himself more and more drawn to Mr. Laban. Their relationship had slowly but systematically shifted to an intellectual peerage. Nevertheless, he knew that his parents regarded that relationship with a sort of hopeless desperation —as though some force had progressively drawn their only child away from them, sapping their first hope and pride in a son to carry on the heritage of their name.

So, now, he hesitated.

"Well, Mr. Laban, I don't know. I'd like to, I suppose. But it'd be kind of hard on my parents. Even if I earned enough money to put me through school, there'd be at least four years before I was doing anything to help them out. My father isn't earning as much as he used to."

"Yes, yes, that's a point. A good point. But remember that your father wouldn't have to contribute to your support any longer, either. It seems to me that his pay is large enough to provide for your mother and himself.

"It would be a shame to miss what a college education can offer you, Westen. Reading, by itself, is not enough. Trained habits of thought and investigation must be established. Classroom discussion is extremely stimulating. There is only so much that one mind, thinking alone, can accomplish.

"I'd like you to study advanced mathematics, too. There is much to be learned from topology and non-Euclidean geometry. Very much. Such information can be very useful to you in your later life."

"I'd like to, Mr. Laban. But I don't know. . ." He found it hard to raise even that weak objection in the face of Mr. Laban's urgent desire for him to go.

"Of course, Westen. It's not a decision I'd want you to make in a moment. Think it over. I'm sure you'll do what seems to be the best thing."

Mr. Laban let the topic lapse, his interest shifting.

"I suppose you've got a young lady these days, eh, Westen?"

Spencer found himself blushing, to his dismay. "Well, uh, no one in particular, sir."

Mr. Laban smiled—the wise, kind smile that crossed his quiet features from time to time.

"That's as it should be at your age. Some time—next year, perhaps—I'd like you to meet someone I know. She's a fine girl. A warm, sensitive person. I'm sure you'd like her."

Spencer flushed again, and substituted an uncomfortable smile for his lack of an answer. Mr. Laban smiled understandingly in return.

And he had gone to college.

A small, not-too-eminent school which could, however, be the stepping-stone for a later transfer to a more famous institution. Moreover, Mr. Laban had arranged for a sports scholarship that left him free to spend more time in study without having to work.

And now he remembered his parents, when he had left them at the bus station. His mother and father had been thin, bleached-out wraiths of the people he remembered from his early childhood.

His mother had cried weakly, and clung to him, while his father had gripped his hand more strongly than he ever had before.

"Wes, I hope you do yourself good down there," he had said. His face drifted into an acceptance of permanent frustration. "I guess there're people who know something most other people don't—people who can get almost anything they want out of life. They know how to make other people do things their way. I don't know—we haven't been as close to you as your mother and I would have liked, maybe. But if they can teach you how to be one of those people, well. . . I haven't got it figured out into the right words, I guess."

He stopped, and his grip grew even tighter. "Anyway—good luck, Wes."

THE goalposts were etched in white against the flat blue of the sky that towered over the backs of the dun jerseys in front of him. Gravel and scattered clumps of grass churned under his feet as he back-pedalled, feeling the muscles of his calves and thighs taking the impacts in coiled surety.

There was a voice, cracking out over the field, spattering off the almost empty stands in this practice session, and the dun jerseys were weaving back and forth in response to the signals.

Most important, there was a ball. It flickered back. A man caught it, spun, feinted to the left side of the line, spun again, leaped, and lobbed the ball further back. Another man took it, touched one blunt nose down, and then Spencer felt the surge beginning at the sole of his foot, rolling up calf and thigh, and felt the momentum gathering in his body as he drove forward. Then his right leg lashed out for the last time, with all his weight and hurtling mass behind it. The ball boomed like a beaten drum, and rose toward the horizontal crossbar.

He grinned, his lips in a thin line that dug back into his cheeks at the corners. He kept his eye on the ball, and did not see the B Team's dun jerseys hurtling aside as the green-and-silken-white varsity cannoned through the light and milling line. His foot was still in the air, and he balanced on his left toe.

Suddenly there was gravel in his mouth, and he spat it out. He kept his eyes closed, breathing despite the knife-edge that touched him whenever his ribs rose or fell. He spat again. The gravel had tasted bloody.

There were men surging around him. He heard the coach come lumbering up, heard his savage bel-

low at his assistant.

"What kind of crazy play was that?"

The assistant stumbled over his words in the face of the coach's violence. "Gee, Andy, it was just a thing I had dreamed up to get everybody warmed up fast. Have everybody working their specialty at the same time."

"There's better ways than having them practice illegal plays!"

"I'm sorry, Andy," the assistant said flatly.

"What about Spencer, here?" the coach demanded.

"Had the wind knocked out of him, I guess." The assistant's voice had a shrug in it. There was a peculiar edge to the man's words.

Spencer felt the coach's bulk squatting down beside him. "How is it, kid?" The bellowing voice was gentle.

Spencer tried to make some sort of sound, but he found that the best he could do was to cough air out of his throat in a series of ugly grunts. He felt the coach's urgent fingers touching the side of his mouth where the blood must have been trickling out, then felt gravel rebound from his side as the coach leaped to his feet and spun, shouting for the trainer.

As he could not remember the eleven men hitting him, so he could not now recall the interval between the coach's frantic shouts and the time when he opened his eyes. The two squads of players, the coach, and the assistant were standing around him, towering over his face. The trainer was cursing as he worked.

He moved his eyes slowly up toward the assistant coach. Strange, that on such a hot, bright day a man's face could be completely free of perspiration, the eyes wide open in the glare, with something smiling slightly in them.

Spencer remembered thinking: *It's my ribs, damn it! Leave the leg alone!* But it turned out to be the leg, too.

Mr. Laban came to see him in the student infirmary. The cane thumped on the composition flooring outside the door of his room, and Spencer came awake instantly. His mind cleared of the drifting semi-lethargy that a month in the traction sling had brought. Then the door opened, and he saw the man—the *much* older man, he saw with sharp dismay—who nevertheless still carried pride and dignity on his shoulders.

"Mr. Laban!"

"How are you, Westen?" The voice was quiet.

Not so much quiet as still, Spencer realized, his dismay growing. And pride and dignity were not, somehow, proper substitutes for confidence.

His mouth quirked sidewise in a crooked smile, and he gestured at the ropework stretching his body. "I'm about as well off as you could expect."

"Yes. Um—yes, yes," Mr. Laban murmured absently. He pulled a chair away from the wall and sat down at the foot of Spencer's bed. He reached out awkwardly and touched the heavy cast on Westen's leg, as though hoping against hope

that it was not really solid. "Westen —I'm—I'm sorry."

"So am I. But it's not anybody's fault." Spencer shrugged.

Mr. Laban shook his head quickly. "It was mine. I sent you down here. I knew they'd try to get at you, but I thought they wouldn't be able to. I misjudged."

Spencer looked at him in bewilderment. "I'm afraid I don't follow you," he told him, wondering just how badly Mr. Laban was feeling—whether the sharp change in his manner had gone so far as to leave him with a vague persecution mania.

But Mr. Laban was going on. "Westen—your parents have passed away."

Spencer lay suspended, his mind sagging in concert with his body.

"They both had very bad hearts," Mr. Laban said. "They died almost together."

"I didn't know," Spencer said tonelessly.

"It only happened yesterday."

He hadn't known they were sick, was what he'd meant, but Spencer only nodded. Somehow, he didn't want to talk about them.

"What do you plan to do after you're well?" Mr. Laban asked, his sequence of thought leaping urgently from point to point without pause, as though he did not have much time.

The question shocked Spencer. Didn't Mr. Laban have some plan?

"I don't know," he answered finally. "They cancelled the scholarship."

Mr. Laban nodded. "It's a small school. And it wasn't really their responsibility. They're paying for your treatment."

"Sure. When they figure out a way to buy me a new hip, I'm sure they'll let me know."

"Westen!" But the protest was perfunctory. The purpose was gone from Mr. Laban's manner, and he acted like a man picking up the fragments of a broken, valuable possession that could never be made whole again.

"All right, Westen, perhaps you know the best way for you to feel. I've arranged a position for you. A very reputable New York concern. If you do your work as well as I'm sure you can, you'll have a secure place in the company for the rest of your life."

Mr. Laban stood up. "I'm sorry if I seem brusque." He rubbed his forehead for a moment. "I'm all alone, suddenly, and there's so much to do. . . I'm older than I should be." He began putting his chair back in its place.

Spencer felt something boiling inside him. It was too much. To pick up a boy, split him off from his parents, push him, pull him, nudge him into the rough semblance of a shape he was to assume —and then drop him. Too much, to come here and deliver a series of blows like this, then to mutter an apology and go.

"Mr. Laban!"

"Westen, I'm sorry. Deeply sorry."

Spencer shook his head emphatically. "*I'm* sorry, Mr. Laban, but I deserve more than that. Some sort of explanation, at least."

Mr. Laban gazed down at him

through his tired eyes. Finally he sighed. "Yes, you do, Westen. But I can't give it to you."

Spencer's lips compressed. "Mr. Laban—have you ever been hit high and low at the same time? When you didn't have the faintest expectation of it?"

Mr. Laban nodded slowly. "Many times. I understand what you feel, Westen."

"I'm sorry, but I can't accept that. I *have* been hit that way. Twice. Once out on that field, and by you, just now. It sort of separates the boy from the man. And I'll tell you this, flat out; I know something funny's been going on. You didn't pick me up because of my curly hair or bright eyes. You haven't been grooming me all my life for any clerkship. And I didn't get the business because somebody was afraid I'd steal the job in the bank from some relative of theirs. And unless you tell me now—right now—what's been going on, I'll find out. Then I'm going to blow the whole thing wide open, and you might not like where the pieces fall. So let's do it the easy way."

He sank back as far as the framework would let him, surprised at himself, as though some unexpected predator had struck out the darkness behind his conscious mind.

Mr. Laban, too, was looking at him oddly. Then he nodded slowly. "Perhaps you're right." He frowned, as though arguing with himself. "I hadn't considered that reaction on your part."

He gestured helplessly. "But I *can't* tell you everything. For your own good—" He nodded to reaffirm the point as Spencer grimaced his annoyance. "*Yes,* Westen—believe me. You've taken my word before. Take it again. I can tell you this; you're quite right. I had plans for you. And you had the original qualifications to fulfill them. Those plans are at cross-purposes with those of another group as powerful as ours—as mine. And we do not clash on a level which even modern science for all its microscopes and telescopes, can detect. You might argue with me. You might point to your broken bones. Believe me, Westen—that is only the path of the . . . the bullet, if you visualize in those terms. The damage is deeper, and far less easy to repair. Impossible to repair. It is in your mind, Westen. The damage to your body is nothing—or, if anything, only a means to an end. It has put you on the defensive—given you a badge of inferiority. You may not realize it now. But you will never again feel yourself equal to any setback or obstacle which might appear. At the crucial moment when only a firm self-confidence could support you, you would remember your damaged body. You would feel the psychological weight of being—forgive me—a cripple. You would falter.

"And where we fight—and in the way we fight—there can be no faltering."

He stopped and looked quickly at Spencer. "That is the truth, as much as I can give it to you. You will find it difficult to believe. I'm sorry about that.

"Westen—it might be best if you forgot some of the things we've talked about in the past. I think you've realized for some time that I was training you toward an understanding of things which very few men have ever understood before. Now I have told you, as much as I am able, why I was doing it. And you must take my word for it that the old goal is now unattainable. Consider the forces in play here. Try to forget. It would be terribly dangerous for you to attempt anything else."

He looked at Spencer's ruined body, and spread his hands helplessly. "Please forgive me." He reached the door, shoulders sagging.

Spencer stared after him. Suddenly, he was remembering all of Mr. Laban's kindnesses, and the picture of Mr. Laban as he had been—confident, his step alive, his cane swinging incisively. It did not matter whether he believed Mr. Laban now or not—he could not let the old man leave this way, hagridden.

He called out sharply, trying to offer him a straw.

"You mentioned a girl once, Mr. Laban. I don't know how, but couldn't she help you?"

Mr. Laban shook his head sadly. "Giulia? No, no. I failed with her, too." His voice dropped once more. "I thought, for a while . . ." He opened the door, staring into space. "Hopeless," he murmured. The door began to close.

"Goodbye, Mr. Laban."

"Goodbye, Spencer. I—I am sorry your parents died." And then the door closed.

THE POSITION was a junior clerkship in a bank. He'd had to start low. Personnel managers didn't take as kindly to football men as most schools like to think, and one year of college wasn't much anyway. But starting low was good enough if you could work your way up in a hurry.

A man who had to walk slowly could usually devote himself to thinking fast. A low, crookedly triumphant smile ran across Spencer's mouth.

And life was a remarkably malleable medium. The smile hooked more sharply as he remembered the hurt and bewildered adolescent who had felt so sloppily emotional when Mr. Laban left him in the infirmary. It was quite possible to shape an attitude and atmosphere in oneself which precluded any more opportunities for hurt or helplessness.

But, with banks as with all higher form of human endeavor, there is a stratum at whose underside every man must halt. Some beat their wings frantically against the glassy surface, refusing to admit that it takes time for a vice president to die so that a division head may take his place, thus leaving a vacuum to be filled with the rarified gas of a section manager who, in turn, leaves a breach through which the senior clerk may leap into the sun of the private payroll.

Spencer had touched that stratum, recognized it for what it was, and given notice, all in the course of a week.

That had been a few weeks ago. Mr. Laban had not even known

his protege was on the bum. Now, he would never know.

He did not remember getting up from the park bench, but suddenly he realized that he was leaning against the inside of the arch at the foot of Fifth Avenue, where he had no business being, where it was physically dangerous to be, since his feet were planted in the roadway. But he was too busy thinking of the desperate, aging man with the dying fire behind his eyes.

Spencer shook his head in the cloying darkness of the midsummer night. Mr. Laban was dead. Whatever the old man's future had been, he had never reached it.

So, the rich uncle had never left his fortune to his nephew. *Great Expectations.* Mr. Laban had never dreamed that the parallel might be so close.

Spencer shrugged up at the overhanging face of an apartment house. Perhaps he'd made an heir of his niece, after all. What was the girl's name again? Julia? No, not quite Julia but the slightly different and more lilting Giulia. He had never heard her last name.

Coincidents were rampant all around him in his life. The graceful man had been sitting beside him in the bar. Another coincidence. And, it was yet another accident that the light, open-topped car hummed to a stop beside him. He turned his blank face toward it, and found himself looking into the grave brown eyes of a slender-faced girl whose chestnut hair was drawn sharply back over one ear and swirled down over her other shoulder. Her deep, full-red lips were slightly parted. Her voice carried a ghost of uncertainty.

"You shouldn't be standing there, you know," she said, but the light words were not as casual as they should have been, and she was looking at him with an odd intensity of interest.

He looked at her speechlessly for a moment. *This is my night for characters,* he thought. *Well, I'm in the right neighborhood.*

But, for some reason, he found himself drawn to this girl with even more than the amount of interest to be expected.

Hot damn! Adventure comes to my hum-drum life! he tried to gibe the odd feeling away, but could not quite succeed. And because it was a midsummer's night, and he stood, still vaguely adrift in alcohol, at the foot of a fabulous street, he shook his head gently and answered her. "I don't really know why I'm standing here. You have funny-shaped ears."

She stared at him for one blank instant, her dark eyebrows like wings. Then she laughed.

"My name's Giulia."

He smiled crookedly. "I was just thinking of you." What the hell, it was a half-truth, wasn't it?

"You were?" she frowned.

"Sure. My name's Wes."

Her mouth trembled into surprise, and she grew a little pale. "But I was just thinking of you!"

They looked at each other blankly, not quite ready to accept the coincidence at its face value.

"Well," he said finally. "Fancy that."

"Y—yes," she answered. She was lost in thought for a moment. "Well. Would—would you like to go for a ride?"

Why not? He nodded. He took his hand away from the side of the arch and walked around the nose of the car to the other door. He felt his right foot touch the asphalt crookedly, felt the straining half-jammed action of his hip, and the bitterness in him snarled—but did not cry very loudly, or else the mid-summer night and something else, equally intangible and equally potent, came in and hushed it.

I'm a commercial artist," she said hours later. The Hudson glimmered as the car ran along the broad arm of the George Washington Bridge. The breeze touched them with its fond coolness. "What do you do?"

He followed the hurrying dip and stately rise of the suspension cable as it swung above his head. His neck rested on the yielding ridge of the seat's back.

"I look at the moon," he said lightly. "I count the stars and smell the night. I drink Tom Collinses in a cellar bar off Sheridan Square. I am a windblown autumn leaf, now tumbling through the air, now spinning groundward, now resting on the frost-touched grass, and when the other leaves fall and cover me—when the rains of September have packed and trampled me into the tough layer of the other crushed leaves—I shall lie supine and wait for the blessedly concealing blanket of the snow to hide me, to dissolve me, to put me back in the earth whence I am sprung."

She giggled happily and wrinkled her nose. "When you're not being stupid, what do you do?"

He raised an admonishing finger. "Ah, Giulia, it is when I am truly stupid that I do anything else. Truly. It is when I send to ask for whom the bell tolls that I am merely a jobless senior clerk in a bank, only recently holding the purse-strings of a thousand—nay, a *hundred* thousand—in my impoverished fingers. Are you a *good* commercial artist?"

She nodded in rapid, self-deriding affirmation. "Oh, *very* good." She turned the car off the bridge and into the West Side Highway. "Where have we *been?*" she asked breathlessly.

"We have," he ticked off on his upraised fingers, "driven up Fifth Avenue in a midsummer night's delirium. We have circumnavigated Central Park and then, having become bored with the Imperial City, we have been to Bear Mountain, thence to such places as Nyack, *sans* kayak; we have flirted briefly with an edge of New Jersey, and we have crossed our bridges when we came to them. The last one, as I recall, was dedicated to someone named Hamilton or Jefferson or Something, but we, in our bubble-headed daring, nevertheless made use of it. And that tinkling sound to the east is the break of dawn."

He clasped his hands behind his head and sighed. "And we have spoke of many things. Of cabbages, kings, and the New York Giants,

who, we have solemnly decided, are due to make a rousing finish of it, after starting off in their usual miserable slump. *If* the pitching holds up."

"I have to go home," Giulia said.

"I know." The cold dawn breeze touched him.

Giulia stopped the car in front of his house and rested her head against the back of the seat, her eyes losing their sparkle.

"This was fun," she said wistfully.

He nodded silently.

"I wish this whole world would go away!" she said with sudden vehemence. "I wish things were always like last night." Then the mood left her as unexpectedly as it had come. "Which is classifiable under the heading of escapism," she said wryly. "Onward, Spencer, ever onward. Wheels must turn, pumps must pump, etceteras must etcetera. Send not to ask for whom the bill tolls."

He got out of the car reluctantly, and stood beside it, his hands on the window coaming.

"I'd like to see you tonight, Giulia."

"I'd like to see you." She smiled gently. "Don't mind me. It's a shock, like dropping back off a cloud."

"I know. I just bounced off the same one."

"Well, let's keep a few wisps around, just to remind us."

He shook his head in mild amazement. "Do you realize how much we had to talk about, and didn't? There's Mr. Laban and the whole business of how we happened to meet . . ."

"I know." Her eyes darkened, and something frightened took hold of her lips. "I'm glad we didn't. That's for later—for much later. I haven't seen Mr. Laban since I—" Something dark and troubled crossed her face, and she stopped, her nail-bitten fingers tightening on his hand. "Much later," she said softly.

"All right," he said lightly. He would not have pressed the point any farther for the world. "I'll call you."

She smiled again. "I'll be home most of the afternoon. I may be out buying some dog food or something, but if I don't answer, I'll be back in a minute.

"Whatever you do, don't give up." She put a kiss in the air for him before she started the car and drove away. He stood on the sidewalk, looking after her. Of all the inexplicable things that had happened to him since last night, she was the only one he wanted.

Nevertheless, he waited until her car was out of sight before he began the twisted, ugly climb up the stairs to his door. He looked up into the doorway, and the graceful man was standing behind the glass, watching every step.

THE GRACEFUL man held the door open as Spencer reached the top step, his eyes filming with rage.

The man put up a quick hand, palm out. "Wait, Mr. Spencer!" There was less assurance in his

voice, this time. His lips were slack at the corners with the first hint of apprehension. "I didn't think you'd want me to help you up the steps. On the other hand, here I was. A difficult position."

"You're right. What else have you got to say?"

"Please listen to me!"

Spencer narrowed his eyes. That last had been an unmistakable plea. His mouth twisted scornfully, and his fingers hooked. But the wave of shame and anger had broken within him. He'd be a fool not to pay some attention to the man.

"Well?"

"I—I'm willing to help you."

Spencer almost laughed. But there was too much of a change from the confident, almost superhuman man of last night. The man was badly frightened of something. In that fright, he might say more than he intended.

"Go ahead."

The graceful man licked at a corner of his mouth. "Could we go up to your room?"

Spencer thought it over for a moment. "No," he said finally. "Not yet. Give me one good reason."

The graceful man clutched at his sleeve. "Listen," he said urgently, "I'm *not* one of your enemies. I'm a third party. From outside. I'll help you get your people out of this jam."

Suddenly, the memory of that last talk with Mr. Laban was very clear in Spencer's mind. Enemies, Mr. Laban had said. And clashes on a level no Earthman could ever be aware of.

Something prickled at the small of Spencer's back, and the carefully acquired cynicism of six years was revealed to be a very feeble wall indeed.

The graceful man saw his hesitation. "Listen!" he exclaimed again, "I'm no fool! I *can't* fight you now! I never suspected that Laban had arranged for you and the girl to meet. Can't you see that? My whole plan was based on the assumption that he'd given up after both of you were crippled. And so you were, individually. But as a team—"

Spencer shook his head, uncomprehending. He was vastly tired. His shoulder muscles were screaming with the unbalanced load they'd been carrying too long without any rest. His mouth was fogged with last night's alcohol, and the bright glare of the day was stabbing at his bloodshot eyes.

"Go on," he said, forcing the words through his stiff mouth. Much of what the man was saying was sheer gibberish. But some of it was clicking into place. The graceful man had his facts arranged in the wrong order, and some of them were not facts at all. But he was telling Spencer what he wanted to know, nevertheless.

"There isn't any more. You can see I'm in no position to fight. All right, then I'll help you. I've got to do *something*. You don't pass over an opportunity like this. Not one like this."

Spencer frowned. The man was acting like a commission agent with an account slipping out of his grasp.

"What's your price?" Spencer demanded.

The man looked startled. "Sal-

vage rights, of course."

"On what?"

The graceful man stared at him. "On *what?*" A slow realization came over his face. "You *don't* know!" He looked up at Spencer's surprised face, inches away, and laughed.

"You don't know!" he repeated. "It was an accident! A true accident! I've tricked myself!"

Too late, Spencer shot out a hand to grab his jacket. The doormat skidded out from under his bad foot and he fell heavily. His head thudded against the cold tile of the foyer. The graceful man danced back, out of the reach of his grasping hands. Then he sprang forward, hurdling Spencer's body. "What a feeble excuse you are!" the graceful man said with something like incredulity. "What a feeble excuse!"

Spencer reached out desperately. But the mat skidded again, and he only slid helplessly to one side. He tried to get to his feet, but the mat slipped again. And once more.

The graceful man chuckled. He half-danced down the steps. "I'll be back!" he cried over his shoulder and walked briskly away down the sidewalk, his shoulders straight and his head up in the early morning sunshine.

Slowly, Spencer managed to stand up. Completely numb, he staggered to the elevator and got up to his apartment. He stripped off his clothes with weak hands and fell across his bed.

He was too close to panic to think now, he realized.

Weapons he did not understand, in a war he could not see. And the graceful man was after salvage rights.

He had to get to a telephone and warn Giulia.

He reached across the bed, his stiffly straight fingers reaching for the instrument. But his body had been too much abused. His fingertips barely touched the smoothness of hard rubber as he fell asleep.

Remember this: Any point in one space is adjacent to all points in any other. Here is instantaneous communication and transportation.

Spencer rolled in his sleep.

Consider this: The stranded traveler must have hotel accommodations. If these are unavailable, he must knock on the villager's door and beg a lodging for the night.

Spencer pawed at his face in annoyance and mumbled.

Extrapolate from this: The lodging is suited to the necessity of the lodger. One man's haystack is another's shelter.

And if the weary travelers must stop where there are thieves, then they must set out alarms and choose sentries from among their numbers.

Finally, Spencer awoke. He remembered the dream, but if dreams were accepted as data, nightmares would be subject to censorship.

HE DID not know what he was going to say to Giulia. He came out of the subway entrance and hurried toward her apartment house. She had sounded cheerful and unworried over the phone, and he hadn't mentioned the graceful

man. As long as she was safe and unafraid, he first of all wanted to find out what she knew about Mr. Laban—and what weapon had been used to strike her down.

Suppose he did find out? What good would it do? What defenses could they raise against the shadowy legions that waited just behind their shoulders?

"Westen Hilyard Spencer, Aged 24, Occupation: Melodramatist," he thought wryly as he swung down the sidewalk.

He smiled crookedly, his confused mood beginning to evaporate. Out of the subway and in the light of the cool, comfortable evening, he was rapidly snapping back to normal.

He noticed with a slight shock that his limp was far less pronounced when his mind was busy with something else, and then he saw Giulia standing on her steps, waiting for him.

She came down and linked her arm with his, her eyes shining and her lips parted not in last night's wonder, but in anticipation. Something warm touched his emotions.

"Well, hello!" she said.

He realized that he had been standing silently, simply looking at her, and flushed. "Hello."

They laughed together, his rueful chuckle mingling with the bright river of her voice. "Whither?" she asked.

Catching her mood, he pursed his lips and cocked his head. "Oh, anywhere. Cost is no object."

She grinned. "Ah-*huh!* My jobless poet. Shall we order our car and tour some more?"

"All right!" They laughed again.

Her car was parked a few yards up the street. They climbed in, and she pulled away from the curb with a growl of the motor. Spencer noticed it. Yesterday, it had been a faint whispering, as gentle as—well, yes, as gentle as Giulia, just as today it was in perfect keeping with her more intense mood. "I say again, lad—whither?" She was finding something to respond to in the car's decisive progress. He could see she enjoyed driving; liked the snap of wrists that sent the roadster around a corner with a precise swing of the tires. Yesterday, the car had drifted around the turns. Today it forged through them.

"Long Island, maybe?"

"Righto!" She shot the car across town, weaving skillfully through traffic. The motor idled threateningly at stop lights, the car jumping ahead of all others as the lights changed. The tires sang waspishly along East River Drive.

"Smoke me."

"Huh?" He looked at her uncomprehendingly.

"A cigarette. A butt. Smoke me, boy, smoke me!" Her fingers snapped out a rapid beat to the words.

"Oh. Sure." He lit two cigarettes and put one between her lips. "Hussy." She hadn't smoked last night—he remembered, guiltily, that he'd never offered her a cigarette. In her mood then, she must have been too shy to ask.

"Hussy I be," she agreed, swinging the car onto the Triboro Bridge. "For tonight, I be a hussy." And something laughed in her shining eyes.

The road was narrow, a headlighted tunnel in the dark. She drove slowly now, while the breeze whispered through the shrubbery that grew close to either side of them.

"Feel like stopping for a little chat?" she asked him with a lazy turn of her head.

He nodded. "All right."

Her hand moved to the dashboard, and the lights switched off. The night fell in a murky roadblock. Giulia cut her speed to almost nothing, bent over the wheel, and peered ahead. "Yuh, yuh, yuh," she checked off under her breath, her glance darting over the almost invisible bushes beside them. *"Yuh!"*

She spun the wheel suddenly, and the car, sweeping branches cracklingly aside, nosed off the road and into a gap in the shrubbery. She ran the car forward until a screen of branches closed behind them, and then cut the motor. "By God, I *can* find it in the dark!" she breathed to herself.

Spencer handed her a fresh cigarette, all his muscles completely relaxed. Last night had not been a time for talking. But tonight's was a different Giulia. For the first time in six years, he did not feel alone. For the first time since the graceful man had spoken to him in the bar, he did not feel bewildered and afraid.

Their childhoods had been much alike. For as long as she could remember, Mr. Laban had been coming to her parents' home. And then, suddenly, six years ago, something had struck out and crippled her. Not physically. But so viciously that Spencer did not pry for the details she was obviously reluctant to give. And, at the same time, her parents had died.

"Heart attacks?" Spencer asked bitterly.

She nodded silently.

"And right after that, Mr. Laban dropped you," he said.

She nodded again. "Just like that." She shrugged and fell silent again.

"Did you ever find out what he was training us for?" He asked it only after considerable hesitation. If she said no, that was the end. Then there was nothing left to do but crouch in the depths of the blind alley and listen to the footsteps drawing closer in the night.

"I'm—I'm not sure."

The long-held breath sighed out of Spencer's lungs.

"It's something about some people—well, not people, but that'll do, I guess—who were trapped here on Earth a long time ago. They were traveling through space."

She shook her head at the inadequacy of her understanding. "Not in ships, though. It's—it's hard to understand. Mr. Laban said it was as though our universe was like a tunnel connecting two cities. These . . . people . . . were in the tunnel when something happened. Something blocked the ends of the tunnel. And all those people have to wait until somebody digs them out."

"Until someone digs them out! How long have they been here?"

She shook her head again. "I

don't know. But Mr. Laban once said something that made me wonder if it wasn't since before there were people—I mean people like us."

Spencer stubbed his cigarette out and looked into the night that had been falling since the Earth began to turn, four billion years in the past.

"What was our job?" he asked in a voice that trailed off into a husky whisper.

Giulia stirred restlessly on her half of the seat. "I don't know," she said. "It had something to do with those people. That's all I know." Something in her voice caught his attention. He looked more closely and realized she was crying.

"Giulia!"

She reached out for him, her face against his shoulder. "Wes! Wes! It's been so lonely!"

The car snarled back toward Manhattan. Spencer was driving, his eyes tight, his responses over-fast and harsh, while Giulia curled luxuriously on the seat beside him, her head in his lap. One hand traced an intricate pattern on his thigh, and the breath flowed smoothly in and out of her relaxed body.

Sweet Giulia! he thought. *Gentle Giulia!* Yes, you can find that shrub-locked hideaway in the dark. I would trust you to find it from anywhere on the Eastern Seaboard, on the darkest night in the dirtiest storm that ever brewed in hell. I'd stake my life on your proficiency.

"Smoke me, boy," she murmured from his lap.

Smoke you! I'd like to set the fires of hell to roasting you! But he put the cigarette between her lips gently enough.

He eased the car to the curb in front of Giulia's house. "We're here," he said.

Giulia stirred in his lap. "We're here because we're here because . . ." she sang softly. She reached up and pulled his lips down to hers. Her nails touched the nape of his neck in a slow movement.

"Call me tomorrow, boy?"

"Sure," he lied out of harsh bitterness.

"Ah? What's eating you, lad?"

"Nothing's eat—" A ball of ice exploded in his stomach. His hand shot up and grasped her suddenly tense wrist.

"You've got awfully long nails, Grandma," he said viciously. "Quick—where did you meet me last night?"

The girl chuckled and lifted her head. "I could answer that. But it wouldn't prove anything." The laughing torrent leaped and rippled under the tone of her voice. "Be damned if I was going to chop my fingernails."

His hand crushed her wrist as his jaw set into a harsh, strained line broken by the jut of the muscles that clamped it. "Let's have it!"

"Relax, lad. It wasn't that bad."

"You wouldn't know."

She arched her eyebrows and pouted carelessly. "I'm Giulia's twin sister," she said. "Tina. It's a shorter name—easier to say over a phone."

"Not if you want Giulia," he

snarled. "I'll know, next time." He let go of her wrist and flung open the door on his side. He pushed himself out, taking the full shock of his weight on his bad hip, glad of the pain that welled up to distract his rage.

Tina grinned up at him. "You may not care, next time." Her eyes glinted with light reflected from a storefront sign, which was red.

"I'll care."

Tina shrugged.

"Will you tell me why?" he asked out of the depth of anger.

Tina chuckled and winked at him. "I like you. Generally speaking, I like all of Giulia's men. You sounded mighty cute over the phone."

He clutched her shoulder. "Cut it out!" he said from deep in his throat. "Quit playing games. Why'd you go through this rigamarole with me?"

For just a moment, the folds of Tina's garish mask parted. "We were curious as to just how much you knew." Then she was laughing again. "So long, sonny," she chuckled. "I'll make a point of telling Giulia what a nice date you are."

He turned away, his mouth curling sourly, and dragged his leg up the street toward the subway entrance.

HE PAID no attention to the placement of his foot or the twist of his body as he made his way from the subway exit to his apartment house.

Weapons, he thought in bitter despair. What kills a man more surely—a bullet through the head or a stab through the heart?

And they stabbed deep, sometimes, he suddenly recalled.

Tina had dangled bait in front of him, telling him just enough to pull information from him if he had it, not enough to help him if he didn't.

What had happened to Giulia?

Why hadn't he thought of that while he was there, in front of her house? Why had he turned away, instead of running upstairs?

Was that a weapon, too—as were doormats that suddenly lost all hold on a floor?

He *had* to get in touch with Giulia.

His key fumbled in the lock, and he swung the door open with a thud of his shoulder. Hitching his body forward in clumsy surges, he made for the telephone.

"Hello," the graceful man said, "I just came in myself."

Spencer stopped dead. He pulled in a deep breath and let it sigh out again. Turning around, he went back and closed the door.

"Have a seat," he said dully.

"Thank you." The graceful man sank down into a chair and crossed his ankles.

Spencer sighed again. "I don't think I care anymore," he said, "but how'd you get in here?"

"All points in one space are adjacent to any point in any other, remember?" The graceful man chuckled. "But you don't. Besides, it's not quite true, or you people wouldn't be here, would you? But you don't know that, do you?" He laughed.

Spencer crossed the room and sat down, feeling the hopelessness wash all the resistance out of his muscles. They were always four steps ahead of him, always laughing. Walls meant nothing to them —space and time were something to move through.

Mr. Laban had warned him.

"All right, stop rubbing it in," he said, surprising himself with the peevishness in his voice. "Do whatever you came here for."

"That was quite a little hornet's nest you and the girl stirred up," the graceful man said conversationally. "You fooled me. You also fooled your enemies. Temporarily, of course, but my! what a scurrying about there was. Simply because you accidentally ran into each other." He shook his head in wonder.

"Get on with it."

The graceful man smiled fleetingly. "Now, then—your little *contretemps* with, ah, Tina . . ."

"How'd you find out about that?"

The graceful man smiled again. "My, you're always asking that, aren't you?" he mused. "You wouldn't know." He chuckled quietly.

"At any rate, there's proof that you've aroused the opposition, so to speak. They can't quite fathom what you're up to—which is understandable, since you don't realize yourself—but they *are* aroused. This is something I am not too happy to see. If they blunder across my own operation, they'll give me trouble."

He hitched himself forward in the chair. "I'm very sorry, Mr. Spencer, but I'm afraid we've come to a parting of the ways." He stood up and extended his hand. "I certainly hope you'll bear no lasting grudge."

Spencer pushed himself up and reached out to take the hand. The graceful man was still not making any sense, but it hardly mattered any more.

The graceful man smiled. "I find it interesting that the most dangerous thing one can do to you people is to kill you before you're ready."

His fingers closed around Spencer's. "Ordinarily I'd have my reservations about you. But with success so near, it hardly matters if you're free to transfer to a healthy chrysalis or not . . ."

Spencer realized he was shaking hands with Death.

And the things Mr. Laban had taught and told him—the little hints, the recommended studies, the inexplicable incidents—were suddenly organized. In the blink of a second, there was a pattern where none had been before.

And something that had always been in his mind, straining at the jammed door Mr. Laban had partially opened, extended a paw through the narrow crack. Razor-keen claws clicked open.

The graceful man stopped as though something had been dashed in his face. His eyes glittered coldly. "What did you do?" he asked in a faint voice.

The hopelessness and confusion began to melt out of Spencer's mind. The new thing, partial and tenuous as it was, began to take its place. He could feel it moving, sense

the flexure of its muscles.

He had been double-teamed once too often, and this time the boy *had* jarred away from the man.

"Salvage, eh?" He held the graceful man transfixed on his pitiless gaze and got back to his chair. He twitched the paw again, and the graceful man screamed thinly past the obstruction in his throat.

"I can control this thing pretty well," Spencer said as matter-of-factly as the graceful man at his best. "But I still don't know why I've got it. Suppose you tell me." He opened his—grip?—a fraction.

"I—I can't understand it," the graceful man protested hoarsely. "There was nothing—nothing . . ."

"I believe you fall short of infallibility," Spencer said dryly and flicked a talon at the pain centers responding to the man's trigeminal nerve. "Sit down and stop wasting time."

The man—no longer poised or graceful—shook himself. He half-fell onto the couch, rubbing his throat. He sat looking down at the floor, his voice hopeless.

"I've already said that all points in one space are ad—"

"And I already know that. Go on."

"Very well. This is not simply a mathematical concept—"

"Obviously."

"All right! I don't know how much you already know! Show some patience!"

Spencer only smiled.

"All right," the graceful man resumed more quietly. "A party of travelers were trapped in this universe. How long ago, on the local time scale, I couldn't say. And I don't know how it happened. Possibly they chose a route that isn't open very often, despite what the mathematics say. At any rate, what should have been an instantaneous passage became, instead, a voyage involving thousands of years on the local time scale. And as long as they were in this universe, they had to conform to its physical laws. They were long-lived, in these terms, but not that long-lived. They had to find shelters, somewhere—some means of staying alive until the route was open again.

"You must understand that these were not physical beings. What the human race is trying to accomplish with physical devices, they do as easily as a human raises his arm.

"I say 'they do.' What I mean, of course, is—we do."

Spencer looked at him silently. He tightened the clutch of his paw.

"I'm not lying!" the graceful man screamed.

"All right," Spencer said, "You're not lying. What's all this mean in terms of you and myself?"

"The travelers went into suspended animation. They went into chrysalis. They started with animals, then switched to human beings when they evolved. I think some of them may have moved into the more complex plants. I don't know. But I do know that at least every human being acts as a chrysalis for one of them. When the chrysalis dies, they move on to a fresh one. Automatically. Most of them are completely unaware of the passage of time. They're just waiting."

Spencer frowned, remembering his nightmare. The stranded travelers had crawled into some strange haystacks indeed!

"Let's get this cleared up," he said. "First: there are other universes besides this one. Other dimensions, if you want to call them that. All these universes, including ours, are so arranged that any specific point in one touches all points in another. What the scientists call hyperspace—the thing they figure will allow us to eventually beat the speed-of-light barrier and reach other stars. Right?"

The graceful man nodded. "If you know how to shift from universe to universe at will, you can start in this room, say, then drop into the next universe for a moment, and come out in Pittsburgh. Instantaneously."

"Ah-*huh!* Except that something went wrong with this particular group of travelers."

The man nodded again. "Yes. What it was, I don't know. The transfer isn't mechanical—we don't use spaceships or any other machinery. Maybe something went wrong in the brain of the individual actually handling the transfer. I don't know."

Spencer shrugged. "It doesn't matter. Human—or inhuman—error isn't something you can neglect, but it *does* happen. Now—let's keep checking. This group of travelers got into this universe, but couldn't get out. Not until certain factors shifted back into proper relationship. They took a wrong turn and got trapped in a blind canyon. They had to wait until something —some natural process, analogous to a slow shift in geological strata—opened a new path for them. Right?"

The graceful man rubbed his throat. "That's right," he said huskily. His eyes welled with slow hate for Spencer.

"Three: These travelers had to find shelter. They did. They seeped into the bodies of living organisms on Earth. When evolution produced people, they took over people. And when their host chrysalis dies, they just find another one. Just like rolling over in your sleep."

"Yes."

"That's the biggest pack of lies I've ever heard from a sober man." Spencer's claw tightened ruthlessly.

"Don't! It's true!" the graceful man screamed. "Listen—I'm not one of those people! This body was never born on Earth. I made it. I had to. I've got to conform to the physical laws of this universe. So did you. All of you. You *had* to find shelter, or you'd have died. But the chrysalids don't know. They can't feel you. They live out their lives normally—they have minds and feelings of their own. But they're chrysalids, just the same. Each of them is the home of one of you. You've got to believe I'm not lying. Look inside yourself. You can do that—you've got special powers. You're one of the ones whose job it is to watch over the safety of the others!"

Spencer looked at him coldly. He couldn't do that. The door in his mind was barely open. He only could half-sense the forces that lived behind it.

"Somebody has to be awake all the time," the graceful man was babbling. "Somebody has to fight off the enemies."

"Ah. We've finally gotten to that. What about the enemies? Who are they?"

The graceful man looked up wearily, and, had Spencer given him the chance, would have sneered. The faintest beginnings of stubbornness trembled at the sides of his lips. But the claw stabbed deep.

"Look," he said, "what kind of individuals will you find among any large group of Earthmen? All kinds—saints and sinners, philanthropists and thieves. What makes you think other kinds of life are any different?

"If you can stay awake, so can others. You're a guardian. Others in the group saw a chance to do a little midnight thievery."

"All right—fine. But what can they possibly be after?" Spencer let the rest of his questions go for the moment. This was the important one.

The graceful man stared at him. "*What?* Good Lord, man, don't you know yet? Look—what kind of medium of exchange would apply among people who don't have material bodies—who have no use for promises on paper or tokens stamped out of metal? Personal obligation, that's what. Debt. And if you first get someone under your control—if you tie him up he and all his successive chrysalids are under your domination—if you enslave his chrysalids, put them in uniform, make them worship some central ideal that keeps them from drifting away from you . . . In other words, if you pen them up in barriers of distinct race, and creed, and nationality—then they're yours. Sure, the individual chrysalids grow old and die. But the young ones are still born under your domination. If you set up that kind of system, and then, when the path re-opens, *you're* the one who wakes up the individuals your chrysalids shelter, and *you're* the one who shows them the open path—then they're in your debt.

"The catch is, Spencer, your enemies have to eliminate you before they can do that. Because if even one of you Watchers is awake and aware when the route opens, you can wake up all the others. And that's your job. You people—you Watchers—were set up from the very beginning, to do just that."

Spencer looked at him narrowly. It just might be. Crazy as it was, it just might be. If it wasn't, then how else could you explain the claw that squeezed the graceful man so ruthlessly?

"So I'm a Watcher, eh? Or, rather, I was trained to be a Watcher. Giulia was, too. And Mr. Laban *was* a Watcher." He smiled coldly at the graceful man. "And you're in the salvage business. You found out our situation, somehow, and now you're willing to tell us where the path is—for a percentage. Is that right? *Is that right?*"

"Well, sure—you don't expect a man to stumble over a setup like this and not take advantage of it, do you? Sure. I'm from the universe you people left, all this time

ago. I found the other end of the route, and came in to see what the pickings were. And I ran right into this hassle you're involved in."

"So the route's open now, is it?"

"Sure. What have I been telling you?"

Spencer's mouth crooked in disgust. "How do we stay awake? What do you mean by that?"

The graceful man shook his head. "You don't. But in every generation one of you wakes up for the balance of your chrysalid's life. You can awaken others and train them to be your successors."

"And our enemies have a similar setup?"

"Sure."

"Is that all?"

"Isn't it enough?" The graceful man shot him a bitter look.

Spencer flexed the muscles of his power, and the graceful man reeled. "Don't!" he shouted. "I'm a human being, just as though I was born here. I feel with these nerves. I'm at the mercy of these organs. Stop hurting me!"

Spencer laughed and let go. "All right, sonny," he said coldly. "I'll let you live. But when you get back to where you came from—remember you owe your life to the individual who's living in here with me."

The graceful man—the erstwhile graceful man—looked at him bitterly. "Magnanimous, aren't you? You don't even know what it means to be under obligation to someone else, do you? You wouldn't be so free with your gifts if you knew." He stared down at his ineffectual human hands, cursing. "A man tries to make a little here and there, and the big-shots walk all over him." He shot a look of pure hate at Spencer.

Spencer gave himself time to laugh at him once more. Then he left the apartment, hurrying to get to Giulia. The last he saw of the graceful man was the broken, huddled figure on the couch.

He limped out of the elevator as fast as he could, knowing that he might be on his way to disaster, not only for himself but for Giulia and all the other individuals he was meant to guard. For he was not Watcher Spencer. He was only Westen Spencer, cripple, with some understanding at last of what lay behind the jammed door in his mind, but with the door still tightly blocked.

PERHAPS the graceful man could come and go as he pleased. Spencer still could not—and he was growing gladder and gladder of it with every minute. Except for the latent power of that other individual within him, he wanted no part of their wonders.

He hailed a cab, not caring about his money now, and sat tensely until they reached Giulia's apartment house.

Giulia's and Tina's. Spencer grimaced. Now he knew how Giulia had been crippled. But that could concern him no more now than did the fact that it was four o'clock in the morning. He ran twistingly up the steps.

Don't kill. Cripple. That was their technique. For if they killed the chrysalis before the individual

within had given up the fight, then they were only restoring fresh weapons to the warrior. But if they tied him down—if they walled him up in his own bitter prison . . .

Giulia stood in the doorway. He stopped, looking at her, at the tracks tears had left on her face.

"Come in, Wes," she said gently.

Spencer stared at her. "How did you know I was coming?"

"I knew. *Please* come in." He stepped into the hall, and she leaned against him, the slow tears coming down her cheeks. "Wes, Wes, Wes," she murmured, her trembling mouth just below his chin. "I knew you weren't coming, but I kept hoping I was wrong. I sat in my room, and waited, and waited, and I knew you weren't coming . . . " The voice lost itself momentarily against his chest. She tilted her head back. "But I waited anyway. Until now."

He reached out and stroked the soft hair at the nape of her neck. "It's all right, Giulia, I'm here now. And I've got a surprise for you." He smiled as she looked up at him, the wonderful glow breaking through behind her eyes.

"A surprise? What is it?"

He shook his head gently and kissed the tip of her nose. "Not now. Not down here. Can we go up to your room?"

She smiled, her lips falling into the remembered lines. "Of course." She put her arm around his waist, and walked up the stairs with him.

He looked around as he stepped into her room. "You don't know anybody named Tina, do you?" he asked.

She looked at him uncertainly. "Tina? No, I don't. Why?"

He reached out and took her hand, with its ragged nails. "I didn't think so. I'll tell you about it, later."

"All right. Now tell me about the surprise."

He smiled into her deep eyes. "The surprise is something I am going to tell you about yourself, and about the world." He sat down on the couch, and she curled beside him, her grave, astonished face looking up at him. His fingers laced in hers, he began to tell her.

"—and that's why all these things have happened to us," he finished. "And that's why, though we're not really awake yet—and if I don't know why, I care less—we've got all these powers."

He felt her tremble, and stopped. "What's the matter?"

Giulia shook her head, and the slow tears began again, gathering in the corners of her upturned eyes and welling slowly down the sides of her cheeks.

"I never understood before. I never knew. But now I can see it. I can understand why I sometimes do things without wanting to, why I know things when I shouldn't. Why did I go driving last night? Why did I stop under the arch for you? Can't you see it, Wes? I'm a —a witch. Wes, I'm one of them."

He stared at her in agony. So that was what haunted her!

"No, darling, no," he said. "You're not a witch. There isn't any such thing. And you're not one of them. If you were, I wouldn't

love you—I couldn't. And you couldn't love me."

The sound of the words hung in the air, and he found time to wonder what sort of wonderful feeling it could be that made him so sure. "It was only because you're so quick to feel things. It's just some special ability of yours, half-awakened."

It was true, he thought. A sensitive enough human might tap into the powers of the individual he unwittingly sheltered.

But Giulia shook her head desperately. "No; no, Wes. I never thought of it this way before, but when I first told Mr. Laban about it, he was frightened. He was concerned for me too, but he was more frightened. And—and it kept getting worse. I could hear what people around me were thinking—what *men* were thinking when they looked at me, and . . . and . . . "

She buried her face in her hands.

"Not always," she said past her wet fingers. "It would come and go. I began to see things—like people who weren't people, who were only shadowy outlines with *things* inside them."

So that was it, he thought. That was how the Watchers knew what to watch for. A special sense that disregarded the chrysalis and saw only the sheltered individual within.

"Most of the time the things were quiet," Giulia went on. "As though they were asleep. But sometimes they were terrible, and *moved* and did things . . . Wes!"

He held her tightly.

"And then . . . then my—my familiar followed me home, and the next time Mr. Laban came he just looked at me and went away. He never came back."

He would, Spencer thought savagely. *No understanding of people. No caring.* How had that long, ragged line of watchers ever managed not to break? How many had been little more than he, just humans with partially awakened powers who somehow kept the tradition alive until another genuine watcher came awake and gave them all the impetus to carry on a bit farther? And how many had had the powers, and never known where they came from, or why?

"Your *familiar?*"

"A dog. A little black dog. It's not a real familiar, of course." She smiled faintly. "I'm not *really* a warty old crone with a cauldron of spells. But I've had a little black dog for the last six years."

He felt his muscles tense. Never once had the graceful man said that all the present chrysalids were human.

And he'd had an artificial human chrysalis, created at will. If *he* could do that . . .

A dog, he thought. *A little black dog.*

"Where is your dog?" he asked, his throat dry.

"Asleep in the other room."

"Call it!"

"All right," she said, wondering. She turned toward the open doorway to the other room. "Here, Princess. Come here," she called softly.

Prin*cess,* he thought, and with complete expectancy, watched Tina

come through the doorway.

"Oh!" Giulia's hand shot up to cover her mouth, and she crouched against Spencer, completely white.

"Hi, boy," Tina said.

Spencer smiled—a tired, sardonic grimace. "Giulia, darling, I want you to meet one of our enemies," he said bitterly.

"But she looks like me!"

"I know," Spencer said, his face tired, and older than it ever had been. "You've been listening, haven't you, Tina?"

Something was growing inside him.

"To every golden word, lad. Do me something."

"Has it done you any good?"

And still growing.

Tina shrugged. "Some. Not much. But I've always had a small jump on you two pigeons." She laughed. "Both of you all tied in knots the way you are."

It was almost grown.

"That's not true anymore," Spencer said. He felt the alien rage gathering itself within him.

"You're Princess?" Giulia asked in a strange voice. Spencer looked at her, and her face was set into an expression he would not have recognized if it had not been growing on his own.

"Yep," Tina said. But her eyes were suddenly too white, and she was staring at both of them.

"Then I'm a Watcher," Giulia said.

Maim the stinking Insurgent, Watcher Spencer thought.

Tina lifted one side of her upper lip, and the bright canine shone stark white in the lamplight.

Suddenly, Giulia cried out. She folded her hands over her stomach, and the corners of her lips went pale.

Watcher Spencer struck out at the Insurgent's chrysalis, trying to drive past it at the entity within.

"No, Watcher!" Giulia cried out in her terrible Watcher voice. "She's mine!"

Tina suddenly clutched her throat.

Spencer sat imprisoned in his own body, watching the Watchers. *So this is what it's like to be a Watcher,* he thought with that part of his mind that the battling Titan had left him. Waiting, and waiting, with the terrible patience of terrible rage, and then pouncing! Pouncing with such Wagnerian intensity! He laughed silently in the crannies of his leased brain.

And still the battle went on.

Then, Tina sobbed. Spencer saw her suddenly double up, and heard Watcher Giulia's vengeful laugh. And then he saw Tina's dress begin to dance across her hips.

Spencer laughed and laughed, while the two Watchers applied their wrathful punishment, oblivious, in their entities of pure electrons and gulf-spanning minds, to the ridiculousness of what was happening.

Heaven only knew what was happening to the Insurgent as an entity. But Tina, the chrysalis, was being spanked.

And that was Giulia's doing. Not Watcher Giulia—she, or it, was too preoccupied with her relentless attack on the entity within the chrysalis, too cold and ruthless ever to

understand any sort of laughter but that of superhuman triumph. No it was Giulia herself—human Giulia, gentle Giulia—who took her human revenge on human Tina.

Armageddon! Spencer thought. *This* is Armageddon! He rocked with silent laughter, and Giulia, too, was laughing. And Tina squealed and yapped.

Human Tina? Oh, no—for Tina's artificial chrysalis was shifting, melted under the fury of the simultaneous Watcher attack. Suddenly the illusion of human flesh and human form was gone—and a little black puppy yipped frantically, clawing at the slightly open front door. Then the door pushed farther open, and the little black puppy tumbled outside and fled down the stairs, leaving a diminishing sound of panicked yipping behind it.

Awake! Arise!

Watcher Spencer, his superhuman mind linked with Watcher Giulia's, hurled out his ponderous summons.

It hurtled around the Earth, touching seas and mountains, rocks and swamps, lakes and beaches, and the places of Man.

Awake!

In their chrysalids, the sleepers heard it. Heard it as they slept in men, in bats, in wolves, in foxes. And, somewhere, the graceful man heard it too, and slipped bitterly away from his artificial body, to await the coming of that individual who called himself, for now, Watcher Spencer.

And the impalpable, invisible, weightless horde rose up, completed its journey, and was gone at last.

Spencer looked at Giulia. Of all the former chrysalids, only they felt the weight slipping away. The rest of the human race just went on living.

They looked at each other and smiled.

"Well, *that's* over," Giulia said, and laughed. Her light fingers traced the line of Spencer's jaw. "We're not carrying the Watchers around with us any longer. We're just us."

"That's right. Just us. Just the human race and all the other living things the Earth has grown." He touched the firm warmth of her neck. He shook his head. "They were such a God-damned *desperate* bunch! So solemn. So relentless."

"Wes?"

"Yes, Giulia?"

"Do you think the world'll be any different now?"

"You mean, no more wars or slavery, no more shying away from people because they don't talk or dress or worship as we do? I don't know. I'm just a normal human being, I guess, after all. I don't much believe in utopias and pat solutions. But we might try going outside and giving a look. Maybe they've lowered taxes." • • •

Time is the chrysalis of eternity.—*Richter*

What Is Your Science I. Q.?

THIS MONTH'S QUIZ is really tough. Count 5 for each correct answer, and you are very good if you can hit a score of 80. The correct answers are on page 115.

1. Heat and light can traverse a vacuum, but _____ cannot.
2. In accordance with Einstein's field equations, what is the radius of the universe in light years?
3. When light passes obliquely from one transparent substance to another _____ occurs.
4. What is the relationship of a Joule and a kilowatt?
5. The term velocity connotes _____ as well as speed.
6. Tension, bending, twisting and shearing are four kinds of stresses. Can you name the fifth?
7. Our local star system is moving within the Milky Way at a rate of _____ miles a second.
8. One of the two fundamental forces of the universe is gravitation. Can you name the other?
9. The only difference, from the standpoint of physics, between radio waves, visible light and high frequency forms of radiation, such as x-rays, is in their _____.
10. What is the approximate speed of sound?
11. Bright line spectrum is formed by _____.
12. A dyne is a small unit of force which can be defined as _____ of a gram weight.
13. The constant for the expression of the quantum of energy is known as _____ constant.
14. What we call an hour is actually a measurement in space. Can you name the number of degrees of its arc in the apparent daily rotation of the celestial sphere?
15. The mathematical factor which is the measure of the unavailable energy in a thermodynamic system is called _____.
16. How many angles and sides has a heptagon?
17. Relativity reveals a fundamental law of nature which states that the velocity of _____ is the top limiting velocity in the universe.
18. The rotation of Mercury's elliptical orbit advances how many seconds of an arc per century?
19. Infrared rays are too _____ to be seen by the naked eye.
20. The shift of wave length in the spectrum of the star known as the "companion of Sirius" is known to astronomers as the _____ Effect.

The future enters into us, in order to transform itself in us, long before it happens. —RAINER MARIA RILKE

BRIGHT ISLANDS

WHEN THE two Geno-Doctors were gone, Miryam took the red capsule from under the base of the bedlamp and slipped it between her dry lips.

Reason told her to swallow the capsule quickly, but instead she held it under her tongue, clinging, against her will, to the last few moments of life.

She knew she was being weak, that she was still seeking hope where there was no hope, and she prayed to the ancient God of the Ghetto that the gelatin coating would dissolve quickly.

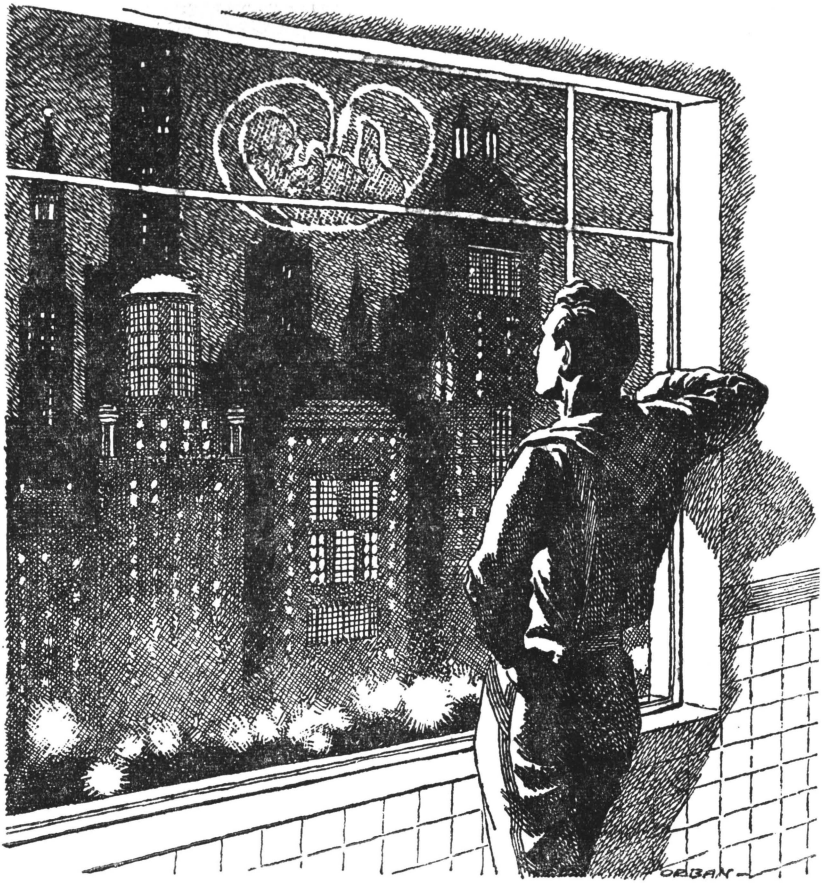
Pain interrupted the prayer, spreading like slow fire from deep within her young body, where the unwanted child of Genetics Center stirred so restlessly, so impatient to be born.

The white walls of her Center room blurred in and out of focus. Shadows merged together in brief, uncertain patterns. Lights flickered where there were no lights, and the darkness was so intense it had a glare of its own.

At the worst of the pain cycle, Miryam bit down on her under lip until the flesh showed as white as her teeth. She fought off temptation to crunch the capsule and put an end to all pain, all fear.

No, she would not go that way. She would go in a moment of blinding clarity, knowing why, savoring the last bitter sweet second of her triumph.

BY FRANK RILEY



Illustrated by Paul Orban

With a subconscious gesture of femininity, Miryam brushed the dark, damp hair from her forehead, and wiped the perspiration from her lips.

"Pretty little thing," one of the Geno-Service agents had called her, when she was arrested last fall in the Warsaw suburb where she had taught nursery school since escaping from the Ghetto.

"Doesn't look a bit like one of her kind," another agent had said, putting his hand under her chin and turning her face to the glare of his flashlight. "No wonder she fooled the Psycho and Chemico squads. . . Lucky for us!"

"What's the matter, little one?" the first agent had spoken again. "Didn't you know we were coming? I thought all of you people were supposed to be telepaths. . . Or doesn't it work when you're asleep?"

He flipped the covers off her trembling body and whistled.

"Hands off!" the Geno-Sergeant had warned sharply. "She's for Center!"

Now the capsule under her tongue was moist and soft. Time fled on swift, fluttering wings. Soon the horror would be done.

But the stubborn spark still glowed, and Miryam allowed her mind to drift down the long, shining corridor to the room where the younger of the two Geno-Doctors was changing into a white coat. The older man, who wore the gold trefoil of Geno-Sar on his collar, tilted back in his chair.

"She should be just about due," he said cheerfully.

"Yes, Sir," replied the young doctor, sounding the proper note of deference for a man who communed daily with the political elite.

"What do you think of her?"

"Well, Sir, frankly—I was surprised—" The young doctor twisted muscular arms to button the back of his jacket. He had but recently come from the Genetics Sanitarium on the Black Sea, and his face was tanned deep brown. "From reading the weekly reports of your staff, I didn't know she was that—that young—"

Miryam trembled with a hope she dared not recognize, but it was crushed out of her by the Geno-Sar's booming voice.

"Not only one of the youngest—but one of the very best specimens we've had to work with at Center! You read her psi rating?"

"Yes, Sir. Seventy-two point four, wasn't it?"

"Seventy-two point six! Absolutely phenomenal! Closest thing to a pure telepath our agents have ever turned up for us! This could be a big night for Center, my boy. . . A big night!"

The young doctor shook his head to clear away the lingering image of a tragic, lovely face against a tear-stained pillow. Miryam was startled to find this image in his mind, and her pulse leaped again.

In a carefully professional tone, the young doctor asked:

"What was her rating after insemination? Did the emotional shock. . . ?"

"Not at all! Oh, naturally, she was uncooperative in the tests, but pentathol and our cross-references gave us a true picture!"

"And the spermatozoa?"

"Best we could get! Refrigerated about thirty years ago from a specimen that tested forty-seven point eight."

The Geno-Sar paused, and because a comment was obviously in order, the young doctor said:

"This certainly could be a big night for Center!"

The Geno-Sar snapped his cigarette lighter with an expansive flourish.

"All the sciences have been taking a crack at psi—ever since the last Politbureau directive gave it number one priority. You should

have heard the talk at Sar-Bureau meeting this afternoon! The Math-Sar actually laughed at Genetics . . . told us to stick to our white mice!"

The young doctor made a polite cluck of disapproval.

"Those stupid mathematicians could learn something of heredity from their own ancients," the Geno-Sar continued, growing heated. "Think of Liebnitz, gifted at 14—Galois, a genius before he was 21!"

The Geno-Sar recovered his temper, and winked.

"Of course, I didn't say that at the meeting—the Bureau chief is very partial to Math—but I did remind them, most pointedly, of the known data on inherited sensory differences between individuals. And you should have seen the squirming! Especially when I got into the taste studies and the phenyl-thio-carbamide tests! Then, when I told of Genetics research on sense of time—sense of direction—sensitivity to pain, sound and smells—Well, the Chief was hanging on my every word! The Psycho-Sar became desperate to the point of rashness, and he jibed at me about our ancient master, Profim Lysenko." The Geno-Sar's head inclined slightly as he pronounced the name. "But the Chief himself gave the correct answer! He quoted from a Bureau directive which stated clearly that sensory characteristics, like any others, could well have been acquired in the first place, and then passed on through heredity! Oh, I tell you, it was a heart-warming afternoon!"

The younger man had been paying him only half attention.

"It's strange we should find some cases of psi among her people," he mused. "When I was at the University I always meant to study something about the—" he hesitated and searched for the approved term, "—the specimen races, but I never had time. . ."

For an instant the Geno-Sar's steel-blue eyes narrowed, and Miryam was shocked to find him appraising the young man for possible heresy. She had always regarded the scientific mind as something remote, cold, but never as something that could commit a heresy.

However, the Geno-Sar decided to table the subject.

"Of course you didn't!" he boomed. "You couldn't have made such a splendid record without total specialization! Each to his own, that's how science has prospered under the benevolence of our party!" He glanced up at the clock. "Well, aren't we just about ready for this delivery?"

MIRYAM drew back her mind. What a fool she was to go on seeking!

The child resumed its inexorable turning within her swollen body, and she knew she could never give to the world a life conceived so terribly, so coldly, without love or passion or tenderness.

Even in these final moments, with the gelatin melting under her tongue, Miryam shuddered with the remembered anguish of strug-

gling up from the depths of anaesthesia to find herself bearing the seed of a child, from a faceless man who had died long ago.

Often, during the carefully guarded months of pregnancy, she had wondered about that man, who he had been, how his talent had compared with hers.

Miryam knew little about genetics, or any other science. The scientific mind had always frightened her, and she had feared to explore it. But she knew there was no truth to the folklore that psi was a characteristic of her people. She knew of only a few cases outside her own family, although within her family it seemed to have been a characteristic that had recurred frequently for many generations. Her father had cautioned her about selecting a husband, and pleaded with her not to flee the Ghetto.

For the past three days, since the nurse had momentarily left the cabinet at the end of the corridor unlocked and unguarded, Miryam had known that she need not be concerned about the success or failure of this terrible experiment. From the nurse's mind she had plucked the essential facts about the potency of the red capsule. This knowledge, for all its loneliness, had been something to cherish, to press to her full breasts, as she would never hold that child of horror.

Tears filled her eyes, squeezed in droplets between the closed lids. Tears because she was so alone. Tears of unbearable sadness and pity, for her people, for her youth and her young body, for the warmth that would be eternally cold, for the unnatural child that squirmed and turned, and would never cry.

In a last forlorn gesture, in a final seeking before the darkness closed, Miryam let her mind stray out of the white room, out of the marble magnificence of Center. She let her thoughts escape on the soft breeze of the early summer evening.

How beautiful it was, even here in the city, amid the science buildings that formed bright islands of light around the minarets and vaulted domes of Government Square.

Even these awesome buildings were lovely in the purple dusk. Their windows were like scattered emeralds of light.

How could there be so much beauty without compassion? So much knowledge without understanding? So much human genius without humanity?

And what a battering of thoughts in the mild air around the centers of science! What a discordance! What a tumult of theories, each of them nurtured within its own walls by the zealous Sars.

There were the Departments of Chemistry and Physics. There was the glass-walled tower of Astronomy! There was the Institute of Psychology, with all its many bureaus. And the new Electronics Building, alabaster even in the dusk.

They were all there, extending in stately splendor along the main avenues, and along the park, where the gossamer mist was rising.

How intolerant were the thoughts they radiated! How sure!

Electronics said: "Quite obviously the answer to psi is in the electrical currents of the brain. Our newest electro-encephalograph has demonstrated. . ."

Chemistry said: "Solution to psi inevitably will be found in the chemical balance of the cells. . ."

Parapsychology said: "We must continue to ignore those who insist upon attributing physical properties to a non-physical characteristic. . ."

And underneath this learned babble, Miryam heard the moth-like whispering of her own people, starving in the Ghetto, or hidden throughout the city, disguised, furtive, tense.

Her mind came close to Government Square, and she cringed, as she had cringed all her young life. The somatics were unbearable. Hatred and fear, blind prejudice, jealousy, cunning, ceaseless intrigue and plotting, setting Sar against Sar, using the genius of each science, dividing and ruling.

No, there was nothing left. No hope, no promise. This was the end of time. This was the night of the world.

Withdrawing again, retreating into itself, Miryam's mind brushed the fragment of a thought. It was a half-formed thought, more a groping, more a question, than an idea. It was delicate, fragile, a wraith and a wisp. But it came to her as clear as the note from a silver bell.

Startled, she hesitated in her withdrawal, and perceived the young Geno-Doctor in the corridor near her room. He had paused by the casement window, and was staring out at the twinkling islands of light around Government Square.

And as his gaze wandered moodily from Tech, to Psycho, to Chemico, to all the incandescent, isolated centers of genius, the idle speculation had formed.

"Wouldn't it be an unusual view if all those bright islands were connected by strings of light. . . ?"

Once formed, the speculation had fanned the ember of a thought:

"Wonder if psi will build those strings of lights?"

Then the young doctor turned almost guiltily from the window to meet the Geno-Sar coming down the corridor. And he said with crisp efficiency,

"I'll check out 12-A for delivery."

"Good boy! I'll go on up and check the staff. . ." The Geno-Sar rubbed his hands together, and walked off, repeating nervously, "Two psi characteristics must be the answer—two psi—"

"Maybe they are," the young doctor murmured softly. "Maybe they are. . ."

DELIVERY, Miryam thought. The life within her throbbed and prodded. There was an ebbing of pain for a moment, and in that moment she saw with the blinding clarity she had sought that this child of hers might bring new hope to the world. That psi ability might be the answer to many things for

(Continued on page 103)

YOUR TIME IS UP

BY WALT SHELDON

The Colonel was a career man; and knowing what would happen within his lifetime promised to be an invaluable asset . . .

But he had never heard of that ancient legend of Faust . . .

Illustrated by Ernie Barth

AT FIRST I thought it was just another wrong number. Well, it was, in a sense—but not the kind of wrong number I thought it was. The ringing signal burred against my ear in the usual way, then there was a click, and somebody said, "Office of Historical Research. Zon Twenty speaking."

"Oh. 'Scuse me," I said. "I must have dialed wrong."

That was euphemism — misplaced loyalty, maybe. I didn't dial the wrong number, and I knew it. But high brass had installed a new automatic dialing system in the Pentagon as an economy measure, and it produced so many wrong numbers and entanglements that I think it actually must have cost more money in the long run than the old-fashioned live operator system—but then that shouldn't surprise you if you've ever been connected with the military.

I was about to hang up after my apology. The voice on the other end said: "Wait! Did you say—*dialed?*"

"Sure," I said.

"Then—" and he seemed surprised, if not downright startled—"what kind of a phone are you speaking from?"

"Huh?" I said. "What kind? The regular kind. Phone, desk, dial, M-1—or whatever the Army calls it."

This time his voice went off like a small bomb. "The *Army?*" he said.

"Sure," I said. "What's the matter with the Army?"

And thought: Navy or Air Force type, no doubt. Our allies. Have to put up with them in the Pentagon. Have to put up with a lot of things —even being Colonel Lawrence Boggs didn't save you from a snafu dialling system. I thought: somebody is out to needle armchair colonels this week. I'll play around with it for a while, maybe find out who's got the sense of humor.

The voice said, "Look here, are you joking with me?"

"Perish it," I said.

"But this talk about—about *dial* phones. About *armies.* Why, you sound like one of those historical tri-vids about the twentieth century!"

I smiled, without too much humor, shook my head at the phone, and said, "Look, fellow, come off it, will you? I haven't got time to play games." I hoped he wasn't some general or equivalent rank in a pixie mood.

"Wait!" he said. "Wait—please —don't think off! Tell me, what year is it? Where you are, I mean."

"What year? It's 1955, of course."

"Why," he said, "this is remarkable!"

"It is?"

"Do you know what I think has happened? A quantum inversion."

"Beg pardon?" I said.

"Karpo Sixteen predicted the possibility just the other day! Listen, my friend, let me ask you just a few questions—"

Then the mechanical voice of the operator cut in. It wasn't a real operator, of course, just a recorded voice, part of the new automatic system. These voices gave all the standard phrases and usually at the wrong time, the way the system was working. The worst of it was you couldn't argue with them or curse them—at least you always felt a little foolish afterward if you did.

The operator's voice said, *"I'm sorry. Your time is up!"*

"Now, wait!" said my communicant, his voice fading a little, "Don't cut us off! Don't think off yet!"

Again: *"I'm sorry. Your time is up!"*

And after that a click, and after that silence.

I jiggled the hook a few times. No result. I shrugged. I hung up and rearranged the papers on my desk and went back to work, forgetting for the moment the party I'd been trying to call in the first place. And forgetting the odd conversation I had just had. No—not quite. Not quite forgetting it. Queerly, it clung to my mind. What had he said his name was? Zon Twenty. Sounded like that, anyway. Odd name. Of course I still thought it was a gag of some kind. Yet it bothered me. Zon's manner, his tone of voice had been so convincing. What he had said suggested that in some queer way I had managed to place a telephone call into the future. But as a sane, normal, recently promoted colonel, I knew this was impossible.

At lunch I was still thinking about it. I ate in the officers' mess

on my floor and steered my tray through the line. I saw, among other acquaintances Major "Clipper" Moskowitz at a far table, and remembered that he was a great science fan, always talking about rockets and reaching the moon, and that sort of thing—we had one argument about why a rocket works in a vacuum, such as space, and he hammered the table and drew diagrams and quoted Newton, and I'm still not convinced. Anyway, I went over and sat next to Clipper.

" 'Lo, Larry. How's it?" he said.

"Routine," I said. "Latest request for overseas duty turned down. I'll probably die in the Pentagon with my pencil still behind my ear."

We talked of such things for several minutes.

"Clipper," I said finally, "you're the G.L.E. on this future science stuff—"

"The what?"

"Greatest Living Expert. Latest Pentagonese. Tell me, what do you think of the possibility of ever being in touch with the future?"

"You mean time travel?"

"I guess that's what you'd call it."

"Time travel is nonsense," he said. "A logical absurdity. By definition, time is a series of infinitesimally small moments in succession. Once a point in time is established, it can't be changed, any more than energy can be destroyed."

"I didn't say anything about changing anything. I was thinking about—well, talking with somebody in the future."

"Just as paradoxical," he said, shrugging, and taking a huge bite of braised beef tongue. "If you go into the future—or talk to the future—the future affects the change, through you. In other words, if *you* can't go back into the past, neither can people from the future. And it's inconceivable that such a thing wouldn't make changes. Maybe only small ones, but they'd multiply in time. *'Thou canst not change a flower, without troubling of a star.'* That's Francis Thompson. You step on one spider today, and you affect the evolution of spiders, the ecology of all other things in the distant future. By a simple act like that you could destroy or create a whole species to come."

"My head swimmeth," I said. "All I want to know is—"

He wasn't even listening to me. He enjoyed spouting this kind of thing. "Of course, it's theoretically possible for you to *witness* events out of the past, without being party to them. If, for instance, you could travel away from Earth at more than the speed of light, overtaking the light waves of an event—say, the Monitor and Merrimac fight—"

"Or the Battle of Gettysburg," I said, loyal to the core.

"—you could look back and see it happen. The future? I doubt it. Unless in some way time and space actually curve back upon themselves, as some think.

"Uh huh," I said, and drank my coffee and finally left Clipper Moskowitz.

AFTER that I did manage to forget about Zon Twenty temporarily. It was a busy week. The draft quota had gone up, and Personnel Planning had worked out new criteria for classification, and I had to study these to apply them to analysis. This won't make much sense to you unless you've worked in a military headquarters yourself. I worked. I had a dim idea that if I worked hard enough somebody would favorably regard one of my requests to get sent overseas.

I've got to explain something right here. I don't want anybody to get the idea I'm a hero type—a professional volunteer. But I'm a career officer, and overseas duty is the quickest way to tactical unit command, which is important on the record. The lack of it has kept many a perfectly good colonel from getting his first star and making that final big step.

So I worked hard, and of course, sent in another request for transfer, this time under the provisions of a different set of regulations. And I didn't think about Zon Twenty again until about a week later, one afternoon, when the phone rang.

"Personal Analysis. Colonel Bog—"

He didn't even let me finish. "Well! I've found you again! The man from the past!"

"Oh, no," I said. "Don't tell me. Not Zon Twenty—"

"Yes, it's I, of course! Seems we've had another lucky accident, and been connected again. I was despairing of it for a while. Now, for machine's sake, don't go away this time! I've *got* to talk to you!"

"It's your dime," I said.

"Dime!" He pounced on it. "That was a monetary unit, when you had money, wasn't it?"

"Look, mister—"

"You haven't guessed what's happened, have you? We have it pretty well analyzed at this end. But we didn't really suppose your technology would be equal to it back there."

"Look, just who are you, and where are you?" I said.

"My name is Zon Twenty, as I told you. I'm an historical technician in the Office of Ancient Research in Washington, the capital of the planet, Earth. I'm an Earthman myself, of course. My job is to prepare studies of ancient civilizations such as yours—"

"Now, wait—what kind of a gag is this?"

"A gag? Oh—that's the ancient term for a joke. Good! I'll make a note of that!"

"Come on. Who is it? Did Clipper Moskowitz put you up to this?"

"Oh, dear," said Zon Twenty, and I could hear his heavy sigh. "I was afraid you wouldn't be able to grasp the situation. I'm going to have to offer proof, I suppose. Look here—exactly what date is it where you are?"

"I told you. 1955."

"I mean what month and year?"

"It's August 23, 1955—and I think you know that as well as I do."

"August 23d. Just a minute . . . we'll make a quick tape on the cyb, here. Ah, yes, here we are. August 23d. All right. The nearest date of significance is September

1st. On the date twenty-one of your so-called nations reached—or should I say will reach—a new trade and tariff agreement in the U.N., and this will eventually lead directly to the free nation federation in—"

"I'm sorry! Your time is up!"

It was that blasted recorded voice of the mechanical operator again.

"Hey! Don't cut us off!" I said.

"Hello? Are you still with me? Look here—I'll try to call back! It's difficult, but I think I can!" said Zon Twenty.

"I'm sorry! Your time is up!"

And again the click, and silence.

This time I didn't forget Zon Twenty, neither quickly nor easily. If it was a gag, it was a beauty: crazy and elaborate, and the acting was superb. If it wasn't a gag —well, I couldn't yet quite believe that it wasn't a gag. A week streamed by in a sea of paperwork. My latest overseas transfer request came back disapproved. Then, on the morning of September 2nd I opened the newspaper and saw the headline:

TWENTY-ONE NATIONS REACH TRADE ACCORD IN U.N.

I read the story. It was essentially what Zon had predicted—or remembered—or whatever you want to call it. I was confused now.

That day I didn't work very well. I couldn't concentrate. I am not a deep thinker, and have no illusions that I am. But one idea presented itself, starting as kind of hypnotic little glow in the bottom of my mind, and this grew until I could scarcely think about anything else.

Put it under the heading of temptation. Ask yourself if you would have been able to resist. Or just forget all the moral and ethical implications, and accept that I was tempted in this way. If I could be in touch with this Zon character—if he really was from the future, and an historical expert, at that—he could tell me all sorts of things that were going to happen. I could then either predict them or otherwise adjust my actions to fit them. I could go up so fast it would make Caesar's career look like a misfit reservist's. I could—

Well, then I started justifying and rationalizing. I could do my country all sorts of good. I thought along those lines for a while, and presently even managed to convince myself that my original purpose had been altruistic all along.

Of course I tried to get in touch with Zon Twenty again. Over and over again I dialed the number I had dialed the first time I had become connected with him by apparent accident. I dialed random numbers. I listened to a long and boring dissertation on permutation of numbers by Clipper Moskowitz in an effort to devise a system of hitting all possible combinations. There were an awful lot of possible combinations.

MY PHONE rang again nearly ten days later.

It was Zon. He said, "Oh, *there* you are! I'd about given up! Look —the quantum inversion is swing-

ing back to normal! This is the last time we'll be able to talk! So we've got to make every moment count!"

"Sure," I said. "You bet. Only I don't exactly get it. I don't understand just how all this happens. If you'd explain—"

"That's not important. Briefly, we use telepathic induction for message selection. That's why I was startled when you mentioned the ancient dial phone. And of course we don't have armies any more."

"Yes, but—"

"Listen, Colonel—what was your name? Never mind. You can be most valuable to me in my research. You can supply details about your time that simply don't exist any more—"

"Don't exist? Don't you have movies, recordings, magazines, all that stuff?"

"Of course not. They were all destroyed in the Final War."

"The what?"

"The Final War. You'll hear about it soon enough. If you survive, that is. Only three hundred thousand did, out of the entire population. They were the seed of our present civilization."

"Hey, now, wait a minute! What about this war? When was it? When's it going to be, I mean?"

"There's no point in your asking," said Zon. "You can't change it, you know. If you could change it, I wouldn't be here. My world as I know it wouldn't exist. The fact that my time does exist proves, therefore, you never changed it. Now, if you'll just calm down—"

"Calm down?" I shouted it across the centuries at him. "How can I? How would *you* feel? Look, this Final War, as you call it. Is it going to be soon? You can at least tell me that, can't you?"

"All right. Soon, as all time is reckoned. In your lifetime, I would say. Now, I suggest that you adjust yourself emotionally and accept what is inevitable. The best thing you can do is answer a few questions I've prepared."

I took his advice. I calmed down. "Questions? Well, Mr. Zon, or whatever your name is, I'll tell you what I'll do. I'll make a bargain with you. I'll answer your questions if you'll answer mine. I'll tell you what's happening here—anything you want to know—if you look in that little file of yours and tell me what's *going* to happen in my time. A deal?"

He was silent for a moment, and at first I thought we'd been cut off again.

"Hello? Zon? You still there?"

"Yes, I'm still here." His voice had become oddly quiet. "So it's the old Faust legend all over again, is that it?"

"I don't know what you're talking about," I said. I didn't—then. "You just answer my questions, and I'll answer yours. Mine first."

"All right," he said. "Very well."

And I started my barrage. When would the Final War start? He told me. How would it start? He told me that. Who would be the belligerents, and what weapons and techniques would be used at first, and what new ones would be developed? He knew. Where

would the major campaigns be fought—how many troops would be involved? I got the whole story. I scribbled furiously and put it on paper.

Afterwards, he asked his questions. They were innocuous, compared to mine. He wanted to know about taboos and marriage customs and slang expressions and education and eating habits and articles of clothing. I told him.

I was in the midst of an explanation of the game of Bingo, of all things, when there was a sudden whooshing and crackling in the earpiece of the telephone.

"Hello? Zon? Still with me?"

"Yes—but I think the signal's going out. This may be the inversion passing! We probably won't be able to talk again. Hello? Do you still hear?"

"I do. Look—one more thing before we go. You said this dictator—the one everybody hated so much—survived the final series of blasts. He and his staff. Where were they? Where were they when the blasts came?"

"In a country at that time called Canada. Little place named Resolution, on Great Slave Lake. They'd dug in there—very elaborate underground installation."

"And the date you gave me is correct?"

"As far as I know. You're determined to be in that place at that time, I suppose." He seemed amused.

"You can say that again," I said.

There were more rumblings of static on the line.

"Well, since you're so determined," said Zon Twenty, "one more word of advice. The dictator and all his followers were afterwards imprisoned by what populace remained. Small wonder, since they were mainly responsible for all the carnage. It was a pretty horrible thing. They were slowly and most savagely tortured continuously for nearly two decades. So if you mean to be there, at Great Slave Lake, I suggest you arrange to be on the right side."

"Don't worry," I said. "I'll arrange it somehow. Larry Boggs is going to live through this, if anybody is—"

"What's that? What's that you said?"

"I said I'm going to live through this—"

"No, no, the name. Boggs. Is that your name?"

"Certainly that's my name. Colonel Lawrence E. Boggs, United States Army, and—"

He was laughing. He was laughing loudly, uproariously, and, I thought, hollowly.

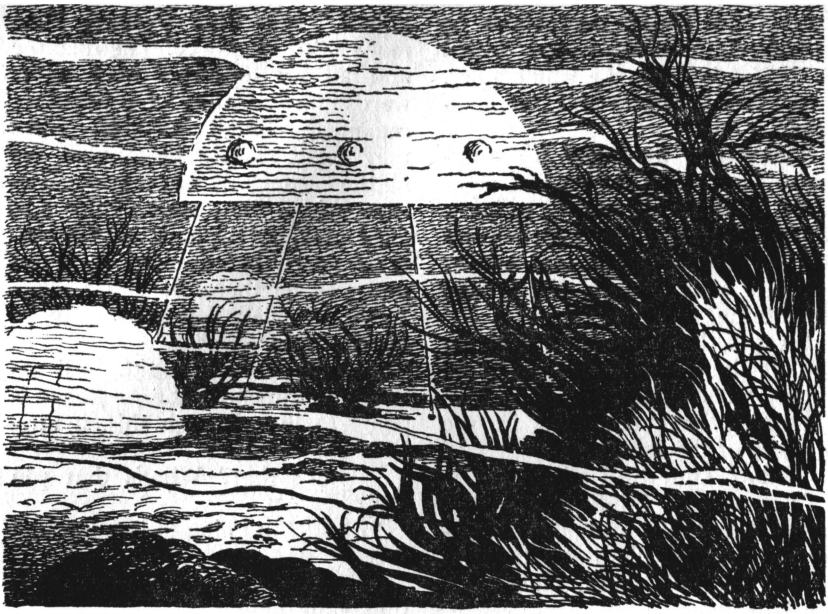
The background noise in the receiver had been steadily getting worse. Now it swelled, like an angry sea. Interference of some sort snarled and crackled. A sick feeling began to grow like fungus in my stomach.

Suddenly his voice came through again. He was still laughing. "Generalissimo Lawrence E. Boggs survived all right Colonel, he—"

All the noise cut away suddenly. There was a pinpoint of silence.

Then the mechanical operator: "I'm sorry! Your time is up!"

• • •



MEN OF THE OCEAN

BY R. E. BANKS

THE MEN of the ocean are not like the men of the land, nor the men of space," said the Spaceman. "The men of the ocean are a race apart."

"That's stupid," said the girl. "Any sociologist will tell you that all mankind shares common objectives, fears, hopes—"

"Objectives, hopes, fears—" said Jim Talbot thoughtfully. He lifted his glass and stared into the eyes of the girl. For a fraction of a second the veil almost lifted. Then she bent and sipped her drink, presenting the top of her sleek, glossy head to him.

He looked past her out the win-

Illustrated by Paul Orban

The ocean floor had served a generation. Now Old Cady was dying, and the men who had worked the kelp beds and sea mines wanted him to die alone . . .

dow of the bar in Long Beach. The fog was in now. A wavy red neon sign across the street flashed: CATALINA SUBMARINE: Last Vessel—Midnight. A few ghost figures swirled through the fog to the entrance of the pier.

"You've got ten minutes," said Jim. "Then it'll be too late to go out to the kelp-beds and the sea-mines, unless you want to walk, and midnight on the ocean floor along the Kelp-cutter's Walkway is no place for a lady sociologist from Iowa."

He was afraid she would say "I can take care of myself." Instead she said: "I have to take the early

morning rocket back to Ames. It's my last chance."

"Take my advice," said Jim. "Don't go out on the Floor tonight. There's trouble out there. I know the men of the ocean and I can tell. They're restless tonight."

"I've read all the books," she said. "I've talked to the local professors and examined the kelp-docks and the sea-mine facilities—I've done everything but go out on the Floor. I planned to do that next week, but—"

She opened her bag and pulled out a yellow telegram which she handed to him. It said that there had been departmental changes in the Sociology Department back in Iowa and her presence for the coming semester was requested a week early. It looked very authentic. He handed it back.

"So you're going out on the Floor tonight anyway!"

She stood up. "Yes. Thanks very much for the drinks, Mr. Talbot. I hope I haven't bored you with all the talk about sociology. A spaceman just in from Mars probably expects something more lively." She blushed and turned rapidly away.

Jim merely bowed his crew-cut head and smiled politely as she moved off. Then his eyes swept the room, a faint frown appearing on his forehead. There were a few tourists like the girl. There were a few spacemen, loud as usual, loud and noisy as their profession demanded. And there were the men of the ocean, far too many of them, with their white, pasty faces and bloodshot eyes, their stony expressions and their sudden, awkward motions as they forgot, temporarily, that they weren't moving in one hundred feet of water.

The men of the ocean weren't drinking tonight.

Jim's frown deepened. He saw the uniformed figure of a copper from the Underwater Police, watching the room as he was, and recognized the reserve insignia. If the reserves were out, every single man on the Underwater Squad must be on duty tonight.

A low, mournful whistle sounded. Last call for the Catalina Submarine. Suddenly it stopped, and for a second in the silence you could hear the boom of the breakers, the saddest sound in the world to Jim. Across the room he saw a sea-miner tip a signal to a kelp-cutter and he saw the cutter slide out of his chair, throw a coin on the table, and disappear into the fog behind the figure of the girl sociologist from Iowa.

Uh-huh!

Jim moved to the door, spoke to the reserve.

"The boys are restless tonight."

The reserve looked at his spaceman's uniform in surprise. But then spacers were frontier men like Floormen and he nodded and spoke as insider to insider.

"You said it. They're all over the Bottom out there."

"For what?"

"Old Man Cady's come home," said the reserve. "Three weeks ago they dragged him out of his kelp-beds and took him to Long Beach Memorial Hospital to die. But he said he'd come back to the Floor,

and he did, and the Floormen think it's great."

"The men of the ocean must be getting sentimental," said Jim. "They weren't in my day."

"You a Floorman?" the reserve asked in surprise.

Jim grinned. "I was born in Donovan's kelp-patch," he said. "But I got the hell out. It was too wet."

The reserve grinned at the old half-joke. "It's wetter than water tonight," he said, giving back a bromide. "If you're thinking of a return visit, I wouldn't go out there until tomorrow if I was you."

Jim didn't answer. Instead he went out into the fog. In times of fog it was better, but you could still feel and smell and hear the city, the insane babble and crash and rush of it. The city that ran from Long Beach south to Old San Diego and north to Old San Francisco. That ran inland through Los Angeles to the Sierras and over the mountains and across what used to be the plains. You could drive from the West Coast to Denver these days, they said, and never be out of sight of a man, building or advertising sign. Jim wouldn't know because he didn't like the land and its cities. There weren't any cities in space—yet, nor under the ocean—yet. And that's where you had to go if you wanted to escape this deafening twenty-four hour roar. Even with the men of the ocean having a ball for themselves out on the Floor, it would be more peaceful than the City, he thought.

At the Submarine ticket window the girl from Iowa—Helen Lindsey, wasn't it?—was still arguing with an Underwater cop.

"Lady, there's a big celebration going on out there tonight, and when these guys cut loose it ain't safe for inlanders. Like I told you, you can't go out."

"At least let me buy a ticket to Catalina. The ride on the Submarine should be safe if I don't get off."

The cop shrugged. But as she turned to the window the ticket man who had been selling tickets put up a sign SOLD OUT.

Helen looked annoyed; then she turned and melted into the crowd. Near Jim a tourist spoke to his wife: "These crazy ocean people. They've been crowding the Submarine on every trip since six o'clock just riding back and forth, the man said. If we're going to Catalina, we'd better take a surface boat or fly over."

The woman snorted. "I don't see why they don't build a bridge. It's just an island, twenty miles out."

JIM shouldered his way through the crowd, keeping his eye on Helen. "I am very altruistic tonight," he thought. "I'm sooo-oo altruistic."

As he expected, she pressed right up to the gate when it opened and flashed a bit of colored paper, probably a hotel check, and went right on through with the crowd. Once she got on the Submarine, she could always pay her way and one more never mattered. Pretty determined to be on that Sub, for

an innocent lady professor.

Then Jim saw what he'd been expecting to see. The quick flash of a fish knife in the crowd. Those fish knives were apparently as sharp as ever, for the man sliced the handle of the girl's bag as he jostled her and somebody else stepped on her toe and her purse was gone without her ever realizing it. Jim recognized the face of the kelp-cutter from the tavern.

He grinned. If you were caught on the Sub without either a ticket or money, they held you for the police at the other end. The men of the ocean were going to great pains to make sure that Helen Lindsey stayed on the Sub, but she didn't have a ticket to begin with and he doubted that her money was in her purse. The men of the ocean would have to do better than that on this girl who was so anxious to join their celebration.

Some celebration!

Old Man Cady was dying out there tonight on the Floor and the men of the ocean were having a celebration to see that he died alone. That made sense when you considered that Old Cady owned three-fourths of the ocean floor between the mainland and Catalina.

Jim got on the Submarine too, using the fake ticket routine, and the busy guard passed him through. The locks slammed, bells jangled and the mighty vessel submerged, its squalid interior crammed with the soft-talking men of the sea, its grimy portholes flicking wizened lights out into the gloom of the Floor. Down below the pilot picked up the Kelp-cutter's Walkway and the propellers churned; the Submarine shook all over like an old lady with the ague and pushed through the water. Jim grinned to himself as he recognized the same furnishings of fifteen years ago, the same plush seats only a little more grimy today.

It was too crowded to sit down. He stood at one end of the corridor near the Ladies Room and watched the underwater markers as they moved along.

Meredith's Mines—Buoy Office, Goldstein's Kelp-farm, Entriken's Mineral Buoy, Strong's Mineral and Metal Supply, Rancho San Kelp, The Forks—

He was expecting some action at The Forks, and he wasn't disappointed. Helen got up to go to the Ladies Room. She pressed right by him without seeing him, because he leaned behind a miner.

"Going to Catalina?" asked the miner, jostled into conversation.

"Catalina Spaceport," lied Jim. "Takeoff tomorrow."

"Most spacemen travel on top to to Catalina," said the man accusingly.

"I had a leftover ticket," said Jim. "Excuse me."

He stepped in front of the "Ladies". He was aware that he wasn't the only one interested in Helen's ploy, as he thought of it. Half of the Submarine eyed the door. Even the Conductor who had gotten half-way up the aisle, punching tickets, called out ineffectually "Hey, lady, your ticket—"

Here the aisle was momentarily

clear. The Submarine's reputation for non-cleanliness assured Jim that Helen was in there alone. He put his shoulder to the door and waited for a lurch. He counted on the lurch. The ride was always jerky because the Third Mate always took over after the trip began so the pilot and engineer could enjoy their twenty-year old card game. Nothing had changed. Jim got his lurch. He broke through the door, because the fastenings were of the feeblest, as he well remembered.

Helen had her diving suit on, all but the helmet. She had hooked it out of the bin marked Emergency. Her next step would've been to slip into the escape hatch. There were two things that were always first-rate on the Catalina Sub despite the rest of its faults. One was the diving suits, the other was the escape hatches. At least three times a year the Sub conked out and you had to go down to the Walkway and finish your trip under your own power.

Helen looked at him in utter astonishment. Jim thought of the long reams of explanations he would have to make and realized how little time he had, with every sea-man out there waiting to see what happened, and took a short-cut.

He belted her on the cheek and then once in the solar plexis, because unless you had practice in knocking people out, how could you be sure?

She folded and slumped obediently on the floor.

He flipped her coat over her to hide the diving suit, cradled the helmet on her stomach and picked her up. He shouldered out of there just as the puffing Conductor broke through the last of the crowd.

"Lady fainted," he threw over his shoulder and kept right on going to the tiny door marked CREW —NO ADMITTANCE.

"This is a helluva night," groaned the Conductor. "Gad, she isn't going to have a baby, is she?"

"This I doubt," said Jim.

He and the Conductor stood alone in the narrow walkway behind the Crew door, a catwalk that led to the Pilot's compartment. Anxious white faces peered through the slit of glass, but the men of the ocean didn't try to follow, figuring she'd be taken to the First Aid room. Jim carried her out of range of the door and laid her on the catwalk above the pounding motors instead.

He turned to the Conductor. "Here—I'm no doc. You take a look."

While the anxious old man bent to peer at the patient, Jim silently asked for forgiveness. Then he brought his heavy hand down hard across the exposed neck of the white-haired old man. It wasn't too funny, he thought, as he dragged the old boy out of the way. Still, he had gained priceless momentary solitude. They were out of range of vision of the men of the ocean and the Crew up ahead didn't know there was trouble.

Three steps down the corridor was another emergency locker. Jim grabbed a rubber suit from it and slid into the suit with the practice

of twenty years in space and under water. He flopped the bowl helmet on his head, lifted Helen's helmet off her stomach where he'd carried it and adjusted it on the now-writhing body. She was coming to now. Good.

He picked her up, looked for the red light and found it. A dozen steps, half-dragging Helen and he was on the platform. He tripped the lever and the floor section cantilevered around and dropped them in the tank. Ten seconds later, they were flushed out on the floor of the ocean. When it came to escape hatches the Crew had it all over the passengers on the Catalina Submarine. He watched the big metal fish ooze away from them in the water, its feeble port lights bravely dotting the darkness. What with this and that and the other thing, he had about ten minutes before the men of the ocean would know of their escape, and then the fun would really begin.

Because tonight the men of the ocean weren't letting any outsider within range of Old Man Cady. And the dark-haired girl wasn't heading any place else, despite all the talk about Iowa, sociology and the other phoney baloney. While they were sinking to the Kelp-cutter's Walkway, Jim wondered how many agents, male and female and children the Real Estate Foundation had sent out tonight and how many would get through to Cady to buy up the ocean floor before he died.

Probably none, he thought as his feet touched the ooze of the Floor. Not even Helen. Not if he knew the men of the ocean.

JIM TALBOT was back in dreamworld. The equalizing pressures of the suit gave the body feel of normalcy even in a hundred feet of water, but the closed-in, drifting lightness was a stirring memory from the old days. Not the free lightness of space but an immersed lightness in which the swaying, deep currents took over and managed you. The silence was awe-inspiring after the roar of the continuous city that was America and after the noisiness of space.

Jim appreciated the quiet for a bit. Spacemen always shouted when they talked because what could be noisier than a spaceport? Spacemen shouted because even in the deep outside quiet of space they were enclosed in a noisy capsule where bells rang, a thousand large and small motors hummed and throbbed, burped and gurgled, depending on their health. Where cargo was always being banged around to make finer weight adjustments, orders, news, music and time signals came whining out of the ship loud-speaker, men chattered and the maintenance crews banged their buckets and mop handles, and hustle and bustle were the antidotes for vast space solitude.

This was a silence and darkness almost womb-like. This was a lazy giving over and slow movement in a ghost-world, where the dim light from the miner's lamp in his helmet showed flashes of rock and kelp and the sandy floor, but where he was

sheltered and protected from the nerve-cutting hustle of civilization. This was one reason why the men of the ocean were different . . .

Two phosphorescent steel cables moved slowly through the water just above the sandy floor, one eternally winding its way towards Catalina, the other to the mainland, like an underwater ski tow. Jim hooked onto one of the ties and fastened Helen's belt hook to another. She struggled for a bit, then she became quiet and he figured her senses had fully returned.

Every hundred yards or so along the Kelp-cutter's Walkway there was a tiny dome. Jim set the hooks for "detach" and as they swept into the structure they were oozed off the line. He grabbed her flailing hand and sank to the upper floor of the dome, kicking the lock panel without even thinking. They were deposited rather crudely on the white, soft sand of the lower dome with a quantity of water which immediately drained away, and he took off his helmet and she hers.

"Well!" she gasped. "I've been wooed and won before, but never quite like this."

"I saved you from arrest," said Jim. He explained about her purse, watching her narrowly, but she kept up her role-playing, shrugging off her loss. She seemed more interested in the dome and studied it curiously, the black gashes of portholes and the institutionally inadequate 25 watt light bulb in its no-steal wire cage. It was a comfortable little bug-wallow with breathable air, ten feet across, resting on the ocean floor. On one wall was a pay telephone. On the other a half-dozen motor propellers in racks.

"Sorry about the rough stuff," said Jim.

"It was one way to get out on the Floor," she said without hostility. In the tight rubber suit she looked little and lost. She drew up her knees and hugged them with her hands, staring at him with a bright-eyed look.

"The only way," said Jim. "You were smart enough to know that you didn't dare get off at the regular underwater stops without being followed, but too dumb to know that the escape hatch routine attracts just as much attention. Now you can level with me. Why did you come out on the Floor tonight, Miss Not-from-Iowa?"

The eyes remained bright and innocent.

"Just to say I'd been on the Floor and walk around a little."

Jim got up without a word. He fumbled out his all-purpose credit card, fed it to a wall slot and removed two motor propellers from the racks by the hand-straps. He strapped one on himself and showed her how to adjust hers.

"Come on, Miss Iowa."

She followed him to the lock, grinning through her bowl helmet at the embarrassing addition to her pert behind.

"The subject of hundreds of dull jokes," he said, "but practical. Let's go."

They slipped out on the Floor, talking on radcommunication now. He showed her how to work the

motor and they moved off under power until they began to feel kelp fronds slap against their suits.

She stopped him.

"Where are you going?"

He pointed behind them to the faint, glowing dot that was the dome they'd just vacated. "The men of the ocean are guarding all the domes tonight. We were lucky to have entered that one when the guard was out working the line. We can't go back. So we might as well return to Long Beach under our own power, now that you've had a look at the Floor."

"I'm not ready—to go in yet."

The trouble with half-trained agents is that they don't know the full dangers. And this was no time for lectures. The guard patrolling the Walkway would soon be back to the dome of Station 54 and instantly notice the missing propellers. He would also probably have the flash on their escape from one of the ocean men on the Sub.

First he would pulse a warning to the Kelp-cutter's headquarters, probably Cady's No. Three mine. Then he would start out after them. Meanwhile in the headquarters the silent men would be gathered around a map, plotting the movements of the outsiders who had invaded the Floor tonight.

Jim had seen the hand-radar network in operation before, and a minnow couldn't get through from the mainland if the men of the ocean didn't want it to. Anybody they picked up close to shore would be sent back to the land safely enough—but those they found back here in the kelp in the inner defenses—

Jim felt his heart quicken.

He had to know whether the girl were an agent or not—and he had to know fast. He put a strangle hold on her and cut her air intake to almost nothing.

"Talk!"

She was strong, but Jim was thinking of the radar-net and the spear-guns and the determined men on the Floor. They sank to the bottom, sliding in the ooze. He maintained control.

"All—all right," she whistled finally.

He knelt above her, his miner's lamp on low peering anxiously into the glass helmet. He could only make out the eyes, but the look of innocence was gone.

"I was hired by the Real Estate Foundation to try to reach Old Man Cady," she said. "Now what?"

"Then the rumor is true—that the Foundation got the Old Man to sign an option on his Floor property while at Long Beach Memorial."

"I guess so. Don't know. I—I'm from Fullerton. I really am—a sociologist. Junior College. I'd done some work on the Floor and its problems. I can wear a suit and dive. They offered me a lot of money. I needed the money."

"Why?"

"Why?" she laughed shortly. "What do you care?"

"Give me your motive."

"I wanted five thousand to go study the red ants on Venus," she spat out over radcom.

Jim stood up. The men of the

ocean were coming now. You couldn't see them nor could you hear them. But over the years he recalled the faint rhythmic vibrations of the seat propellers that the men of the ocean used. As a kid, he could've told how many they were. Now he only knew they were coming.

"Let's move," he said.

They moved off into the kelp. The seaweed was a darker mass in the darkness and looked like an impenetrable wall. But the jungle was only a growing mass of plants, rooted to the bottom, leafing up with bulbous floats, reaching for the surface where it had to have the sun, like any plant, for photosynthesis. They brushed into the clogging, choking stuff, the skin effect of their suits transmitting the feeling to them. There were tunnels in the kelp, but you had to know how to find them. Jim found them, marveling that the girl from Fullerton would believe she had a chance on the Floor. She couldn't have known he would follow her from the shore to help. Either she was to meet a confederate at The Forks or her motive was one of desperation. Presently he would have to know which.

Meanwhile, he led the way, staying close to the bottom. Sometimes, he dived to a rock and burrowed against it. Sometimes, he left the tunnel in the kelp to slide and twist through the kelp forest itself and emerge in the tunnel again. He was making it a little tough for hand radar, he hoped.

Helen followed, helpless at the moment to argue. They were in the center of the kelp farm now. A faint beep signal from the detector in his suit began to guide him. The signal meant human habitation. In the absolute darkness and sliding nothingness of the water it was good to know that there was a farm home buoy ahead.

Suddenly there was a faint vibration above, a different sort. A metal spear tip, propelled by a killing charge of CO_2 cut past them as their silent pursuers caught a flash of them. Jim instantly cut his helmet light; he had already made Helen douse hers. He saw the direction of the tow-line paying out behind the spearhead; and dove into the kelp mass at a tangent, cutting off his propeller motor. They sank, nested in the mass, motionless. He spent the waiting time in clearing her propeller of the seaweed that she constantly tangled with, and they bumped body to body in a silence that was so deep he could hear the thump of his own heart.

The hunt on the ocean floor was different. Silence—the sudden aggression—and if you were smart and didn't swim in panic, half the time the hunter couldn't find you. A novice would've spurted into a swim of death, but Jim remembered the old ways and forced the discipline of inaction on his nervous system that cried out to be moving. At last sufficient time had passed so that they dared to move again, no motor vibrations being discernible.

And now—

They broke into a clearing. The farm home buoy loomed dark in

front of them, its anchor line going to the bottom, but floating easily, its majestic weight swaying with the currents. Jim went right to it, forcing out thoughts of what could've happened in fifteen years. He broke into the entrance lock and pushed the bell desperately.

"Who?" said a voice, and he almost fainted.

His luck was running tonight—

"Jim Talbot," he said.

There was a silence from the wall speaker. Helen took off her bowl and stared at him in white-faced puzzlement.

"Jim—Talbot," whispered the feminine, metallic wall-voice.

"For Christ's sake, Bea, let us in!" cried Jim.

THE FARM home buoy swayed and rolled seventy-five feet below the surface, twenty feet above the Floor. The little woman in slacks and a short hair-cut who faced them stared at Jim as if he were a parolee from death. Jim stood there, buckling his knees to get used to the long-forgotten motion of the farm home buoy. Helen who had no sea-legs, collapsed in a chair, puzzled.

"So you've come back," said the woman in slacks.

"All the way. Did you—is he—"

"I married him," she said. "That was twelve years ago. We have a child. She's sleeping upstairs." She gestured at the ceiling.

"Your parents?"

"They died."

Jim let out a long, slow breath and sank into a chair. "It's good to know Ed lived," he said. "After fifteen years. The last time I saw him, he was floating in the kelp with six inches of my spear sticking in him."

"It could've been different," she said. He felt sorry for her with the lines in her face now, and the gray-fringed hair. But she still had that delicate, fragile beauty. And maybe she felt sorry for him, for he had aged too. But in the end the heart couldn't speak. The heart can never speak except in the phrases of melodrama. "Could have been different", "So you're back." He thought of the hours and hours of unspoken interior monologues he'd had with the image of her, and here she was, and here he was, back on the Floor again, and as usual the time was short, as it always was throughout life, and he couldn't break down in front of a stranger and say "My God, how the hell have you been—"

"How's kelp-farming?" he asked instead.

"Horrible," she said. "It's done and over. The kelp-price has broken forever. They're spore-farming up there now, with those spores the spacemen—you spacemen—brought back to Earth. Kelp-cutting is done. We fed the world for a generation and they don't need kelp any more, all the hungry millions and millions."

"What's the kelp-price?"

"A nickel a hundredweight," she said.

"God in heaven."

There was a faint stir below.

"You've got to pass me over," said Jim. "I'm on my way to see

the Old Man and you've got to pass me over."

A spasm of uncertainty crossed her face. "Jim, you don't belong any more. Ed's still a kelp-cutter. I'm his wife. He's out tonight, working the net, trying for a few more hours to save things. All outsiders are enemies tonight."

"Kelp-cutting's done. Sea-mining's done. The people of the land need your space to live in, Bea. It won't matter if Old Cady dies without selling his land to the Foundation. The world needs it. The world'll get it."

"And you'll get millions if your uncle sells out to them," said Bea bitterly. "Is that why I've got to pass you over?"

Helen sat up with a gasp.

"I won't get millions," said Jim. "I won't get anything at all. The Old Man doesn't care much for his relatives that deserted the ocean."

"The option they tricked him into signing while he was in the hospital expires tomorrow," said Bea. "He may not live that long. Then, in his will, the land goes to the Underwater Association, they say. In perpetuity." she sighed. "The Association will never give up the land to the Real Estate Foundation. Like Ed says, let 'em build houses in the Atlantic. Why don't they try the Gulf of Mexico?"

There wasn't time to argue. Jim took the little woman in his arms. "You've got to pass me over, Bea," he said desperately.

A strange voice came at them from the intercom. A firm voice asking for admittance to the home buoy for a search.

Bea shuddered. "Jim—I can't hide you!"

But Helen was on her feet. From her inside pocket she had a wallet out. Jim saw something green then and started to cut Helen off. "You fool, don't—"

But Helen pushed Jim aside. "How much?" she said. "Here's five hundred—no, a thousand!"

Bea blushed. Jim was about to snatch the money from the table and throw it back at Helen, but Bea picked up the bills.

"It's been hard, very hard," she said, her bright eyes studying Jim's face.

"Where can we hide?" asked Helen.

"She took the money!" Jim whispered in the darkness.

"I don't blame her. With those kelp-prices it must be rough, feeding and clothing a family."

In the darkness Jim tried to swallow his bitterness. For the first time he truly felt the desperation of the men of the ocean. But hadn't kelp-foods always been doomed? There had always been something a little wrong with them. Seaweed had bulk and was rich in minerals washed down by the rivers of the land, absorbed by the ocean plants. Enriched by vitamins and proteins, it had carried mankind along but was tasteless. Spore-farming yielded rich, sun-grown crops today. The kelp-cutters had suffered for many months now. Could he blame Bea for snatching the money?

"I take it you shot a man and had to leave. Otherwise you'd have married her," said Helen.

"I would have."

"Don't blame her for not waiting either," said Helen. "In life you make the best of what exists."

"I don't," snapped Jim and she changed the subject.

"Are we safe here?"

"There's a secret place on each farm home buoy," said Jim. "That's where the kelp-cutters keep their money, because there aren't any banks on the ocean floor. The men of the ocean would never ask the location of anyone's house safe. We're in it. We're okay."

Helen stirred in the darkness. "Jim—why are you helping me? I mean, if you don't stand to gain from the sale of the land."

"Red ants on Venus."

She was silent. Then she said slowly. "All right. I do have a good reason for being on the Floor as an agent of the Foundation. My husband worked for them. He took some money to speculate. The Foundation manager will prosecute unless I can help him on this option business. I can't afford to fail."

"Why didn't your husband come himself?"

"Because," she said softly, "he was stabbed when he tried to get in to see Old Man Cady at Long Beach Memorial Hospital, day before yesterday. He may live and he may not, but he won't want to, if I fail."

Jim listened for the sincerity. It was there.

"And you?" she asked.

Faintly, as if far away, he could hear the pursuers arguing with Bea. He decided he would have to level with Helen.

"I've been hired by the Spacemen's Retirement Fund," he said. "We want the Floor. If I can get it, they'll make me manager of the whole operation."

"Why the Floor for retired spacemen?"

"What else to do with the old men of space?" asked Jim. "They can't stand the rigors of the new space colonies. And they can't find any land on the monstrous cities of Earth, except the poorest of reclaimed desert land, which is a hell of a desolate place to end your life. But under the ocean it's different. Quiet. Everybody is equal. A young man can't move much faster than an old one. They can raise a little kelp, do a little seamining to bolster their pensions. The low prices won't matter to them. They can go into town on Saturday, and the rest of the time play cards, drink and think. Spacemen don't mind wearing pressure suits and they rather prefer solitude or they wouldn't be in space. The only thing they really want to get away from is hustle and bustle —and the Floor is perfect for that."

"Maybe we can work out something between the Foundation and the Retirement Fund," she said. "Maybe we can share the Floor."

"No," said Jim. "This was my project, and I sold it to the Retirement Fund. It only makes sense if I can buy all Cady's land. Some for buildings, the rest for investment. Otherwise the Retirement Fund will invest in a land establishment or a space-station which cost less."

"So your job as manager depends

on getting all the Floor land?"

"Yes."

She was silent. "Something doesn't fit. You have the knowledge of how to get to Cady. You have the incentive—a life-time job, perhaps even a dream fulfillment. That fits because as Manager of the project you'd become the biggest man on the Floor, and everyone wants to return to his place of origin as a success. But you don't need me at all. So why have you helped me?"

Jim didn't answer.

She laughed. "Something tells me there's skullduggery ahead. But I warn you now, I intend to fulfill my mission."

"Of course," he said.

HELEN was his diversion. It could only be a matter of minutes now, he thought as they swam along after leaving Bea's place, before she would realize why he had helped her. And then?

When they found Cady's Number Three Mine, where the old man was probably hiding, Jim would need her. She needed him to get her to that spot. Once there, only one of them could succeed, and they were more dangerous to each other than the common enemy.

He tried to convince himself that her position was hopeless compared to his. How would she get inside the mine? But he knew there were ways. Once in the mine, how could she reach Cady? Answer: Cady would insist on seeing any agent good enough to break the net, for Cady was that way. Once she saw Cady how could she, in the midst of hostile men of the ocean, get his signature to extend the option? For that matter, how could he? He smiled to himself. It could be done. It could be done, because Cady was smart, Cady knew the old Floor economy was done and would have signed before, except that the men of the ocean captured him in a moment of sickness. But then, he reasoned, why wouldn't Cady have already signed, despite agents and options?

He knew the answer to that one, too. Like all old people, Cady thought he would live a little longer and it would be a disagreeable task to sign away the Floor when it had been his whole life—he would wait until the last possible moment unless he were pushed.

A mission was practical and could succeed. They had to get through, and yet only one of them must reach Cady.

They spoke carefully of neutral things as they moved through the water. How skin divers in the old days had started the trek to the ocean. How the opening worlds of atomic science had allowed mankind to flourish until they literally carpeted the world's land with their myriad lives. How the land broke down as a food-supplier, and the sea rescued it, and now the spore-farming of space and the mining of space had made the economy of the Floor obsolete.

Already, the Hudson River in New York pointed the way to the new uses of the ocean. The famous deep-bottom apartments were com-

plete with movies, stores, hospitals. The rest of the continental shelf would follow and finally the true ocean depths, and the agrarian age of the ocean would be over.

There was no doubt about it when they came to the Old Man's hiding place. The men of the ocean had sacrificed subterfuge for strength, in their direct, lazy way. He was in Cady's No. Three mine as Jim had expected, because it was the largest. Around the great metal mound that moved along the ocean floor was the fire-fly twinkle of the lights of some two dozen slowly-circling guards. They had floodlights on the exterior, turning the dark water to a sullen green and making the clean-swept white sand floor glitter.

Jim and Helen sank behind a submerged rock to study the terrain. "Now, Jim," said Helen, we've got to settle this thing. I know you plan to use me for a diversion so that you can get into the mine, but I can't allow it."

"I've brought you through the radar net," said Jim. "You couldn't have made it on your own. In fact, I've saved your life, and I think I can find a way for you to get out with a whole skin—"

"Jim, Jim, don't you see my need's the greater? To you this is simply a way of proving yourself. To Bea—and the rest of the people on the Floor. That you can be the biggest man on the Floor. You can always go elsewhere and do better. You showed that once when you left the Floor and Bea."

"I had to."

"You didn't have to shoot a man to prove your love for her. That was overdone. You don't have to come back as the biggest man on the Floor, in charge of this wonderful new project. That's overdone, too. You must have a romantic notion of yourself."

"The spacemen need the Floor," he said in hot defensive anger.

"Maybe they do. But you won't be any more successful with your project if you succeed than you were in your courtship with Bea, or with your space career, because nobody cooperates with somebody who always plays big-shot."

"Big-shot!" he laughed bitterly. "Little shot, Helen. My time in space is almost done. If I don't put over this project, I've only got a few years of down-hill space travel left in me."

"You left the Floor to find something," she said. "You didn't find it. Now you're back, still hunting. What is it, Jim Talbot?"

There are things too deep to say. He remembered his brother, ten years older, who had left the Floor for space. Who had come back to their drab farm home buoy wearing a uniform and medals. Who had come back with a beautiful land girl as his wife. Jim had been ten then, and his eyes grew big when Buck Talbot talked about the far-off places, the frozen, awing silences, the strangeness and wonder of the deep velvet space sky. Jim remembered the size and shape and color of the medal his brother wore on his right breast "For Valor Beyond the Call of Duty". He remembered how awed

his playmates had been with Buck and his land girl wife. And in the prime of his manhood, Buck had gone back into space and disappeared forever, the girl along with him, and left behind an image that Jim, at least, had never forgotten. . .

"What is it, Jim Talbot?" she asked.

"Nothing," he said.

"I don't even have a choice like you," she said. "I've got to get through to preserve what little I've got. If you won't help—"

She gave him a backward shove. One minute they were muttering, face-plate to face-plate. The next she had shoved him off balance and fired at him with her underwater pistol, which she must have stowed into her suit way back on the submarine when she was alone in the "Ladies".

Her inexperience betrayed her. She missed.

In a swimming swoop he did a backward spin and came up with the short spear gun he had acquired at Bea's. There was a rising, impatient anger inside of him, a sudden fury at her assault on his motives. He fired from the belt and he had had years of experience with guns.

She took six inches of metal without a sound and floated there, spread out, her weight bumping her down towards the ocean floor, now that she was immobile. She gave one convulsive jerk and drifted, and the line from the gun twitched with her dead weight and the current's sway.

He couldn't tell if he'd killed her. He only knew that the moment for her to provide a diversion had come, not in the way he planned, but it was here, and the rest must be action.

The group at the mine picked up the violent motions on hand radar and sped for the spot. He broke the spear gun line free and shoved his helmeted head in the loose ooze of the ocean floor, getting rid of the propeller. He let the water arrange his limbs—he made like a rock. How many thousands of times as a kid had he made "rock" in the Floor games, the underwater version of hide and seek? Though the men of the ocean could see twice as well in their medium as the land-men, he knew he was only a wavy shadow on the ocean floor compared to the spread-eagled figure floating free.

Five of the guards gathered her in and pushed her towards the mine. They didn't see him because at the moment they weren't looking for him. Jim boldly swam behind them at a short distance, his sea-lamp off, safe in the temporary confusion.

As they approached the mine, he looked for the suction inlets on the bottom, sucking in the mineral-rich ooze of the Floor as the entire dome structure traveled its way to Catalina and back. The mine was working. No man of the land would dare invade a mine via the silt tunnels. No man of the ocean would expect to get away with it.

Jim let the others get ahead of him and dived; he found the strong flow of the intake. There was a horrible moment while he was

pressed with the hard-flowing mud against a filter screen, the pressure crunching at his body then he broke the screen. He was sucked into the silt intake. The secret of not getting stuck in this passage, no bigger than a man's body, was to keep moving, and he held his empty spear gun between his legs and fired off round after round into the soft mud, taking advantage of the backthrust of the gun to keep him moving.

He ended up in the settling tanks with a plop, buried in mud. By now instruments in the mine would show that a large, foreign body had broken the screen and passed into the tank. They would investigate.

Instead of trying to surface, Jim burrowed in the mud, beating down his claustrophobic fears of the thick stuff, reminding himself that it was only another medium slightly thicker than water.

He knew the position of the waste trap on the bottom of the tank and found it, feeling the suction at the bottom pulling him down, to be ejected again when the tank was flushed. He went on down into the flush canal. Good. Their instruments would now show that the foreign body had passed out again.

He put his rubber fingers to the wall, wedged himself tight and closed his eyes to wait.

This time he'd have to be good. But then he was always equal to the task, wasn't he? The girl, with all her need to win, had been inefficient and bungling, and he who, according to her, was only trying to play big-shot was the success. He grinned sardonically, and then remembered he'd had to shoot her and lost his grin. He forced extraneous thoughts from his mind. He wasn't inside the mine yet.

He tried to visualize the control panel. The tank must be almost filled by now. He tried to think himself right at the point of the solenoid, ready to divine the switch of the motors from intake pumping over to flushing action. Again his experience paid off.

He had done this once before when he worked for Schneider's Deep-Sea Mines as a young man, and a foolish, visiting tourist had got himself sucked into the tank and Jim had had to go in and pull him out.

The intake cycle ended. He had ten seconds while relays clicked, the mass was read, and the computer decided what minerals to retain, what to flush out. Jim made the supreme effort then, going back up the flush tunnel into the sediment tank itself, burrowing up through the weight of the mud. He had three feet to go and he barely wriggled out of the opening when the flushing started and the sea water roared in, and the tank began to swing to separate out the metals it wanted by centrifugal force.

It was a wild ride, but not too bad if you didn't mind being thrown around on the hard metal walls like a paper clip in a vacuum cleaner. In the rhythmic, spinning action the heavier metals settled out to the collecting pans and the waste silt began to pour through

the flush outlet. Jim waited until the tank was nearly empty and the whirling action slowed to "idle". Then he threw up his feet, struck open one of the "reach through" hatches and squirmed out into the mine proper, falling to the floor in exhaustion. He had not been detected. His entrance had been noted by the instruments on the inlet side. His exit had been noted on the outlet side. The machine had absorbed a two hundred and eighty pound rock and ejected it again. The instruments had noted the loss of the screen and replaced it at the end of the cycle, but they had no way of recording his return from the outlet hatch because foreign bodies, once in the flush tunnel always obeyed the laws of force and gravity and went on out. Thus you could fool a machine as easily as a man, if you had more knowledge than it did.

Jim grinned weakly to himself. Another factor helped him. Helen, the diversion. The men of the ocean certainly wouldn't be bothering about instrument chart-bumps while they had the excitement of the girl to occupy them.

Jim went upstairs to the main room and eased through the door.

THEY had laid her on the low observation bunk, looking out the glass plate over the ocean floor where you sometimes sat to watch and guide the mine as it bumped its way along the bottom. In the old days you could spot the slow-moving mighty black sea bass and put on a suit and go out spear-fishing while the mine lumbered along. But there were almost no fish any more, between the mainland and Catalina, due to Floor civilization. A few small kelp bass and deep water ling cod were all that had survived.

There was a doctor on duty there, naturally, and he was bent over the girl. They had taken off her suit and he had some kind of tube stuck in her chest. Draining her lungs of the blood from his shot, decided Jim, growing cold all over.

The men of the ocean stood around, hang-dog, equipment dangling from big hands, their eyes soft, their white faces frowning. Though there might be a dozen bodies floating in the kelp tonight, a wounded enemy and a woman—that was different.

He shouldered his way boldly through the crowd to her and looked down. Her cheeks seemed sunken, and the eyes were bright. He thought her mind wandered, but she looked directly at him.

"You—made it."

"I always do."

She moved her hands. It cost effort but she had, suddenly, a paper there. Behind them the men of the ocean stirred and muttered and the doctor looked up sharply from his equipment.

"My need—is greater," she said.

He couldn't refuse to take the paper. It fell partly open. There was a snapshot inside—of two kids. He stood there, his back to the ocean men, feeling hot and cold, staring into the dying eyes. Her ploy, he decided, was a very good

ploy indeed.

She smiled faintly as she saw his defeat.

He turned around to the men of the ocean. "My name's Jim Talbot," he said. "I'm a nephew of Old Man Cady, and I'm just back from space. I want to see him."

A tall man raised a spear-gun. "My name's Ferris, and we don't remember you, Jim, not at all. The Old Man doesn't remember the ones that have left the Floor."

"Don't bubble me, Oyster-head," said Jim, recognizing the man and remembering the old nickname. "I've licked you before and I can do it again."

Ferris raised his gun. There was a silence while you could hear the tortured breathing of the girl.

Then she screamed, and she didn't have to do it, but in that final diversion Jim came up with his muddy spear gun and flung it underhanded at Ferris and knocked the other's gun away. He darted for the door of the Old Man's apartment as he remembered it and the uproar started. But it didn't last very long. There was a commanding clang of an alarm bell, and the door swung open and a man rolled out in a wheel chair.

"For the love of God," piped a thin voice, "what's going on here?"

The men of the ocean fell back before the wizened old man in the wheel chair. The doctor cried out in protest "You must stay in bed." The old man pounded on the metal floor with his cane and shouted in a quavery voice. "Shut up, everybody."

They shut.

"Now you," said Cady to Jim.

"Your nephew," said Jim rapidly, eyeing Ferris who had recovered his gun. "Jim Talbot, Ed's son, back from space on an errand."

"Welcome back," said the old man drily and pointed to the bunk.

"And she—"

"She is—was—an agent for the Foundation, trying to get through to you with a contract for the Floor. I helped her."

Ferris sprang forward with a cry "No contract!". He went for Jim, but the old man's cane tripped him and spread him on the deck.

"You always were a fool, Ferris," said the old man. He looked around the room, his aged, red-rimmed eyes reminding Jim of an ancient rooster's. "What the hell's wrong with everybody? You want to starve forever? Even your own goddam wives don't want to see the Floor ruined. Look at you—kelp-cutters and miners. You used to hate each other's guts. You used to fight like madmen about whether a patch of ground should be mined or farmed. Now you're friends. You fight the Real Estaters, and you'll end up friends with them, because the old way's done on the Floor.

"'Course I signed the option. They didn't trick me in the Long Beach Hospital. I always meant to sign the option and the contract to save you fools a piece of living. Only my *special* bodyguard with Mr. Ferris in charge showed up and rushed me back here before I could finish the deal."

The old man paused. "When you get old, you get a little tired, so temporarily I had to let you

have your way and bring me back here. I figured we'd talk it over later; but all you do is lock me in a room and shove medicine down my throat."

He made a gesture. He tossed a hand spear-gun to Jim.

"Now Jim, lad, you can give me some help with these fools, before they kill me with medicine and their own foolish fears."

Jim took the gun and grinned, but the men of the ocean stared in shock at the peppery little man.

"For fifty years I've run the Floor," he lectured in heat. "I never did anything but what was right for all of you. Gave you credit. Helped you build farms and mines and farm home buoys. Sold your products. Whenever one of you went broke, I took over your land so that no outsiders could come in, and I kept you on, at a disastrous percentage that didn't help my pocket, by God! My reward for keeping you going—you kick me in the tail. But I'm going to save you once more, just the same. Jim, where's the agent's contract?"

Ferris started to protest but Jim forced the spear against his throat and Ferris stopped moving. Jim found the paper on the floor and flipped it to the old man who smiled up at Ferris.

"Senile Old Man Cady," said the old man. "Doesn't know nothing, does he, Oyster-head? Listen to me, under this contract you'll all get enough money for your various equities to either go into the apartment building business or take your cut and move out beyond Catalina and start a new farm or sea mine. This is a present from me and I don't care which you do. Now before I sign I want to ask one thing—Anybody here who's made a profit on farming or mining the last three months?"

There was no answer.

The old man nodded and smiled. "Permit a senile old man one further question, boys. What the hell are you going to do if we don't sell this land and get some money? Mr. Ferris—any ideas?"

"We'll find new uses for the kelp to save the farms," said Ferris. "To save the mines we'll cut metal prices to meet space competition and hold on. We can make it, boys, if we can hold on."

Cady nodded. "Very good. Thought of the same thing myself a year and a half ago. Took the problem to CalTech and a couple of other research outfits. Paid a million for this study. The smartest research and marketing men in the United States say it can't be done, but Mr. Ferris here has advantages they don't. He never finished Floor high-school. Anybody else here want to string along with him? Be glad to give you your land back clear, even though most of you owe me plenty on it."

Nobody stirred. But Ferris had another shot in his locker.

"How much do *you* make on this deal, Cady?" he asked.

The old man smiled. "Plenty," he said. "I'm just senile enough to still want to make a little dough, while you're six months behind in all your payments, Ferris. I intend to go on making money as long as I

live. Anybody that doesn't want to make money—vote for Ferris. He'll save the Floor for you, if you want to eat kelp three times a day and wear seaweed clothes for the rest of your lives. Here's your last chance, men. After all, the Foundation can buy sea land further up the coast and they won't keep the offer open forever."

The old man lifted the pen to sign. Then he dropped it. "No, by God, I won't sign unless everybody agrees. Even Ferris. The men of the ocean have always stuck together and I plan to keep it that way. Talk to him, some of you."

Ferris looked slightly dazed. The men of the ocean moved up on him, muttering. "What's the idea, Oyster-head?" "What gives there?" "What's to use for money?" "You wanta ruin us?"

"Oh, I'll go along with the crowd," cried Ferris bleakly. "Go ahead and sign. I just wanted to make sure it was all on the up-and-up, Chief, that's all. And I don't like to see this lousy Spacer here making dough off us."

The old man chuckled and signed the contract. "Then you should've talked to me, instead of slapping me into the hands of the doctor and shutting me up with thermometers and medicines," he said. "As for Jim and his friend—the Foundation hired 'em. Let the Foundation pay 'em. Once a man leaves the Floor he isn't a part of my family no more."

The old man flung the contract at Jim and then he wheeled up to the bunk where Helen lay.

"It looks like the Foundation will get off cheap this trip," he said softly. He took the blanket and pulled it over the girl's face. The white, thin hands patted the still figure. "A nice-looking girl, Jim. Too bad."

Then with a thoughtful frown the old man wheeled himself back into the bedroom and closed the door.

The men of the ocean broke out into a babble. "Boy, that was close," said a sea-miner who had spent twenty-four hours in trying to prevent the signing. "Like he says, the Foundation might not've signed with us if we'd held off much longer." Heads nodded in agreement and the men pressed around Jim, begging to have the honor of signing the contract as witnesses.

That, thought Jim, was real salesmanship. He let them fight over the contract, turned back to the still figure on the bunk. He pulled back the blanket and studied the dead face. It was girlish in its relaxation, but the worry lines of the mother-provider were there and an aura of competence he hadn't noted before.

Yes, she would forgive him for his shot that ended her life. She had understood better than he, that she couldn't make the mission alone. Once he had begun to guide her, she knew that she must win him to her cause at all costs, and the cost had been high indeed. She had correctly judged that she couldn't win him except by finding and using his weakness—his need to make the heroic gesture.

All of his life he had made the

gesture in the manner of his big brother, Buck Talbot. With Bea years ago on the Floor, in his space career, and on the day he had stalked into the Retirement Fund squabble and played strong man with his solution. And in the end Helen had allowed him to play hero for two kids in Glendale whose future would now be secure. No wonder there was a half-smile on the dead lips. He pulled up the blanket and went to draw himself a black cup of coffee, winking back the tears of sadness.

He looked up and saw, for the first time, a teen-age youth who had been staring at Helen's body and was now staring at him. The features resembled Ferris, and Jim figured it was Ferris's boy. The lad came up with adolescent awkwardness, compulsion-driven but shy, his eyes shining on Jim's uniform now that he had shed his diving suit.

"What's it like out there, mister?" he asked. "What's space like?"

Jim put his hand on the lad's shoulder. "Son, it's just about like every place else, a lot of fun and a lot of dull waiting in between."

But the lad refused to downgrade his illusions.

"You're a space captain," he said in awe. "You run a space ship."

Then Jim did what Buck Talbot should've done for him, years ago.

"It's sixty feet long," said Jim, nodding. "It's got a lot of machinery and four other guys besides myself. We carry freight and in between times play cards, and I tell the boys what it's like under the ocean and they think it must be pretty wonderful down here."

The lad looked puzzled and the glamor slipped out of his eyes. "Oh," he said. He turned away.

Something stirred inside Jim too. The ghost of Buck Talbot was laid to rest at last. He had done the thing that had to be done for Helen, for Old Cady, for the men of the ocean and for the land people. He had even done a little something for Ferris and his son. And through it all he had done nothing for himself, nothing at all. This was the role he'd always yearned to play and he had played it to the hilt.

Done nothing for himself? No—he wouldn't have to make the gesture any more, and his was the greatest reward of all, self-knowledge, a guide for the rest of his life. • • •

The fairest thing we can experience is the mysterious. It is the fundamental emotion which stands at the cradle of true art and true science. He who knows it not, can no longer wonder, can no longer feel amazement, is as good as dead, a snuffed out candle. —Albert Einstein

Illustrated by Ed Emsh

until life do us part

It's a long life, when you're immortal. To retain sanity you've got to be unemotional. To be unemotional, you can't fall in love . . .

BY WINSTON MARKS

IT WAS a deathless world, but a woman was dying.

Anne Tabor lay limp and pale, her long, slender limbs making only shallow depressions on the mercury bath which supported her. Webb Fellow stood over her awaiting the effects of the sedative to relieve her pain.

His title was *Doctor,* but almost everyone in this age had an M. D. certificate with several specialties to his credit. Webb Fellow was simply one who continued to find interest and diversion in the field of physiological maintentance.

He stood tall and strong above her, lean-bellied, smooth-faced and calm appearing, yet he didn't feel especially calm. As the agony eased from Anne's face he spoke softly.

"I'm glad you came to me, Anne."

She moistened her lips and spoke without opening her eyes. "It was you or Clifford—and Cliff hasn't practiced for a century or more. It's—it's quite important to me,

Webb. I really want to live. Not because I'm afraid of dying, but . . ."

"I know, Anne. I know."

Everyone in Chicago knew. Anne Tabor was the first female of that city to be chosen for motherhood in almost a decade. And in the three days since the news had flashed from Washington, Anne Tabor had generated within the blood-stream of her lovely, near-perfect body, a mutated cancerous cell that threatened to destroy her. Mutant leukemia!

"Just relax, dear. We have the whole city of Chicago to draw on for blood while we work this thing out."

He touched a cool hand to her fevered forehead, and the slight motion stirred the golden halo that her hair made on the silvery surface of the mercury.

The word, "dear", echoed strangely in his ears once he had said it. Her eyes had opened at the expression of sentiment, and now they were wide and blue as they examined him. A tiny smile curved her pale lips. "Did I hear correctly?"

"Yes, dear." He repeated the word deliberately, and for the first time since his student days he felt the web of his emotions tighten and twist into a knot of unreason.

She mustn't die . . . not now!

Her smile widened with her look of mild amazement. "Why Webb, I do believe you mean it!"

"You have always been high in my affections, Anne."

"Yes, but—*it's a long life.* Such a long life!"

That damned phrase again! The essence of sanity, they called it. The cliche of cliches that underscored this whole business of immortality. *Be not concerned for the frustrations of the moment. All obstacles are transient—all obstacles and all emotions. The price of immortality is caution, patience, temperance. Deep personal attachments lead to love, love leads to jealousy, jealousy to un-saneness, insanity to violence,* violence to—"

All he had said was that she was high in his affections, but no one spoke of such things any more. When one did, it was considered that more than conventional promiscuity was involved in his intentions.

He turned away abruptly and studied the dials that registered her blood-pressure, pulse and metabolism. Incredible how even women three hundred years old remained sensitive to the slightest sign of infantile passion in their men. And more fantastic yet, that he, Webb Fellow, of the original generation of immortals some seven hundred years old, should find the destructive spark of possessiveness still alive in his semantically adjusted nervous system.

Mechanically he noted the systole and diastole lines on the revolving chart and ordered an attendant to administer whole blood. Before he left her he turned back for a moment. "It shouldn't be more than 24 hours, Anne, and I promise you there won't be any impairment of your maternal capacity."

He was startled to note that tears welled into her eyes. "Thank you, Webb. Clifford was worried that I might be disqualified."

"Nonsense! Clifford hasn't kept up on things." He strode away without further comment, but as he stepped from surgery into pathology he was troubled. Why was Clifford so worried about her? Did Clifford think that Anne would choose *him* to father her child?

The thought struck like a snake. Before he could block it the fangs were deep, and the venom of adolescent jealousy raced from brain to endocrines to blood-stream, poisoning his whole nervous system.

It's a long life!

He resorted to the old antidote himself, despising his weakness as he breathed the words. They came out as a sigh. He discovered that he was searching his memory to determine whether he or Clifford could lay claim to Anne by seniority.

Seniority? What damned nonsense was that? Anne had traded back and forth between Clifford and him for at least 250 years—with uncounted, trivial alliances with how many other men?

But the others didn't count. It was he and Clifford whom Anne preferred, just as he and Clifford had discussed on countless occasions Anne's perpetual attraction to them both. Anne *was* Clifford's favorite, and he'd made no secret of it.

"Over here, Webb. We have it!" It was Porter, the head staff pathologist holding out a small vial of crimson-clear liquid. "This ferric-protein salt should cure our

famous lady quite quickly. It played sudden hell in the culture."

"Oh, yes? Fine. Thank you, Porter. Thank you very much!"

The narrow-shouldered pathologist gave him a second look. "Certainly. Don't mention it." He paused then asked bluntly, "Did she name you for paternity?"

Webb managed to hold the vial steady to the light, but his voice was a shade too taut and high. "Not yet—that is, we haven't discussed it. It's a possibility, I suppose."

"I suppose," Porter mocked gently. "You with the highest genetic-desirability rating in the State, give or take a couple of counties."

Yes, there were a couple other males in Illinois with as high a genetic rating as Webb Fellow, and one of them was Clifford Ainsley.

The obvious question thrust itself upon Webb for the first time. Was that why Anne Tabor had seemed to concentrate her favors upon him and Clifford? Had she actually anticipated the eventuality of being chosen for motherhood, and had her criterion for male companionship been simply a high genetic rating?

It's a long life. Even with such unlikely odds against the contingency, he supposed any qualified female secretly nurtured the hope that someday—

With the inexplicable tension mounting in him he passed the vial along to an assistant with instructions for administering it. Anne would be in no condition to discuss the matter for another day or two.

But he must know. He must know whether she had already chosen Clifford.

He slipped into a light street-jacket, caught an express to topside and engaged a taxi. His finger was poised over the destination dial before he realized with a start that he had forgotten the five-digit number for Clifford's address. It had been that long since he had called on his old friend.

Friend? The concept seemed suddenly strange. How long since their friendship had actually dissolved into an unacknowledged rivalry?

Nonsense. He and Clifford had both been uncommonly busy with their respective professions. And since Clifford had branched from medicine into robotics, their paths and interests had simply diverged. Alternating almost weekly between the two men, Anne Tabor had kept each more or less informed of the other's activities, but somehow he and Clifford had ceased looking each other up.

The directory gave him Clifford's number, and he dialed it. The small vehicle lifted quickly, slipped into the invisible traffic pattern and began applying the dialed code-address to the electronic grid that cross-hatched Chicago like a mammoth waffle. As traffic cluttered ahead on one particular striation, the taxi banked smoothly and right-angled to the next parallel course and proceeded.

Neat, safe, fool-proof. Perfect transportation within proscribed geometrical limits, Webb thought. An infinite number of routes from

one point to another—like the course of a human life—but all within certain proscribed limits.

It's a long life.

The course of a man's life could be considered a passage with infinite possibilities only if he were allowed to backtrack occasionally. Was that what he was doing? Had life grown so dull that he was seeking the diversion of immaturity again?

Immortality.

Was it really so important? Once there had been a time when love, open, unashamed love had been accepted as one of life's strongest motivations. And it wasn't just a feeling of jealous possessiveness. There was a feeling of mutuality in it, a tenderness, an unselfishness and closeness of communion between man and woman.

How had this exalted condition become debased into the casual association that now existed between the sexes? Debased? That was a loaded term. What was the matter with him? Anne Tabor was a lovely, desirable creature, but no more lovely, no more desirable than a hundred other females he knew.

An odd, almost unique feeling of shame swept over him as his cab sank to the landing strip on Clifford's apartment building. He must conceal his state of mind from Clifford or be judged a complete imbecile.

WELL, Webb! This is a surprise." Cliff's face was entirely without emotion. "Anne! It's about Anne, isn't it?"

"Anne will be fine."

"Good, good! You startled me, standing there in the door like a messenger of doom. I thought for a moment—well, things wouldn't be the same without little Annie, would they?"

They had moved into Cliff's apartment, and Webb shrugged out of his jacket. The spacious quarters and expensive appointments reminded Webb of Clifford's wealth.

"The robot business must be thriving," Webb remarked. "Anne didn't mention such luxury over here."

"The girl is tactful, my friend. Tactful, sweet, intelligent."

Webb looked up quickly. He had seated himself, and Clifford stood before him in a stiff, almost challenging pose. "Am I welcome here?" the physician asked bluntly.

"Certainly, certainly. We'll always welcome you here. Nothing need be changed just because Anne is to have a child. Nothing, that is, except the customary observance of monogamous convention until the child is born and raised."

A pound of lead sagged in Webb's stomach. "Then—Anne has named you for paternity?"

Clifford's slender, well-made body lost itself in the precise center of an over-size chair, he looked at Webb thoughtfully. "Well, practically. We were discussing it the other night when she had the first symptoms of this attack." He rubbed his hairless chin. "Why? Did you especially aspire to the noble station of parenthood?"

The lazy sarcasm was salt in the wound. With difficulty, Webb kept his face expressionless. "When I heard the news, naturally I gave the possibility some consideration. That's why I came over here."

"I see. Anne didn't tell you."

"She was in considerable distress when they brought her in. I—I didn't ask her."

In spite of the raven-black hair and youthful face, there was something about Clifford that Webb didn't like, a hardness, a lack-luster indifference verging on boorishness. The thought of losing Anne completely for more than eighteen years to this man was more painful even than Webb had anticipated.

Impulsively he said, "For old time's sake, Cliff, will you do me a big favor?"

The engineer stared at him and waited.

"Take a vacation. Disappear for a few months."

The dark eyebrows remained in a straight line. "And run out on Anne? You aren't serious."

"I am."

Clifford laughed without smiling. "You'd better head for hormone harbor and take *yourself* a vacation, old man. You're becoming senile."

"Then you won't withdraw?"

"Of course not. You're asking more than a favor. You're asking me to offend Anne. These things are important to females."

"It's important to me, too, Cliff."

"Well, I'll be—" The smaller man rolled to his feet and put his hands on his hips. "I never thought to see the day when honored Elder Webb Fellow would come muling around like a sub-century freshman. Of all the anachronistic drivel!"

"You see?" Webb said eagerly, "It isn't important to you at all. Why can't you do this for me, Cliff? I—I just can't stand the thought of being without Anne all those years."

"Relax, Webb. *It's a long life.* Anne will be back in circulation before you know it." He paced to a low desk and extracted a small address book from a drawer. "If you're short of female acquaintances at the moment you can have these. I won't be needing them for awhile."

He flipped the book at Webb. By chance the cover opened, caught the air and slanted the book up in its course so it struck the physician's cheek with a slap. The faint sting was the detonator that exploded all the careful restraint of seven centuries.

Webb arose to his feet slowly and moved toward Clifford. "So medicine was too elementary for you? Human physiology and behaviour has no unsolved problems in it, you said once. So you went into robotics—positronic brains—infinite variety of response, with built in neuroses and psychoses. Human behaviour was too stereotyped for you, Clifford. Everyone was predictable to seven decimal places. You were bored."

"You have it about right," the engineer said insolently. He let his arms drop to his sides, relaxed, unconcerned at the tension in the

physician's voice.

"You build fine chess-playing machines, I hear," Webb said softly, gradually closing the distance between them. "Your mechanical geniuses have outstripped our finest playwrights and novelists for creativity and originality. You've probed every conceivable aberrated twist of human nature with your psychological-probabilities computers. You've reduced sociology and human relations to a cipher—"

Clifford shrugged. "Merely an extension of early work in general semantics—the same work that gave us mental stability to go with physical immortality. Certainly you don't disparage—"

"I'm disparaging nothing," Webb broke in. "I'm merely pointing out your blind spot, your fatal blind spot."

"Fatal?"

"Yes, Clifford, fatal. I'm going to kill you."

The words seemed to have no effect. Not until Webb's powerful surgeon's hands closed about his neck did Clifford go rigid and begin his futile struggle.

Webb did not crush the larynx immediately. He squeezed down with slow, breath-robbing pressure, feeling for the windpipe under his thumbs. Clifford gasped, "*'Sa long life, Webb* . . . don't . . . commit suicide."

"It's a long life, but not for you, my stupid friend. Sure, they'll execute me. But you won't have her. Never again, do you hear?"

Clifford's eyes were closed now, and Webb knew that the roaring in his victim's ears would be blotting out all external sound. The knowledge infuriated him, and he screamed, "You fool, I pleaded with you. I took your insults and gave you every clue you needed—didn't you recognize my condition? You fool! You brilliant, blind fool!"

Clifford collapsed to his knees, and Webb let him go with one final, irrevocable wrench that certified his death.

Clifford's death and his own. The penalty for murder was still capital punishment, and in his own case Webb acknowledged the logic and necessity of such harsh consequences.

If there was one activity that immortal, 28th Century Man could no longer afford, it was the luxury of falling in love. . .

WEBB stood back and looked down at his crumpled victim. The heavy pressure was subsiding from his temples, and the gray film of irrational hate faded from his vision.

"Cliff—I—" Then full horror closed in on him and he choked off. His hands felt slick and slippery, but it was his own sweat, not blood. The tactile memory of his fingers squeezing, crushing Clifford's throat, fed details of touch, texture and temperature to his tortured but clear brain. His surgeon's fingers were twitching, trying to tell him what they had discovered moments ago, but a more overwhelming thought blocked the message.

I've taken a man's life . . . and my own. And ruined Anne's happiness. I've brought her tragedy instead of happiness.

No, not tragedy. Inconvenience. It would still be a long life for Anne. She would find a suitable mate, then her child would quickly erase the memory of this day.

Still, he had committed murder, the first deliberate murder the world had known in centuries. "Damn you!" he screamed down at the body. "Why didn't you protect yourself?"

"Oh, I did, Webb, I did!"

Webb spun to face the direction of the voice behind him. His eyes must be playing tricks—an afterimage, perhaps. "Who are you?" Webb demanded.

"Clifford Ainsley. The prototype, that is, in the flesh and not a roboid." He nodded at the body on the floor. "Ainsley the Second. Strictly a lab job."

"Cliff? Oh, my God!" Webb fell into a chair and sobbed with relief.

Clifford Ainsley came to him and put a hand to his shoulder. "I'm truly sorry, Webb, but it was better this way. We can be thankful that I anticipated your actions."

Webb looked up. "You—expected me to murder you?"

"The p c—probability computation—was remarkably high. You see, I ran your genetic pattern into the computer, added the double stress factor of Anne's serious illness *and* her forthcoming motherhood, and the subtotal spelled out a four letter word."

Webb nodded slowly. "Love."

"Right. And you know the corollary to that. When I punched in the details of your relationship with Anne *and* me, well, the next subtotal read—homicide."

The expression of relief in Webb's face changed to show the hurt he felt. "But if you knew all this, why did you have to play out this scene, even with a remote control robot?"

"To discharge the murder impulse, my friend. I had to play it straight, reacting just as I would to your demands, had I not known of your condition. Otherwise the computations would have been based on false inter-reaction premises. And until you made the attempt on my life, you were a real danger to me—and yourself. Now the shock of your murder attempt and the relief at your failure have dissipated that danger."

It was true, Webb admitted to himself. No longer did he feel the least malice toward Cliff. But bitterness was still rank on his tongue. "So how does the story end? Does boy get girl or not?"

"Of course. Boy always gets girl, if he wants her. *It's a long life.* At this phase she wants me."

"Is that your own opinion or just another subtotal of the computer?"

"Both."

"But—how does it really end. What happens when you punch the *total* key?"

"You ask that, Webb? You, one of the very first to embrace the rigors of physical immortality? My dear friend, *there is no total key.*" • • •

Illustrated by Ed Emsh

THE TWILIGHT YEARS

It was a new era—an era of practicality and cruelty, an era for youth . . . An era of alarm, too, for people who were over sixty . . .

SYDNEY MERCER stopped his pacing and listened; his head tilted expectantly. When he heard the elevator stop, he went with quick, awkward steps to the apartment door and opened it just a crack. "This time," he sighed with relief, "It's Eleanor." He opened the door for her.

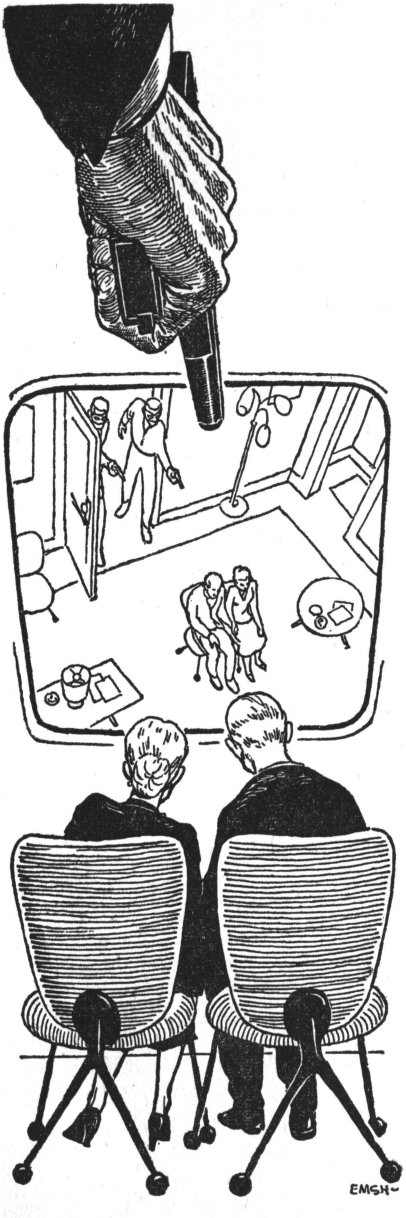
His wife breezed down the hall and through the open door. She dumped her armful of packages beside her on the couch as she kicked off her shoes. "Whew! What a relief!"

Closing the door carefully, Sydney hurried over to her. "Ellie—I've been worried. You didn't tell me you were going to be so late. And when you didn't call—"

"Nonsense," she said gaily. "It's only 6:15. Why, the stores are just now starting to board up. And you know the "A Cars" don't start running till seven." She smiled at him. "Would you get my slippers, honey?"

He hesitated for a moment, and then shuffled into the bedroom. Eleanor stood in front of the couch flexing her tired toes. She had a small and rather dumpy figure without her high heels. And though her fashionably dressed body was

BY KIRK AND GAREN DRUSSAI



usually molded into the latest silhouette, now in her more relaxed state she frankly looked her sixty-one years.

Sydney came back with her slippers, and bent to put them on. "Thanks, dear, shopping just kills my feet. But, enough of this," she sighed, "I've got only a few minutes to get dinner ready before 'Manhunt' comes on." And she started for the kitchen.

He followed and caught her heavily by the shoulders, his face stern. "Listen, Ellie—I don't *ever* want you to come home so late that you have to take an armored car." He shook her to emphasize his statement.

"But why?" she asked with genuine wonder. "They're safe enough. Edith and Ruth often take 'A' cars, and nothing's ever happened to them."

He let her go reluctantly. "Ellie," he said gently, "I just want to be sure that nothing happens to you, that's all. We're at such a dangerous age now, with both of us over sixty. You're all I've got. I'd be so all alone without you."

She thrust out her ample chest indignantly. "Sydney, the trouble with you is that you're still living in the past. You've got to keep up with the times. Sure, things are different now, than they were, say, ten years ago. But what of it? If life is more dangerous now, it's certainly more thrilling—and more intense, too!"

He eyed her steadily. "What's so thrilling about being sixty plus?"

"You've just got to accept," she continued glibly, as though it had

been memorized, "the fact that it's a young people's world, now. Live for the day! That should be our motto." She smiled placidly at him. "That's the way I've been living this past year. As though each day was completely separate from the one before it—and the one after. In a young people's world—what else is there to do?"

Eleanor patted her husband's cheek, and then looked past him into the living room, a shocked expression on her face. "Why Syd, have you been sitting here all alone without the T.V. on? Goodness, that's enough to make anyone start thinking! You march right in there and turn it on."

He turned, with a slight shrug, to comply, and Eleanor started to fix dinner. The T.V. screen was in full view of the kitchen cubicle, of course. Apartments had been designed that way for years now. So, she was able to open the few cans and containers that constituted dinner, with her eyes almost entirely on the T.V.

Sydney gave it a glance or two as he set the table. But he was too preoccupied with his thoughts to enjoy the programs as much as he usually tried to. He wondered why this day to day living didn't seem to be as much fun to him as it did to others. He fingered the "Sixty-Plus" insignia sewn onto his shirt sleeve. To him, it had turned out to be merely a matter of waiting.

Eleanor was fixing a salad, with hardly a glance at what she was doing, so automatically did her fingers accomplish their task. He looked at her, cheerfully doing what the times and fashion decreed, and wished he could accept things the way she did. He was very fond of her. Now that he had been retired, they should have had time to enjoy each other. But something was wrong. Most people tried to have fun while they were waiting. Their closest friends, Eddie and Jean, seemed to be enjoying their retirement period. Or were they really, he asked himself, remembering a few times in past conversations when the talk had verged momentarily in that direction, only to break off guiltily.

They sat down to eat at the table in front of the screen, sitting side by side, of course, so they wouldn't miss any of the programs during dinner.

Part way through the meal the phone rang. Sydney quickly got up to answer it. He knew Eleanor hated to be disturbed during a T.V. program.

"Hello, Jean," he said pleasantly, recognizing her voice at once. "What's the matter? You sound so—" His lips remained open, unexpectedly. Then, he put his hand over the mouthpiece of the phone.

"Ellie!" he called so sharply that she turned at once.

"What is it?" she snapped back at him between mouthfuls.

"It's Jean. She says Eddie's gone out for 'fair game'!" His voice faded to a whisper. "Good God, Ellie. I don't know what to say to her!"

Eleanor dropped her fork to the plate with an air of disgust rising to the surface. "Oh, that woman! She always did let Eddie worry her." She smiled benignly. "Tell

her we're sorry to hear it, of course. But he had only a year to go anyway."

"But she wants to know what to do!" He looked at her pleadingly. "She's acting hysterical. If she decides to go out herself—"

Eleanor got up and took the phone from his shaky hand. He sat down on the couch, only distantly hearing snatches of what Eleanor was saying to Jean, picturing Eddie walking down the deserted streets. Probably right out in the middle, where anyone could see him.

"No—you stay right where you are—no point in both of you . . . Yes, that's right. I've always known you had more pride than he did . . . Sure, we'll be over to see you—no, not tonight! . . . Of course not; wait until morning—remember, I'm counting on you, Jean."

Eleanor finally hung up and, going back to the table, finished spearing the bit of salad she had been working on.

Sydney looked at her, unbelievingly. "Ellie, how can you go right back to eating after what's happened to Eddie?"

Her eyes remained on the screen. "Why should I feel sorry for him, if he didn't have the guts to wait? I just feel sorry for Jean. The shame of it! If it had happened some other way, it would have been different. And Jean hasn't even got enough sense to realize it isn't 'fair game' for Eddie. It's just plain suicide!" Eleanor glanced at her husband sharply. "What on earth's got into you tonight, Syd! You're jumpier than I've ever seen you."

He concentrated, a puzzled look on his face. "I don't know. I never thought much about it until today. And with Eddie. Everything falls into place suddenly, it all seems so wrong, so useless." He looked at her intently as she pushed her empty plate away and lit a cigarette. "Ellie, doesn't it strike you as strange—almost unbelievable—that we accept the concept of longevity as a subversive one? Doesn't it seem—well, weird—that we sixty plus-ers sit around every night—just waiting?"

Eleanor turned innocuous grey eyes to him. "Oh, Sydney, you're talking like a silly pup. Let's pay attention to the show."

"Some people kill themselves." He muttered, almost savoring the words.

"Oh bosh, don't say such things!" Her voice was tight and angry. "Sydney, you wouldn't shame me like that, would you; not like that weak-kneed Eddie?"

"Why not?" he retorted. He was beginning to feel ashamed of arguing with Eleanor but he couldn't stop. "Since my retirement, since I became a sixty plus-er, I've just been sitting around doing nothing. I feel like a stupid animal being kept in a pen." He buried his face in his hands and sobbed.

She stroked his head lovingly but nevertheless condescendingly. "Sydney, there's so much you could be doing, now that you have time for it."

He raised his head tiredly. "It's too late for that. But—what have I missed? Have you got an answer?"

"Well," she looked slightly dis-

concerted. "What all the others do. they play golf, and sunbathe, and go to lectures and shows, and uh—" Her ingenuity gave out. She stole a glance at the T.V. screen. "You've got to relax, honey, stop all this thinking. You know, 'eat, drink, and be merry' sort of—"

He noticed that her attention had wandered. He knew why. That cold chill in the pit of his stomach had told him that it was almost time.

"Do we have to watch it, tonight?" Sydney asked her almost bitterly. "How can you really sit there and enjoy seeing all that violence and—"

She leaned back comfortably, watching the screen. "What else are the boys to do? The psychiatrists say, that since the war is over, our boys need to drain off their energies somehow. Besides, sometimes it's really merciful." She folded her arms over her stomach, as though to dismiss the subject.

The screen had darkened. There were two young men, dim and strange looking, with masks over the lower part of their faces. And they were making plans—in a small, darkened room. Then, silently, they left the room, and crept through the somber streets. The camera followed them faithfully as they slipped cautiously from shadow to shadow.

Sydney found himself watching the screen now, too. It compelled him against his will. "I went through a war," he hissed, clenching his fists tightly. "The Korean War—when I was young. And when it was over I went back to work in an office. I didn't need any violence drained out of me!"

"Sshhh," Eleanor insisted, and then relented. "I keep telling you, Syd, these boys went through a different kind of war than yours. They've had more taken out of them than you had." She whispered it, her eyes never leaving the screen, her breath coming in excited gasps. "People have just outlived their usefulness, now, by the time they are sixty. It's natural for the young folks to resent us, especially if we are a burden and there are too many of us. You've got to adjust, Sydney, just adjust to the times."

The two men paused at an intersection—paused for endless moments—while millions of people watched, hardly daring to breathe. Then slowly and deliberately, with overtly melodramatic malice, they turn a corner, and start to run swiftly along the street. Of the millions who watched—there were some who felt a cold clutching within them.

Sydney leaned forward on the couch, his pale eyes almost bulging with intentness. The intersection on the screen had been familiar. The street the cameras were recording —was more so.

Adjust, he thought, I wish it was that easy for me. Adjust to the times, she says—they all say—thereby excusing everything hideous, and violent, and disgusting that exists in the present. Nobody objects to anything. There's nothing con-

structive for individuals anymore. They just accept. Adjust to being idle and useless at sixty, whether I like it or not. Adjust to A Cars, the boarding up of shops every night, not daring to go out after dark. Get used to violence and fear, sitting in front of this screen as though it were an object of worship. Endure "Manhunt" every night; not knowing—just waiting—waiting . . . those of us who live to sixty-five.

Eleanor cleared her throat and then whispered huskily. "They've been up the same street before." She turned to him, her eyes watery with agitation pushed almost to its limit.

He couldn't help it. All his resentment was momentarily stilled by his affection for her. He smiled. "Sure, Ellie. Many times." Involuntarily, he put his arm around her shoulder and squeezed.

Without warning, the two men stopped in front of an apartment house. They glanced quickly around, and then slipped into the building, the camera close upon them.

Sydney took his wife's hand. "Why they've even been in the very same building before." His face felt cold and damp. He added resolutely, "It's a big apartment house, Ellie, a real big one."

Suddenly he found himself listening—listening—hardly breathing. It seemed as though sound didn't exist anymore. There was just silence, grotesque and unnatural.

Then he heard it. First there was a stealthy shuffling sound coming a long ways down the hall. Then the slight regular noise of a wheeled object, following.

Sydney saw that she had not heard. Her eyes were desperately fixed on the screen. It could be, he thought chaotically, it could be the Masons across the hall. They're almost sixty-five.

Then the door knob turned, and the door swung silently open. Stiffly, Sydney turned his head to the door. There was time, they saw to that. There was time to see the two masked men with guns in their hands. And behind them was the T.V. camera, registering the scene that was duplicated on his own screen. There was even time to turn to Ellie; to see the look of cheated disappointment in her eyes change to astonishment as the bullet cut cleanly into her open mouth. And then there was no more time for Sydney Mercer either, who had reached the age of sixty plus and therefore was past his usefulness. Another bullet stopped his intake of breath.

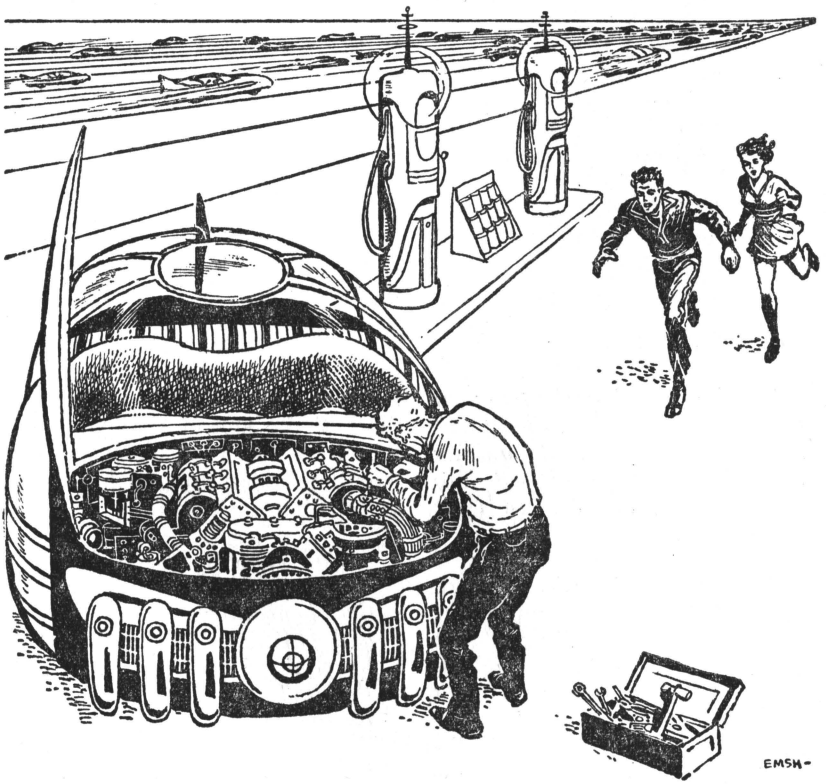
The camera moved in for a close up of the two men; their lips, beneath the masks, smiling and guileless. Then the camera hovered for a few moments over the ludicrously postured bodies on the couch for a fade out.

"Manhunt" was over for the night. The announcer's voice and figure gradually took over the expanse of the screen.

"Tonight's program has been

(Continued on page 117)

The Morrisons didn't lose their freedom. They were merely sentenced to the highways for life, never stopping anywhere, going no place, just driving, driving, driving . . .



Illustrated by Ed Emsh

BY BRYCE WALTON

FREEWAY

SOME PEOPLE had disagreed with him. They were influential people. He was put on the road.

Stan wanted to scream at the big sixteen-cylinder Special to go faster. But Salt Lake City, where they would allow him to stop over for the maximum eight hours, was a long way off. And anyway, he couldn't go over a hundred. The Special had an automatic cut-off.

He stared down the super ten-lane Freeway, down the glassy river plunging straight across the early desert morning—into nowhere. That was Anna's trouble. His wife couldn't just keep travelling, knowing there was no place to go. No one could do that. I can't do it much longer either, Stan thought. The two of us with no place to go but back and forth, across and over, retracing the same throughways, highways, freeways, a thousand times round and round like mobile bugs caught in a gigantic concrete net.

He kept watching his wife's white face in the rear-view mirror. Now there was this bitter veil of resignation painted on it. He didn't know when the hysteria would scream through again, what she would try next, or when.

She had always been highly emotional, vital, active, a fighter. The Special kept moving, but it was still a suffocating cage. She needed to stop over somewhere, longer, much longer than the maximum eight hours. She needed treatment, a good long rest, a doctor's care—

She might need more than that. Complete freedom perhaps. She had always been an all-or-nothing gal. But he couldn't give her that.

Shimmering up ahead he saw the shack about fifty feet off the Freeway, saw the fluttering of colorful hand-woven rugs and blankets covered with ancient Indian symbols.

It wasn't an authorized stop, but he stopped. The car swayed slightly as he pressed the hydraulic.

From the bluish haze of the desert's tranquil breath a jackrabbit hobbled onto the Freeway's fringe. It froze. Then with a squeal it scrambled back into the dust to escape the thing hurtling toward it out of the rising sun.

Stan jumped out. The dust burned. There was a flat heavy violence to the blast of morning sun on his face. He looked in through the rear window of the car.

"You'll be okay, honey." Her face was feverish. Sweat stood out on her forehead. She didn't look at him.

"It's too late," she said. "We're dead, Stan. Moving all the time.

But not alive."

He turned. The pressure, the suppression, the helpless anger was in him meeting the heavy hand of the sun. An old Indian, wearing dirty levis and a denim shirt and a beaded belt, was standing near him. His face was angled, so dark it had a bluish tinge. "Blanket? Rugs? Hand-made. Real Indian stuff."

"My wife's sick," Stan said. "She needs a doctor. I want to use your phone to call a doctor. I can't leave the Freeway—"

This was the fourth unauthorized stop he had made since Anna had tried to jump out of the car back there—when it was going a hundred miles an hour.

The Indian saw the Special's license. He shrugged, then shook his head.

"For God's sake don't shake your head," Stan yelled. "Just let me use your phone—"

The Indian kept on shaking his head. There was no emotion, only a fatalistic acceptance of the overly-complex world he and many of his kind had rejected long ago. "You're a Crackpot."

"But what's that to you when I just want to use your phone? If I can get a doctor's affidavit—"

"If I help you, then the Law come down on my neck."

"But I only want to use the phone!"

"I cannot risk it. You drive on now."

He felt it, the thing that was slowly dying in Anna's eyes. This need to strike out, strike out hard and murderously at something real. This suppressed feeling had been growing in him now for too many miles to remember. He started forward. But the Indian slid the knife from his beaded belt. "I am sorry, and that is the honest truth," The Indian said. "But you have to move on now." The Indian stepped back toward the ancient symbols of his kind. "We have stopped moving. We stay here now no matter what. Now, White Doctor, it is your turn to move on."

He put his hand over his eyes as though to push something down. One act of violence, and the questionable "freedom" would be ended. That would be an admission of defeat. His hand still over his eyes, he backed away. Then he turned, choking and half blinded with smoldering rage.

Keep moving. Nothing else to do with them but put them on the road and keep them moving, never letting them stop over long enough to cause trouble, to stir up any wrong ideas. Hit the road, Crackpot. Head on down the super ten-lane Freeway into the second Middle Ages lit with neon.

Then he was running, yelling at Anna. She was past the shack and stumbling through sand toward the mountains. He coaxed her back and into the car, sickness gorging his throat as she kicked and screamed at him and he forced her into the corner of the back seat.

"Stan, we could run to the mountains."

"The Law wouldn't let us get very far. Remember, the Special's remotely controlled. If we leave the Freeway, they'd be on us in no time. They know when we stop,

where we stop. They know if we leave the Freeway!"

"But we would have *tried!*"

"They're just waiting for us to do something legally wrong so they can put us away, honey. We can't let ourselves be goaded into doing anything legally wrong!"

"Stan—" she was shaking her head, and her eyes were wet. "Can't you see, can't you *see?* What they do to us doesn't matter now. It's what we do, or don't do—"

When she quieted down a little, he got back under the wheel. Within a hundred feet, the Special was going eighty-five miles an hour.

THE THING he had to hold on to hard, was the fact that they had never really done anything wrong. Anna needed a good long rest so she could regain the proper perspective. The Higher Court itself had said they hadn't done anything wrong. There were thousands now on the Freeways, none of them had any real criminal labels on them. They were risks. They *might* be dangerous. Attitudes not quite right. A little off center one way or another at the wrong time. Some personal indiscretion in the past. A thought not quite orthodox in the present. A possible future threat. A threat to total security.

Be careful, easy does it. Too many black marks on his road record and the "freedom" of the road would go. Then he would be a criminal in fact, instead of a vague criminal possibility, and put behind bars. Or worse.

The hell with them. The hell with them all. He pulled over onto an emergency siding and stopped. Not authorized. A good long rest and talk with Anna—

Then he saw it. Suddenly, frantically, he wanted to move on. But now he couldn't. He kept seeing the light of defiance fading from Anna's eyes.

The Patrolcar was there, the way it always was there, suddenly, materializing out of the desert, or out of a mountain, a side street. Sometimes it was a helio dropping out of the sky. Sometimes it was a light flashing in darkness.

Every official of the law: city, county, state, or federal, had a full record on every Special. They could control them at will. Stop them, start them, keep them moving down the line.

Jails of the open road. Mobility lending to incarceration a mock illusion of freedom. Open sky. Open prairie. The Freeway stretching ahead.

And the Patrolcar coming up behind.

The Patrolcar stopped. The two Patrolmen in black and gold uniforms looked in at Stan. "Well, egghead," the older, beefy one said. "It was nice of you to stop without being asked. A fellow named Ferreti back at Snappy Service No. 7 said you might be a trouble-maker. We thought we ought to check up."

Stan said, "I wanted to use his phone to try to get a doctor to examine my wife. She's ill. She needs help and I've been trying—"

Without turning, the older Patrolman interrupted, "Larry, what

you got on the philosopher here?"

The younger Patrolman who had a shy, almost embarrassed air about him looked into his black notebook. "He isn't a philosopher, not officially, Leland. Every Crackpot we stop, you figure him to be a philosopher. You just hate philosophers that's all."

"Well, that's a fact, boy." When he took the cigar out of his mouth, the corners of his mouth were stained brown. "My kid got loused up plenty by a philosopher in High School last year. I raised a squawk and got the Crackpot kicked out. I also got three others booted out for hiring him in the first place. I found out he was a lousy atheist!"

The Patrolman put the cigar back into his mouth. "What have you got on him, Lieutenant?"

"Stanley L. Morrison, B.A. Drake University, Class of '55. Doctor of Philosophy, Drake University, 1957. Federal employee 1957-59. Dropped from Federal employment, January, 1959—"

"What for, Lieutenant?"

"For excessive political enthusiasm for the preceding political party in office." The Lieutenant looked up almost apologetically. "Looks like he was unfortunate enough to have been on the wrong side of the fence when the Independants were elected."

"These guys are dangerous no matter what side they're on. A Crackpot shouldn't be on either side. Well, Lieutenant, what else?"

"Professor of Nuclear Physics, Drake University, 1960-62. Dismissed by Board of Regents May 31, charged with 'private thought inconsistent with the policies of the University'. Special inquiry August 5. Dismissal sustained. Was put on the road as a permanent risk to security February 3, 1963. He's been on the roads for a year and three months."

Stan forced quiet into his voice. "My wife's sick. If I could get a doctor to examine her, I'm sure I could get a permit to lay over somewhere so she can get rest and proper treatment."

"Only eight hours," the beefy one said. "That's the limit. And you're not supposed to have stopped here at all. Or back at the Indian's."

"I know," Stan said. "But this is an emergency. If you could help me—"

The beefy one grinned into the back seat. "That might be all that's bothering the missus, egghead. She ain't getting the proper treatment maybe."

Easy, easy does it. In the rearview mirror he could see that what the Patrolman said had brought a flush of life to her face. She was rigid now, and then suddenly she screamed. "Stan! For God's sake, Stan, don't take any more from the simian!"

"Let's go," the young Lieutenant said quickly. "We've got the report and we'll forward it. There's no call to bait them."

"Shut up," the beefy one said.

"Don't tell me to shut up," the Lieutenant said. He put his notebook away. "This man's never committed any crime. That's why he's on the road. They didn't know what else to do with him. We're

supposed to keep them moving that's all. Not hold them up because of personal vindictiveness."

The beefy one's face was getting red. "Don't use your big words on me, boy. I'll send you back to College."

"He's getting punishment enough. You've got nothing against him, or the woman."

The beefy one took a deep breath. "Okay, Lieutenant. But I'm going to drop a few words in the right place. I guess you know how the Commissioner feels about Crackpots."

"I don't give a damn. Come on, let's get out of here." The Lieutenant looked at Stan a moment. "You'd better move on, Doctor."

"Thanks," Stan said.

"At the next Snappy Service maybe you can phone. That's an hour's authorized stop for Specials. There's a Government Project in the hills nearby. You might be able to contact a Doctor there."

THE SAGE spread out to a blur. Heat wavered up from the Freeway. In the rear-view mirror he saw Anna leaning back, her legs stretched out, her arms limp at her sides. She wasn't thinking about this with an historical perspective, that was the trouble. She had lost the saving sense of continuity with generations gone, which stretched like a lifeline across the frightening present.

Keep the perspective. Wait it out. That was the only way. This was an historical phase, part of a cycle. Stan couldn't blame any one. Anxiety, suspicion of intellectuals and men of science—as though they had been any more responsible really than any one else—suspicion and fear. There always had to be whipping boys. In one form or another, he knew, it had happened many times before. Another time of change and danger. There was a quicksand of fear under men's reasoning.

When things were better, they hadn't remained better. When they were bad, they couldn't stay bad. Wait it out. One thing he knew—neither he nor any other scientist could detach himself from life. The frightened policemen of the public conscience had made the mistake of thinking they could detach the scientist.

I'll not withdraw from it. All of it represents a necessary change. If not for the immediate better, then I'll be here for the immediate worst which will someday change into something better than ever.

But Anna's tired voice was whispering in his ear. "First of all, we're individuals, men, women. We've got to fight, fight back!"

"At what? Ourselves?"

A sign said: HAL'S SNAPPY SERVICE. TWENTY-SEVEN MILES.

She's right, he thought, and started slowing down. This is it. He wasn't going any farther until Anna was examined, and he was given an okay to stop somewhere so she could rest.

It was a dusty oasis, an arid anachronism on the desert's edge. Beyond it, the mountains blundered up like giants from a pur-

plish haze, brooding and somehow threatening. Groves of cottonwoods could be seen far ahead, and sprinklings of green reaching into the thinning sage.

The old man shuffled out of the shade by the coke machine. Behind him, through dusty glass, Stan saw the blurred faces staring with still curiosity.

The old man hesitated, then came around between the pumps to the driver's side. He was all stooped bone and leathery skin. His face, Stan thought beneath the rising desperation, resembled an African ceremonial mask.

To the left a '62 Fordster was cranked up for a grease job. But the only life around it was a scrawny dog lying out flat to get all the air possible on its ribby body, its tongue hanging out in the black grease.

"The car's okay," Stan said. "I just want to use your telephone."

"Doctor Morrison, you'd better go on to Salt Lake City. That's an eight-hour stopover."

"My wife needs a doctor's okay for a long rest. I can't take a chance on going clear to Salt Lake City."

"But this is only an hour stop."

Stan got out and shoved past the old man. Heat waves shivered up out of the concrete and through the soles of his shoes. The heat seared his dry throat and burned his lungs.

Anna wasn't even looking. She seemed to have forgotten him. Almost everyone had forgotten him by now, he thought, forgotten Doctor Stanley Morrison the man who had never been afraid to speak out and say what he thought, and think what he wanted to think. Fifteen months with never more than an eight hour stopover. Thought and self-regard frozen by perpetual motion, and shriveled by consequent neglect. Only the old man remembered. That was odd.

A man stepped into the doorway. He was lean and powerful with a long gaunt chewing jaw like that of a horse. His eyes were small and black, and he was grinning with anticipation. Stan felt his stomach muscles tighten.

Behind the man, Stan saw the kid. Almost as tall as the man who was obviously his father, but rail-thin, like an emaciated duplicate of the man, a starved, frustrated shadow, grinning and feverishly picking at a pimple under his left ear. He carried a grease-gun cradled in his left arm as though it were a machine gun.

"I'd like to use your phone, please," Stan said. "My wife's ill. I want to phone the Government Project and see if I can get a doctor over here to look at her."

"What seems to be troubling the missus?"

"I don't know!"

"Then how do you know it's a serious sickness, Crackpot?"

"Just let me use the phone? Will you do that?"

"They phoned in ahead, Crackpot. Said you might be a troublemaker."

"I don't want to make any trouble. I just want to use the phone!"

"Why? Even if the Doc came over, you wouldn't be here. He

can't get here inside an hour. And that's all the longer you can stay here. You got to move on."

"I'm coming in to use the phone," Stan heard himself saying. He fought to keep the breathiness out of his voice, the trembling out of his throat.

"I don't guess I'd want to have it said I was coddling a Crackpot."

"I never caused you any trouble."

"You helped build hellbombs," the man said. He took the toothpick out of his mouth. "You crazy bastards got to be kept moving along the road."

"How do you know what I did or didn't do?"

"You're a Crackpot."

"I never helped build any kind of bomb," Stan whispered. "But even if I did—"

"You're one of them nuclear physicists."

"I was an instructor at a University. I taught at a Government school once too—for a while—" He stopped himself, realizing he was defending himself as though somehow he suspected his own guilt.

"You taught other guys how to build hellbombs. Who needs you and your kind, Crackpot? We need your brains like we need a knife in the back."

Stan lunged forward. The kid yelled something in a high cracked voice as Stan lashed out again. He felt his knuckles scrape across hard teeth. Blood leaped from the man's upper lip in a thin crimson slash. His eyes widened with a grudging respect, then he snarled through the blood as he stumbled backward and off balance. He fell against the window and trying to regain his balance, reeled and went down in a welter of empty gallon oil cans.

He gathered himself for an upward lunge. Through the blood staining his teeth, he muttered, "By gawd, Crackpot. I didn't think you had the guts!"

Stan glanced out the window and saw that Anna was gone from the car.

Dimly, he heard the man saying he was going to beat hell out of the Crackpot, going to beat the Crackpot over the head and then the Crackpot wouldn't be able to cook up any more dangerous ideas in it for a long, long time.

Anna may die now, Stan thought as he stood there bent over a little, feeling his wet fists tightening. She may die now, because of a frustrated fool who doesn't know what else to do with himself on a hot and dull and empty afternoon.

Stan suddenly caught the flash of color out of the corner of his eye. He twisted, not thinking at all, and felt his fist sink into the kid's stomach. The kid fell, curled up among the empty oil cans. He writhed and moaned and held his stomach.

"Get up, "Stan yelled into the man's face. "Get up—"

The man came up all at once, and his weight hurled Stan clear across the room. He felt the gum machine shatter under him, and the metal grinding into his side as he rolled. Stan felt the grease-gun in his hand as he saw the man lifting the tire tool, and then Stan swung the grease gun into the face, seeing the terrible grin, the blood-

stained white smile.

Unrecognizable as it was, the mans' face wouldn't go away. Stan swung at it again. Then he heard her voice, Anna's voice, intense and alive, and there was a flash of Anna the way he remembered her a thousand years ago, before they were put on the road. She was tearing at the man's face with her fingernails and kicking him savagely.

Stan had the man's shirt collar and it was ripping under his fingers as he slammed the head against the concrete floor. The thudding rhythm was coming up through his arm and throbbing behind his eyes.

Like drums, he thought as a sickening light flashed on the dusty glass, like primitive war drums beating out a dance of tribal doom.

Suddenly feeling sick and weak, he stood up and walked stiffly out into the sun.

He leaned against the side of the building trying to keep from retching. Anna touched his arm and he looked up, half blinded by the glare of the sun. Her face was flushed and alive. She seemed ten years younger.

"Don't be sorry," she said. "Be glad, Stan."

"They broke us," he whispered. "We've crawled into the cage."

"It doesn't matter, Stan, it doesn't matter what they do to us now! It's something to admit you're human, isn't it?"

She was partly right at least. He felt both glad and sad. But in either case, it was the end of the road.

He saw the old man lowering the hood of the Special. He ran back between the pumps carrying a metal tool box. "I've fixed it," he said, breathing heavily. "Now get out of here. Push it to the limit. I broke the cut-off too. Hurry it up!"

"But what's the use?" Stan said. "They'll get us sooner or later—"

"They're not going to get you now, not if you stop reasoning everything out as though it were a problem in calculus! I've cut the remote control off, and the radar and radio. They won't know where you are. I've changed the license plate too. But hurry out of here before Hal or his kid start phoning."

"But being on the Freeway," Stan said, "they'll catch up with us! What's the use—"

"Stan!" Anna said sharply. "Can't you *see?* We're getting away!"

"I don't want to run away from it," Stan said.

"You're not running away from anything," the old man said. "You'll find out. Follow my directions and you'll find out. You're not running away. You can get out of the flood water for a while, sit on the bank, until the water drops and clears a little."

Stan looked into the old man's face a long moment. "Who the hell are you anyway?"

"That doesn't matter, Doctor Morrison. Now will you get out of here! Move on down the road!"

Stan finally nodded and took Anna's arm and they started toward the Special. "All right, but what about you?" he asked the old man.

"I'll make out. You just be concerned about yourself, Doctor Mor-

rison. This isn't the first time I've helped someone off the road. It won't be the last time either, I hope."

He waved to them as the Special, without any limit to its speed now except the limitations of a driver's nerve, roared away toward the mountains.

NOW THE SPECIAL became anonymous on the Freeway, one of countless cars hurtling down the super ten-lane Freeway, its license changed, its controls and checkers cut off, its sovereignty returned to it by a nameless old man, a box of wrenches, and a roll of wire.

Three hundred miles farther on, the Freeway began a long banked curve; a thick wall of cottonwoods, willows and smaller brush lined the side where a creek rushed out of a cleft in the lower hills and ran along the Freeway's edge.

Stan started to slow down.

"There, that's it!" Anna said, pointing excitedly. "The big rock, the three tall trees. There, between the rock and the tree. Turn, Stan. *Turn!*"

"But there isn't any road. There isn't—"

"Turn!"

Stan turned.

He blinked as the Special roared off the Freeway and smashed through a solid wall of leaves, branches and brush. Then they were on a narrow winding dirt road, dipping down into the stream where a foot of water ran over stones to create a fiord. It twisted up the other side, around the creek's edge, over stones and gravel, twisting tortuously upward and out of sight like a coiled rope.

"Go on, Stan, keep going!"

Stan kept going. It demanded all his power of concentration just to stay on the road which was hardly more than a pathway through the rising mountains. He had no time to think, and had very little to say.

Some hundred and fifty miles farther into the mountains, at an altitude that bit into their lungs, they saw the marker almost buried in rocks at the left of the road. The place where the old man had told them to stop and wait.

But they didn't have to wait. A man, lean and healthy for his age—which must have been at least sixty, Stan thought—stepped from behind a rock, and came toward the Special. He was smiling and he extended his hand.

"Doctor and Mrs. Morrison," he said. Anna was already out of the car, shaking his hand. Stan got out. He took a second look, then whispered: "Doctor Bergmann!"

The man wore levis and a mackinaw, and he carried a rifle slung under one arm. "I wasn't expecting you to recognize me," he said as they shook hands. "I've lost about thirty-five pounds." He smiled again. "It's healthier up here."

He walked around to the driver's side and opened the door. The motor was still running. Stan realized then what Bergmann was doing, and for some reason without definition he started to protest. Berg-

mann was setting the automatic clutch and releasing the brake. The Special started moving up the road, but there was no one inside to turn the wheel when it reached the hairpin turn about fifty feet ahead.

Stan watched the car gaining speed, its left door swinging like the door in a vacant house. He thought of stories he had heard about convicts finally released after many years, stunned, frightened by reality, begging to be returned to the restricted but understandable cell. Then he smiled. Anna smiled.

The Special, once you pushed the right button, could do almost everything by itself, feed itself gas, gain speed, shift its gears; but it didn't know when to turn to avoid self-destruction.

Stan winced slightly as the car lurched a little and then leaped out into space. He felt the black void opening under him as though he were still in the Special. Fifteen months.

His ears were filled with the sudden screeching whine of the wheels against unresisting air, then the world seemed to burst with a thundering series of solid smashing roars which were quickly dissipated in the high mountain air.

Doctor Bergmann went over to the edge and looked down. "That's the tenth one," he said. "We're going to send a work party down there in a few days to cover it all over with rocks. Still, I doubt if we have to worry about them spotting the wreckage."

He turned. "Well, let's start hiking. It's still a few miles."

"Where," Stan asked. "I've gone along this far. I've had no choice. But now what's it all about?"

"Didn't the old man tell you?"

"No."

"Just remember, Morrison. We're not running away. This is an old Mormon trail. A lot of the old pioneers took it. That marker says that the Williams-Conner Party camped here and was massacred by Indians in 1867. There's an old Indian city at about three thousand feet. I guess we're the first ones to use it for maybe a thousand years. We've got an archeologist up there —Michael Hilliard—who's been going slightly crazy. Anyway, we've got books up there, we raise most of our own food, and we've plenty of time to study and try to figure out where we made the big mistakes. We're really doing very well."

"But what about the old man?" Anna asked.

Bergmann chuckled. "Arch has turned into a regular man of a thousand faces. He works along the Freeways and watches for those who are at the breaking point and can't stay on the road any longer. Some of those condemned to the Freeways are criminals, others are fools or misguided zealots; and we've got to be careful not to wise those birds up by mistake. Arch has an unerring instinct, and sending our people to us is his job."

The three of them started walking up the old pioneer trail.

"We made a lot of mistakes," Bergmann said. "All of us, some more than others. You can't blame people for being afraid, suspicious of us. We *did* unleash the potentialities for total destruction with-

out ever thinking about the social implications or ever bothering to wonder about how our contributions would be used and controlled.

"So we're off there waiting now. Waiting and studying. Someday they'll need us again. And we'll be ready."

"But who was the old man?" Anna asked.

Bergmann laughed. "Only the greatest physicist of the age. Remember Arch Hoffenstein?"

Stan put his arm over Anna's shoulders and they walked on, and up. He had almost forgotten. But now he never would. Somewhere, Arch Hoffenstein was hitch-hiking along the Freeway with the ghost of Galileo. • • •

WORTH CITING

THE SLED is one of the crudest vehicles, and far precedes the invention of the wheel in Man's conquest of terrestrial space. But it was in a sled that a new record for land travel was set recently —a scientifically designed twentieth century sled that reached 632 miles per hour.

Driven by nine rockets developing a thrust of 40,000 pounds, the 2,000 pound vehicle travelled half a mile while it accelerated to 632 miles per hour on iron rails laid out for it. Acceleration took five seconds. Then the sled coasted at a record speed for half a second and was brought to a dead stop in a fraction over one second.

The test was one of a series of experiments on the effect of high speed travel on the human body. Specifically it was to determine how much deceleration and air blast a pilot of the new supersonic planes can withstand and the physical effects of changes in the direction of motion at high speed.

Strapped to the sled was Col. John Stapp, U.S. Air Force aero medical research scientist. He took the quickest ride ever taken—it lasted six and one half seconds—and withstood wind pressure forces of more than two tons and deceleration forces of up to thirty-five times the pull of gravity. Despite this, he suffered only two black eyes when his eyeballs flatted against his tightly clenched lids and some small blood blisters when dust particles travelling near the speed of sound struck him.

Our citation this month goes to Col. Stapp who volunteered for the tests, risking his life on the unknown quantities that might be encountered in order to establish the degree of punishment that pilots of today and of the not too distant future of rocket-travel might have to sustain.

Wars are won by sacrifice. But computers don't consider sacrifice an optimum move . . .

FORCED MOVE

BY HENRY LEE

Illustrated by Ernie Barth

SNOW had fallen in the morning but now the sky was clear and Ruy, with a glance at the frosty stars and a sharp twist of his foot as he ground out a cigarette, stepped out quickly. It was axiomatic. What had to be done, had to be done. A forged pass, with 48 hours of alleged validity gleaming brightly in red letters under the plastic overlaminate was better than no pass. And an outdated pass would wipe away a week's work in the underground.

The sharp, massive gray outline of the Pentagon loomed before him, dark and foreboding against the sky. The brightly lighted entrance through which he must gain admittance resembled the glowing peep-hole into the inferno of an atomic drive.

Ruy's stomach hardened, then exploded in a surge of bitter, stringent gastric juices as the MP glanced at his pass, scrutinized his face, and then turned his attention toward others coming through the entrance.

Ruy wanted to run and hide. His dark blue uniform seemed to shrink tighter and tighter. The misfit must be apparent from the back. The silvery commander's insignia on his jacket weighed heavily at his chest and at his heart. He wished desperately for one fleeting, but excruciating, moment that he were back on his ship, in his own uniform, at the control panel of his computer.

He started off to the right in a seeming trance. The first step had been taken. His many hours of thought, study and planning would carry him from here.

This was the only way. He had repeated the fact over and over. It was an ugly business, but had to be done. Five years of war was enough, Man was on his knees before the invaders from outer space; but they in turn had been too long from home and were near the breaking point. A continued drain would mean defeat for both sides. Ruy could turn the tide, but very probably his life would be the minimum sacrifice.

He had decided his fate long before he left the decks of his ship. Only the belligerent pride of statesmen, and the steadfast belief in the infallability of their computers, kept the two great battle fleets drawn in null position against each other. The computers, perhaps, deserved such ultimate confidence—in theory. They always predicted optimum maneuver envelopes, always predicted mobilization rates to develop force fields designed to offset those of the enemy. And they always kept battle losses to a minimum—merely dribbling away the resources of the solar system. Yet in five years of such optimum maneuvering, not a single battle had been won.

Two doors gave way before Ruy's pocket vibrator, the lock tumblers slipping and turning freely in a mad frenzy to escape the resonating hum. A short, windowless corridor lay before him, broken only by a massive door at the other end. Beyond that door lay Ruy's objective.

The guard never had time to do more than note Ruy's presence in this sanctum sanctorum. The needle thin spray of a paralyzing drug made his body feel stiff, unmanageable, and peculiarly buoyant, as though he were being hurled through space. His thoughts became blurred and then after a blinding flash, complete oblivion set in.

The two officers seated at the control panels of the master computer experienced similar depression of their cardiovascular systems and medullae.

Small thermite igniters pressed against the door lock and hinges fused the steel door to its frame.

With the smell of scorched paint still stinging his nostrils, Ruy seated himself at the control panel, dabbed his left wrist with stringent antiseptic, gripped his hand into a fist, and plunged the silver probes deep into the nerves of his wrist.

Glancing through the observation window into the battle plotting room below, he studied the positions of the fleets as they appeared on the large wall diagram of the solar system.

Disregarding the distraction offered by the moving figures of the few officers and technicians on duty by the map, he fixed the positions of the fleets into his mind. He would have need for a clear visual picture until he adapted to the mental images the computer would feed into his brain. He worked with furious haste, yet each step was meticulously precise—everything depended on his grasping the reins of battle from the computer and successfully twisting its authority to his own purposes.

Grasping the viewing switch, he threw it on. Pinpoints of light flared deep within his brain and seemed to blot his vision. Closing his eyes, his brain fought for perspective. Gradually, it focused and perceived the solar system; resplendent with sun, planets, moons, and men of war. Enveloping each ship were lines of force, scintillating sharp and hard; forming cosmic vortexes as the lesser computers on board followed the master's directives and distorted the ether around the ships, seeking to build a pattern to penetrate the opposing fields and engulf the enemy men of war.

A moment, and the game was on. Ruy grasped the "Manual" switch before him, pulled hard, and dropped his hands to the keyboard before him.

THE GENERAL, who was known in military circles as a good Joe, but a stickler for the theory of war, relaxed languidly at his desk in the small office off the Battle Room. The other officers on duty milled around the plotting board within his eyesight awaiting the end of the evening shift.

It was strange and new to relax on the job after so many years of fleet duty. But staff duty to the master computer was good, politically. He was getting along in years, and a few more contacts here might mean a separate fleet command of his own, perhaps in pursuit of the invader, if the computers could ever break the deadlock.

Suddenly, the sweet reverie of the General was snapped like a tight tension cable. A gong on the wall clanged rapidly three times and a red flashing light next to the gong told him what his ears refused to believe. The computer had been switched to manual. He had received no such instructions. In fact, the computer hadn't been on manual since the war started.

"Captain, who ordered manual control?" he barked as he sprang to the doorway of the Battle Room.

"I don't know, Sir," stammered the Captain. His manner and bearing were those of a man who had just been faced with a problem of cataclysmic proportions.

"Well check with the control room—on the double—before our fleet gets out of defensive position." His parade ground roar snapped the Captain out of the catelepsy which had enveloped him and sent him scurrying into the corridor.

An almost hysterical shout whirled the General back to the plotting board.

"Sir, our fleet is attacking—*attacking!*

"What? Where?" asked the General, his eyes darting over the board in a frantic effort to orient himself.

"Here, Sir, see. The positions are changing gradually in an unusual pattern. A patrol ship, a destroyer, and a cruiser have all gone right into the enemy vortex field," analyzed the Major.

"Yes, I see—But with the enemy concentrating his ships orthogonally—he'll build a vortex that will disintegrate each and every ship of ours near the vortex," said the General, his mind coming up to full battle speed as it grasped the situation. "My God! Can't they see that they're going to certain death?"

A gong sounded in a muffled sort of way in the plotting room below Ruy, as a gentle buzz told him that the computer had relinquished control.

His fingers began to play rapidly over the keys. Swift orders of strategy were transmitted through steel conduits deep into the computer vaults of the building. There, the orders were transposed into detailed tactics and beamed throughout the solar system. And as his fingers limbered to the keys, he played a deadly tune, a concerto of death.

The fleet grew alive with a sudden awareness; it seemed to be a thing alive, straining at its bonds in response to the music played into its computers and controls. Suddenly, the fleet sprang forward. A destroyer shot out into the midst of the enemy fleet, launching all of its energy in one tremendous lurch —only to go down in a flaming wreck as the enemy ships swerved and concentrated on it. And a second ship, and then a third ship repeated the frightful maneuver, until the whole heavens were lighted with the flaming novae of berserk atomic drives.

"General, sir," said the Lieutenant, with sweat rolling from his brow as he saluted.

"Yes, Lieutenant," said the General looking away from the battle map of the solar system.

"We can't make any headway against the control room door. Must be solid steel. Whoever got in there must have fused it shut."

"Well, get a welding torch," said the General, his eyes going back to watch the devastation of the fleet. "We've got to get in—get that computer back on automatic. Get explosives, if necessary."

"We've sent for a welding torch already, sir. It'll be here in a few minutes."

"All right. Send someone for hand grenades too. We've got to stop this sabotage before the fleet is annihilated. They're losing ships every minute."

"Sir," interposed the Captain standing nearby, "maybe we can cut off the computer room someway. I know it's a direct conduit, right to the vaults from the control room, but maybe we can cut the conduits and let the ships fall back on their emergency circuits."

"Looks like a possible alternative, Captain, though we'd put the computer out of operation for several days," said the General. "But we're losing our fleet this way."

Seven, eight, nine great men of war went down before the blazing force fields of the enemy, who pounced on every sacrifice offered to it by the computer.

The Lieutenant turned his eyes from the incandescent glare of the thick steel conduit glowing red under the finger of the acetylene torch. "General, its extremely resistant to cutting. I doubt if we can cut through it before they finally get the door and frame cut away up in the control room."

"Keep at it, boy. We've got to get through at the saboteur one way or another. Do the best you can. The boys in the fleet are counting on you. They're going down to certain death while we delay."

WITH THE last terms of the new equations of strategy played into the computer, Ruy sat back, gave a sigh, opened his eyes, and slipped the electrodes from his wrist. His job was almost done. If he could keep the others from this control panel for another half hour, the computer could operate on his equations fully, and the battle would be won.

The first ships from Earth had already gone down in flames, expendable sacrifices to his purpose. But they were not dying in vain. The end result would be—must be —victory.

Wars are fought by strategy, but also by sacrifice. Every general must send troops into battle, must expect to sacrifice to make the enemy commit himself in the desired way, and so make victory possible.

This was what Ruy believed. He believed it deeply, deeply enough to throw aside his career as a rising young theoretical mathematics officer of the fleet and to go over the heads of his unconvinced superiors, with all their unread reports and unanswered recommendations from subordinates, in the only way a man of action could —by taking things into his own hands, and staking his life on the gamble.

The General, eyes riveted to the board, winced with pain as ship after ship roiled the heavens with flaming death. And as he watched, a gradual subtle design became apparent. For every ship he had lost, his ships had taken a similar tally—for each sacrifice, a trap was sprung and a similar toll taken. Computers did not sacrifice, did not send men out to certain death. Therefore a sacrifice was greedily snapped up as a mistake of the

enemy. And such greed snapped the trap. One move forced the next, once the bait was taken.

As the theme of the theory formed in the General's mind, he suddenly muttered: "Even exchange will balance a computer's potential—but a series of forced, even-exchanges can distort a fleet's position from optimum . . . I never realized it before—an optimum move is not an optimum move—if it's a forced move."

He turned from the board and spoke quietly to the men who stood in hushed groups watching the flaming battle.

"Gentlemen, we are winning a great victory; the war will soon be over."

The door to the computer room toppled outward, frame and all, after several ceaseless hours of cutting. The impact left the hallway of armed men silent and still, like specters in the unreal light from the glowing acetylene torch. Just inside the doorway stood a man, his youth belied by wise and thoughtful eyes, grinding a cigarette under his foot. And as he stepped through the wrecked and twisted door frame not a hand was raised against him. • • •

BRIGHT ISLANDS *(Continued from page 41)*

the race of mankind. What did it matter that it was conceived without love and emotion. What did it matter that she was being used as an experiment . . . if this child within her could fulfill the promise.

Miryam spat the soft capsule between her quivering lips. She watched it roll and bounce across the polished tile floor, toward the door.

Pain returned, and its fire was warm. There were no shadows on the wall. Pain returned, and it had purpose and promise. Wonderingly, she beheld the concept that science, too, lived with fear, each science in its own Ghetto. And if the young doctor was right, if psi. . .

As the doctor stepped into the room, he bent over and picked up the red capsule. His thumb and forefinger felt the warmth, the moisture, and he looked long and thoughtfully into Miryam's dark, glowing eyes.

His fingers shook as he wrapped the capsule in a piece of tissue and dropped it into the pocket of his white jacket. He picked up the chart from the foot of the bed.

"Miryam—" His voice was not under complete control, and he began again, with an effort at lightness. "Miryam—that's a strange name. What does it mean?"

"It is an ancient spelling," she whispered, her eyes deep and dark, filled with pain and wonder. "You may find it easier to call me—Mary." • • •

Deception can be good or bad, depending on how you look at it and on the circumstances. Dorav and Tzal had the right way of looking at it, and the circumstances were undoubtedly prime.

PIONEERS

BY BASIL WELLS

GRADUALLY he became aware of resilient rubber and plastic supporting him. He lay on his back, heels together and toes lopped outward, elbows crowding uncomfortably into his ribs. His body shifted. The month-long hibernation was over.

A delicious feeling of completeness—of achievement—swept over him. He, Dorav Brink, had escaped from the endless boredom and idleness of Earth's mechanized domes, after all. Here on Sulle II there would be adventure and work in plenty.

His eyes opened. In the soft yellowish light which flooded the small square room, he saw a dozen other couches, similar to that on which he lay. Most of them were occupied. His gaze probed the huddled figures searching for the girl Rea.

He had met her aboard the space lighter enroute to the interstellar liner that was to carry them to Sulle

II. Then they had been given their preliminary capsules of *iberno* and he remembered no more.

Iberno hits some people that way —with others it takes five or six capsules to put them into the death-like cataleptic state required for star hopping . . .

He saw her! Third couch to the right of his own. He stood up carefully, balancing on rubbery legs, and his hand went up to the constriction binding his skull. What was this? Goggles! Brink's fingers curled about the flexible band securing them. He tugged.

"Stop that, Brink!"

Brink's hand fell away. He recognized the voice of Len Daniels, the recruiter for this illegal voyage here to Sulle II.

"Want to lose your eyesight, Brink?" demanded the dapper little man. "We warned you of the danger. For at least ten days your eyes must remain protected."

The little gray-haired man wore no glasses, he had acquired an immunity to the sunlight of Sulle II from former voyages, but his naturally pink-and-white complexion was a sickly yellow.

Their voices roused the other colonists, and now Daniels moved among them, his soft full voice admonishing and sympathetic.

A coarse-haired giant of a man, dark hair graying at the temples of his ruddy outsize features, clamped Brink's fist with a huge hand.

"Name's Bryt Carby," he said, his voice ridiculously shrill.

"I'm Dorav Brink." His eyes slid toward the tall slenderness of Rea Smyt.

"Air don't taste much different from back home, Brink."

Brink made a wry face. "After breathing spacer air and being doped with *iberno* for months could we tell the difference?"

Carby laughed in agreement. "But Senior Daniels," and Brink wanted to grin at the respectful term used by the big, slow speaking man, "Senior Daniels says that Sulle II is like Earth in almost every respect."

"He would! And possibly it is. According to him even the animals resemble our own planet's."

"Once," and Carby grinned widely, "I ate a bit of cooked native meat. Ten credits it cost me. After that the protein packets and yeasteaks sickened me."

"I tried it once too, Carby, but it cost me fifteen credits. And that's the way Daniels and his company will get back the thousand credits we owe them for the trip." Brink laughed. "With food that we raise and meat that we kill, Carby. Daniels flies it to Earth and smuggles it into the domes as native to Earth. His profit must be enormous."

Carby frowned and rubbed a stubby finger across the bridge of his huge nose. And Brink edged away from his neighbor toward the slim tallness of Rea Smyt.

"Attention all of you!" Len Daniels had climbed atop a sturdy metal table.

"On the bulletin board just behind me the Commission has posted a list of your assignments and partners for the current year. Some of you will remain here in Low Park

to work off your indebtedness, and others will be sent out to Middle Park and Devil's Elbow."

Something in the agent's tone, a touch of ironic amusement or arrogance, perhaps, angered Brink. But he kept his lips shut. In the ancient records that he had studied in the long idle years back there in York Dome, he had read of serfdom and slavery. He could afford to wait and learn if what he feared was true. After all, they were many light years from home and at Daniels' mercy—for the moment at least.

"After you have paired up and found the locations assigned you go to Warehouse Seven and draw your rations and tools. Your plastic tents will serve for shelter even in winter, but my advice to you is to build with logs."

The little man smiled a trifle grimly as he studied them.

"I would advise you to hunt game and raise crops as quickly as possible," he added. "Supplies and tools are expensive to freight out here to Sulle II. They will cost you five hundred more credits."

The colonists' faces paled and their eyes were sick. Brink smiled grimly as he watched. Well they'd asked for it. Most of them were regretting their decision to abandon the ease and plenty of the giant domes already, but they had no choice now. Uncertainly they crowded about the bulletin board, and paired up as the directive indicated.

Brink found himself with a partner named Tzal Evans. She proved to be a genial, oversized, blonde giantess at least five years his senior. He had been hoping for a younger, more attractive companion—possibly dark-haired Rea Smyt. Yet he realized that the Commission could not permit its colonists to choose their jobs and partners at random. There was work to be done.

He found the map and learned that both he and Bryt Carby were assigned to the untamed, forested section named Middle Park. And Bryt Carby had drawn Rea Smyt as his partner.

Brink scrubbed at his chin. He foresaw difficulties ahead for Carby. The few moments that he had spent with Rea had acquainted him with her lightning changes of mood and her disdain for rules and regulations. Those two had nothing in common. After the legal year of partnership was ended neither of them would be likely to renew the agreement for another year.

Perhaps he, Brink, would draw her in next year's pool of unattached citizens, and then . . .

Tzal nudged at him. "Let's get our supplies," she said, her voice deep as a man's.

"Sure, Tzal." The top of her fair-haired skull was level with his eyes, and across it he caught a glimpse of Rea Smyt leading Carby from the reception center. "Sure. We better."

Rea danced along ahead of Carby like a child—a lovely slender child.

DUSK CAUGHT them, hours later, on the wooded ridge high above the broad valley that was

their destination.

Carby followed Rea off the crumbled highway, that the vanished Sullans had built, and into a sheltered grove of long-leaved trees. Brink and Tzal, pushing easily together at the harnesses behind the rubber-tired cart, followed them.

Clumsily, for they had never seen a tent before, they released the forward section of the cart and drew out the slender jointed ribs of metal. They snapped these together into a low dome ten feet in diameter; and then Tzal controlled the extensible arms feeding out the plastic covering, while Brink locked the opaque skin into place.

Five minutes later, with the wind cone driving the generator and the bottled gas feeding the small stove, Tzal was preparing their evening meal under the soft glowing tubes.

She turned to Brink.

"Better go help Carby," she suggested, smiling. "That Rea—" And she shook her head.

Brink found Carby struggling doggedly with the metal ribs. His partner was not in sight, but they could hear her voice, singing softly somewhere out among the dusky trees. When at last the lighting tubes were glowing and Carby had lighted the stove, Brink eyed the weary, large-featured man curiously.

"What are you going to do about it?" he blurted. "You can't go on doing all the work. She needs a good—a good, lumping, I think the Ancients called it."

Carby grinned faintly.

"When she is ready," he said mildly, "she will help."

"Hah!" Brink snorted and went to the zippered entrance. "See you tomorrow, Bryt."

He crossed the near-darkness of the needle-strewn glade to his own tent. How bright were these stars and how sweet and cold was this raw air. In York Dome, with its thirty million citizens and its mild, conditioned atmosphere, one saw the stars only through telescreens or viewing ports.

Somewhere in the darkness a mournful wail, an aching ghost of a howl, sounded, and faded into the unfamiliar chirps, and hums of the night prowlers of the Sullan uplands . . .

There was a choked scream from nearby and Brink heard the crashing progress of Rea Smyt toward her tent. The zippered entrance brightened and then dimmed as she shut it behind her. Brink shrugged. Stooping he entered his own savory-smelling tent.

Tzal had covered the sleeping cots with the gay scarlet-and-blue blankets provided them, and their sliced and steaming rations were ready on the extended table shelf of the cart. Tzal smiled at him from the cot that doubled as a chair.

"Better eat before it gets cold," she invited, and helped herself to a serving of salmon-hued promine.

"Tomorrow," Brink said as he seated himself beside her, "we will dine on real meat—meat that I kill."

"Of course," Tzal agreed placidly.

Brink was remembering that easy promise, a month later, as he

bound the last raggedly split shake atop the cabin roof. The cabin was but ten feet wide and twice as long, and built of smallish logs, but its cost in blistered flesh and exhaustion had been terrific . . .

Six days had passed after their arrival here in Middle Park before his unfamiliar, lead-propelling rifle finally had brought down a small deerlike creature . . . the hunting wasn't easy—nothing here on Sulle II was easy.

He slid off the roof and down the trunk af a small tree that he had left here atop this grassy knoll. He straightened his hunched shoulders and heard the muscles grate and snap across the cartilage. He looked down over the grassy parkland, where a meandering stream watered the soil, and counted, for the hundredth time, the five young spotted ruminants that Carby, Tzal, and he had captured from a herd of wild creatures.

"Cows," Carby, and Tzal, his partner, called these giant cattlelike creatures, and he followed suit. It was easier to apply the familiar names to creatures that resembled those of Earth than to use the names supplied them at the Reception Center.

"Dorav!" He heard the voice and then the pressure of two rounded soft arms were around him.

"Rea!" he grunted, facing her. He pushed her arms aside, all too conscious of the shielded breast that brushed the back of his hand.

"Why are you here?" he demanded. "You have work at your cabin. The walls are only half finished"

The girl smiled at him. She was very attractive in a slim boyish sort of way. The palm of her sun-tanned hand, as she laid it upon his wrist, was not calloused as were Tzal's and his own.

"My partner and yours are cutting logs above us," she said. "We can be alone for several hours . . ."

Brink pushed her soft palm from his arm. For the past three weeks physical exhaustion and unwonted exercise had driven any desire for her from his thoughts. She was Carby's partner for a year—and Carby was his friend.

"Don't get me wrong, Dorav!" Her eyes flashed. They were blue and very dark and clear. "I want to go back to the Earth—to York Dome, to Sippi Dome or one of the other two domes in North America."

"I think we all do at times," Brink said coldly. "But it's not possible. Earth is forty or fifty light years away."

"I know a way." Rea Smyt's eyes were bright. "But I need a partner. Bryt won't go—he likes it here. And your blonde cow of a partner . . ."

"Tzal is okay," Brink said angrily. "Shut your mouth and go back to your own cabin before I—"

"We could go across the plains to the old ruins," Rea cried hastily, "and then journey down . . ."

Brink's work-roughened fingers spun her about facing toward Carby's cabin and the round gray tent beside it at the opposite end of the knoll.

Rea was sobbing angrily.

"I'll go by myself," she cried. "You fools can stay here and live

like beasts—it's so simple if you only . . ."

Brink gave her a shove.

"If you worked as you should, you wouldn't find time to be discontented. And next year you can draw a new partner from the unattached pool."

The girl's eyes were hot as she turned and raced off along the path bisecting the knoll's green-swarded crown.

And Dorav Brink set to work building the huge stone-and-clay chimney that was to warm them in the winter ahead. The memory of Rea's words and the softness of her, kept intruding. Suddenly, he found himself longing for the comforts and the security of York Dome—he had been a peace guard, serving two hours every month—life had been soft and easy . . .

Savagely Brink swung his stone hammer, trying to smash his memories of mechanized, pleasant sloth as well as the harsh substance of the rocks.

IT WAS another morning, the weeks of feverish planting and hunting for game to trade at the frozen locker plant at Center, were behind them. Now it was late summer on Sulle II, and even the early morning was uncomfortably warm.

Brink yawned and stretched luxuriously on his cot. Across the room Tzal still slept, her tousled, short-cropped hair faded by the sun, and her exposed firm flesh a ripe, golden-red. Her face was turned toward him and she was smiling faintly, as though at some pleasant dream fantasy.

Brink felt a pleasant lethargy. Tzal was a good partner, she never criticized without reason, and he trusted her judgment. His eyes ranged over the cabin. It was stout and well-joined—and their hands had erected it. Their credits at the locker plant were growing, despite the disappearance of most of the wild herds of "cattle". In another eight or ten years they would have repaid the passage advances and own a valuable property.

It was odd, he thought idly, that he never considered any woman other than Tzal as his partner when he thought of the future. Actually, of course she would request a change of partners, as he also intended to do, at the year's end. If the Commission allowed it she might even specify Bryt Carby—they worked well together in the fields and forest, and the three of them were good friends.

Suddenly he was aware of Carby's voice shouting somewhere outside. Brink pulled on his knee-length shorts and a sleeveless tunic, and struggled into his high, clumsily cobbled boots of "cowhide". He took down his repeating weapon and pocketed a handful of cartridges.

"What's it?" asked Tzal sleepily.

"I expect something is after the herd again," Brink told her as he went out the heavy, double-planked door.

He could hear Carby clearly now. He was calling for Rea. Brink swore under his breath and turned to reenter the cabin, but Carby had seen him and hailed him.

"Rea left in the night," the big man said. "She took one of the horses and a rifle. And she left a note. Says she is going back to live in one of the domes."

Brink whistled. The "horse" she had taken, actually a *ystan* according to the Commission, was only half-broken and a giant animal three times as large as its Earthly counterpart.

"The loneliness must have driven her insane," the big man cried. "We've got to follow her—get her to come back."

Carby's eyes were wild. He clamped Brink's right shoulder.

"Are you coming or not, Dorav? She needs us. We've got to find her."

The big man's eyes leaked tears. Brink realized, astounded, that the selfish, shallow, lazy woman—the woman, Rea Smyt—had won Carby's love.

"Of course, Bryt. I'll help you search."

"I will go too." Tzal's eyes were steady. "We must work together. When our child is born another woman will be needed."

Brink opened his mouth to object —closed it.

"Of course, but whether Rea is the one to . . ."

"She is a woman." Tzal smiled faintly and nodded.

"I'll follow her tracks, the *ystan's* tracks, westward across the park," Bryt Carby said impatiently. "She must head south or north to climb out of the valley. You, Tzal, go to the north end of the valley and pick up the trail—if it's there."

He shook the graying coarse hair out of his reddened eyes.

"You go south, Dorav. I'll meet up with you in a few hours if the trail leads in that direction. If neither of you find a trail and a day passes, I suggest that you return to the cabins."

"Best plan," Brink agreed. He called in to Tzal: "I'll saddle up."

"Right with you," his partner replied.

But, with the approach of night, Brink's big black *ystan* and his saddle-weary rider followed alone on the trail. Rea's partner had not overtaken Brink as he had promised.

The trail was clearcut and easy to follow—Rea was letting her mount race at top speed southward along the dirt crusted ancient highway. And Brink's half-tamed black stallion was endowed with stamina and speed that Carby's dun mare could never match . . . Now, darkness had blanked out the spoor.

At a miniature park's brush-screened entrance, Brink urged the weary *ystan* into the natural hedge of leafy growth. The big black snorted half-hearted protest and reared as branches clawed and stung him. When they were through they were in a broad grassy meadow, and in the fading light of a full moon jagged ruins stood etched against the darker trees.

He did not attempt any exploration until he had eaten of fire-warmed, greasy meat and portions of bread sopped in the frying pan. Then he took a flaming branch, as thick through as his lower leg, and carried this rude torch into the

ruins.

What had once been a street lay before him. Jumbled walls of brick and stone marked widely separated buildings.

In all, he counted no less than forty-five mounds, when he came across an isolated squared block of stone tilted at an awkward angle and half buried. And cut into the stone was a blurred inscription.

The lettering was alien, yet somehow, achingly familiar. Brink dropped to his knees to clean away the concealing sod; but the spell of concentration was broken by a racing, swelling tattoo of hoofbeats. He sprang to his feet, remembering that he had left his rifle near the fire.

The rider could be Bryt Carby—or it could be some, as yet undiscovered savage, native to the planet, or even Rea returning in panic.

He found his rifle, stepped through the rim of bushes beside the ancient highway and waited in their shadow. The indistinct bulk of a *ystan* grew larger in the pale light of Sulle II's lone satellite. At first Brink could see no rider; then he saw the huddled lump of darkness above the saddle. He stepped out into the road.

"Rea?" he said. His rifle lifted above the horizontal, its butt at his hip.

"Woa," the rider moaned faintly, and the trembling *ystan* came to a drooping stand.

Brink reached up to the rider to help her down.

"No," Rea whispered. "Hide me —hide—horse. Savages . . ."

Brink grunted under his breath and tugged at the steaming *ystan's* bit to lead the beast off the highway. They pushed through the clawing branches, the *ystan's* breathing stentorian and ragged. The exhausted mount was dying on its feet.

They had scarcely reached the open meadow within, when the *ystan* collapsed. Rea fell with him, her right leg pinned under the twitching wet hulk. As Brink tugged her leg free, she groaned and went limp in his arms. Only then did he feel the stickiness of half-dried blood on her tunic and discover the sharp arrowhead that projected a full two inches from the front of her left shoulderblade.

Gently he whittled at the arrow's exposed shaft until the irregular metal head dropped off and then he jerked the arrow from the wound. He was glad that she was unconscious.

The distant voices of humans, shouting unintelligible phrases, warned him of the approach of the savages. The fire! With his hands he smothered and buried the flames. It was possible that the aborigines might pass them by. He could not banish the smell of smoke as he had the telltale glow of the coals, but the direction of the wind might protect them . . .

The stiffening loom of the *ystan* lay between them and the park's brushy entrance. Carefully he slid his rifle up and over the saddle.

Voices and the sliding, chomp-tramp of hide-shod feet came and passed on. They had missed the break in the return tracks of Rea's *ystan*. Or, perhaps, the hoofprints

of Brink's mount seemed to them a continuation of her spoor.

"I am awake," a small voice whispered beside him.

"Are you in pain, Rea?"

"Not much. Too near being dead for that. I'm done."

"No chance." Brink's voice was flat and false. She must have lost most of her blood. "How did it happen?"

"Was heading south on this highway. Planned to turn east soon. To Denver or some other deserted city where I might find a tube shuttle to Sippi Dome. You realize—this is really Earth?"

"Just now," Brink agreed gruffly. "Found a cornerstone. Must have been a public building—a bank they called it. This was Collrada Nation, or State."

"I knew . . . weeks ago. Tried to tell you. So . . . started alone."

She sat up suddenly, as though propelled by springs, and her good arm motioned toward the moonlit heights. She tried to say something, choked, and fell back.

There was no pulse . . .

THE THIRD day after Rea's death. Three days, and three of the hairy, half-naked white savages, he thought grimly. He had never killed a fellow being before—in York Dome hatred and love and loyalty were mere words from the barbarian centuries—but now he had destroyed three of his own kind. Nor did he feel any shame or regret . . .

The savages on Rea's backtrail had come upon Bryt Carby. He had killed one of them before they had overpowered him and built their fires.

Carby had not died until an hour after Brink had come upon the howling pack of six warriors and had emptied his gun into them. He had killed two of them outright and wounded three others; and then he had cared for the broken, blistered thing that had been his friend, until Carby died.

Now he watched before the cave where two savages lay hidden—and he watched the growing swarmings of green-bodied flies about the elevated rocky lip of their shelter.

The warriors must not escape to carry word back to their tribesmen of the settlement of the men from York Dome . . .

At a sound from behind him, he turned about, his rifle butt dug into his shoulder and chest, his finger pressing the firing button.

"Tzal!"

Behind the boulder overlooking the savages' rocky death trap he took her in his arms. She was Tzal, smiling and full-bodied as always, and his partner for this year and for the other years. The years yet to come.

She was dirt-streaked and sweaty. Her clothes were torn and her hair was matted and discolored with dust. Weariness darkened the skin beneath her eyes . . . She was beautiful!

"Where," she asked him after a time, "are they hidden?"

"Up there, just back of those—"

He spun about, racing back to where he had dropped his rifle. The two savages, wounded and limping

grotesquely, were scuttling toward a broken jumble of rock fragments. Once hidden there they might work up the slope and escape.

Tzal's rifle cracked, once, twice, even as he turned and brought up his own weapon. A defiant yell slapped across the rocky slot and an arrow thudded weakly at Tzal's feet. Brink's thumb hit the firing button and the warrior spun about and fell across the man Tzal had shot.

For now the settlements were safe. The colonists, bargaining years of hard work for a supposed passage to a distant unsettled world, were secure from attack. Only a few hours from their luxurious home domes, they could sweat and toil and suffer as the hardy explorers of the earlier centuries must have done.

Dorav Brink wanted to laugh—to tell Tzal and the others of the colossal duping they had experienced. Yet he kept silent. From the evil of the trickery a great good might come. For the first time in centuries men were living an active, brain-stimulating life.

Let the great hothouse domes with their dwarfish inbred animals in their parks, and their controlled atmosphere, and odor content index, and mass-produced pleasure booths go their way. Let the pale, thready-muscled humans nibble their synthetic promines and yeasteaks—the pioneers had no need for substitutes . . .

Brink's arm went around Tzal's shoulders and he was looking into her shaken, tear-stained eyes. He smiled. It was the first time he had ever seen his placid partner so moved.

"All this," Brink said, his hand sweeping, "for our son, and for the sons to follow him. Our children will make of Sulle II a better world than Earth."

Tzal's lips trembled. She had not heard him, he thought. His head lifted yet higher and he filled his lungs with the crisp upland air. Tzal was clinging to him, depending on him . . .

Precisely, perhaps, as Tzal wished him to feel. • • •

The study of science can make genuine and wholesome contributions to character development, not the least of which is an uncompromising demand for truth and honesty in all the affairs of life and a proper humility before all the many wonders which surround us. —E. U. Condon

The four stumbling blocks to truth: The influence of fragile or unworthy authority, custom, the imperfections of undisciplined senses, the concealment of ignorance by ostentation of seeming wisdom.

—Roger Bacon

In the not too distant future, you will walk into a supermarket, shop, pay the bill, and walk out with a cash receipt that identifies your bags of groceries—but you won't carry the groceries to your car. An endless belt will speed them straight to the parking lot. And when you put the bags on the kitchen table, they won't topple over, because they will be shorter, squatter and wider at the bottom. New equipment foreshadows other aids to shopping, such as carts with wrap around handles so that you can push them or pull them from either side or end, automatic doors that open as you approach them, food cabinets that can be reached from all sides, and large tanks of synthetic sea water that keep lobsters "sea-fresh".

Houses of the future may all be built using a four-inch cube, called a module, as a structural "atom." Nowadays the architect draws his plans according to feet, inches and fractions of inches. When construction begins, plumbers, masons and carpenters have to cut and patch their non-standardized materials to make them fit the requirements. The new system of modular measure would eliminate this waste by making use of building materials that are standardized to the four-inch cube. Thus, when the workers follow a blueprint scaled to the module, all parts would automatically fit. It is estimated, from the structures already built with this method, that industry would save billions of dollars a year by fully adopting this method.

If present trends continue, surgical mortality of the future may well nigh be non-existent. Figures show that in the past ten years deaths from major surgical operations have been cut by as much as four-fifths, in some instances, and at least by half in the overall picture. Improvements in training, surgical techniques, anaesthetic substances and procedures, post operative and pre-operative procedures, increasing use of antibiotics, and the use of blood transfusions to prevent death from shock have all been major factors. The record is all the more remarkable, because in recent years more than half the patients operated on have been aged fifty or over.

Underwater explorers may soon be able to pedal themselves into the watery depths. A new device, designed to go along with snorkles and swimfins, is a sort of miniature submarine about 8½ to 12 feet long. The operator sits inside a plastic bubble and powers the sub by pumping pedals. The pedals drive the propeller and the sub heads downward and then straight ahead. On a calm day the device can move along under water at a speed of 4 or 5 miles per hour. Designed pri-

marily for offshore prospectors for oil and uranium, it is also ideal for treasure hunters and sportsmen.

Home baked bread like grandma used to make may soon be an actuality, but the hard work will be eliminated. The Canadian Defense Research Board has come up with an instant bread mix which produces the same tasty aromatic loaf without kneading or fermentation. All the baker has to do is add water and then bake for two hours. It will be available in U.S. stores, but so far no one knows exactly when.

Car designers of the future may reduce the death toll from head-on collisions by putting trunk space behind the engine. Recent experiments by the Highway Research Board showed that less then one-third of the initial jolt of a collision is absorbed by the car frame. Putting more car structure between the front bumper and the driver would increase the absorption of the impact.

Farmers may some day be able to produce six or seven ears on one stalk. Recent investigations by plant physiologists have discovered an unknown factor in corn strains that causes them to regularly produce either one or two ears to a stalk. They have also found that by blocking off the point at which one ear is begining to develope, the stalk is forced to produce an ear at another point. Some minor success has produced as many as three miniature ears, using this blocking technique, and then allowing the blocked ear to develope after the third ear has formed at the new point.

Hospitals of the future may have stocks of dura, the membrane that covers the brain. A recently discovered technique has enabled medical research men to preserve this membrane by the freeze-drying method, which is also used for preserving arteries and other tissues. Success with dogs has been reported by members of the Naval Medical Research Institute, and frozen dura has been stockpiled at the tissue bank of the Naval Medical School and will be used clinically at the Naval Hospital at Bethesda, Maryland.

A gas tank that is expected to save many airplane crash victims from

WHAT IS YOUR SCIENCE I.Q.?

ANSWERS: 1—Sound. 2—35 billion. 3—Refraction. 4—Joule is a watt second, kilowatt an hour. 5—Direction. 6—Compression. 7—200. 8—Electromagnetism. 9—Wave-length. 10—750 m.p.h. 11—Incandescent gases. 12—1/980. 13—Planck's. 14—15 degrees. 15—Entropy. 16—7. 17—Light. 18—43. 19—Long. 20—Einstein.

fiery death has passed its first tests and may soon be a "must" on all aircraft. The tank, which is made of tough rubberized nylon, is rupture proof and will not spew forth its contents at high speeds. Tests show that the tank can withstand direct impacts of up to 75 miles an hour. The cell bodies range in weight from one-tenth to six-tenths of a pound per square foot and are designed to remain intact in a crashing plane until enough force is built up to rip the wing off.

Sometime in the future the Earth may be dotted with large-scale factories that are making food by artificial photosynthesis. Recent discoveries in the field have opened new vistas of unlimited food and power supplies; a time when Man would no longer have to depend on green plants for food and energy sources, but will be able to tap sunlight directly. Researchers have found that the true "solar engine" of plants is in the small, chlorophyll-containing green granules called chloroplasts. When isolated, these chloroplasts use sunlight to split water into hydrogen and oxygen exactly as is done in the living plants. The scientists have also found chemicals which will stop each step in the complete cycle of photosynthesis which follows so that men in the laboratories can separate or combine the processes at will and see what happens. The goal for the future is a harnessing of the sun's energy to make foods out of carbon dioxide and water in larger amounts than that which growing plants are able to provide. Ultimately, through such a mechanism, energy-rich chemicals may be built up from sunlight to provide unlimited power for industry as well.

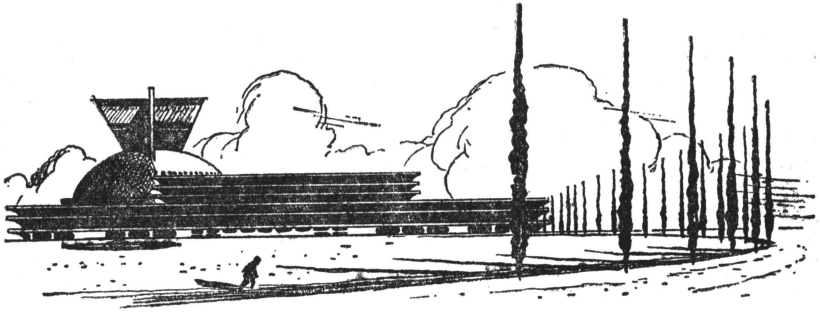
Don't be too surprised if you soon see bathing suits made of the new stretch yarns. Manufacturers think they have the technical problems licked now, and if they do, that old joke about the lady who carries her bathing suit in her purse will be more fact than fiction.

Personnel directors of the future may hire their scientists and laboratory workers by testing their mental "temperature". A new concept has shown that the different rates of scientific production are much larger than other variations among men. No runner can race 100 times

faster than another, and one man doesn't speak 100 times faster than another. But mental "temperature" or capacity, likens the production of ideas to a chemical reaction. A small increase in temperature can speed the reaction considerably. If one man's mental temperature is twice that of another, he is likely to be 100 times more productive.

Gardeners may now envision a weed-free future with more and more certainty. Several products, in testing stages, have shown signs of being exactly what the suburban home-owner has been dreaming about. A new weed-killer, mixed with the soil before planting, has proven quite successful in attacking *only* the weeds, allowing the flowerbed to grow luxuriously without a single weed.

Another successful item is a new non-poisonous, non-corrosive weed killer that permanently sterilizes soil beneath pavements etc. and is ideal under walks, driveways, fences, parking areas and even the sidewalks in front of your house.



THE TWILIGHT YEARS *(Continued from page 85)*

sponsored, as a Public Service," the oily voice intoned, "by the National Casket Company, with offices in all principal cities.

Remember your duty as a citizen.

All you oldsters, between the ages of "sixty and Annihilation Day"—you may be among the ones who don't have to wait until your sixty-fifth birthday—and you others who are nearing the twilight years —be sure you have your burial arrangements taken care of. Do it tonight—at the very latest, tomorrow. For the next day may be too late.

"The management, the staff, and the actors want to extend their respects to the wonderful old couple who played *their* parts in tonight's real life drama.

"Goodnight all!" • • •

Dear jlq:

Naturally I turned to the editorial immediately after arriving home with your mag. I must compliment you on a good job. You did some pretty fast thinking in order to beat your deadline for turning in a 2 page filler.

Needless to say, I am inclined to favor a practical application of eugenics, the science whose aim is to breed a superior human stock; not by combining those qualities considered favorable by one generation in one locality, but rather by weeding out those characteristics which almost all people consider unfavorable.

Certainly idiots (I.Q. 20—) are capable of producing geniuses. It would be useless to argue with you on that point. One thing to be remembered, though, is that the percentage of high I.Q.'s from such matings is substantially lower than that from 2 normal persons. An example of, and probably the most widely publicized of inherited physical afflictions is Hemophilia, which is carried by a recessive gene. This is the disease that indirectly led to the Russian Revolution 1918. It certainly would eliminate much suffering if matings between persons carrying this and similar genes could be prohibited.

You cited the example of Europe's former ruling houses. Here we certainly have an example of controlled breeding —*but was it carried on scientifically?* Hardly. Here harmful recessives were allowed to multiply until they began showing up regularly. I wonder what the results would be if beneficial genes were allowed to multiply in similar fashion.

How do you reason that individual enterprise must be bred out of the race? *How much* "individual enterprise" does a Mongolian Idiot demonstrate? This is, of course, an extreme example—but I doubt that you can prove that deficient intelligence breeds "individual enterprise".

Certainly the U.S. has prospered. If there is any such thing as a gene for "individual enterprise" I'm willing to wager that most of the people immigrating to these shores would have to have had it in order to even conceive of leaving the "old country". "It was built . . . and men with some of the worst brains in the world." The preceding is a direct quotation from your editorial. What does "worst" mean? Name a few such men.

In preceding centuries there existed conditions in most parts of the globe which insured survival to the fittest. As a result, harmful recessives were prevented from spreading to a great extent. Now that the superior individuals thus created have made it possible for every microcephlic to live as long as other men's ingenuity can keep them alive, I wonder how we will prevent the average I.Q. (by this I refer to *potential* brain power) from dropping below the accepted mean of 100.

You could've done well to make a more extensive survey of eugenics as even a rank amateur such as myself can spot the shallowness of your reasoning.

—Edmund Luksus, 3717 Johnson Street, Gary, Indiana.

Maybe I didn't succeed in making my point in that editorial (January issue). However, it was simply this: Individual incentive is a more promising avenue to good government and a healthy nation than selective breeding. —*jlq*

Dear Mr. Quinn:

Just felt impelled to write a "letter to the editor" to say I think the February issue is about as consistently meritorious as I've seen, including the cover. Not a really weak story in it, although I thought the motivation in "Seller of the Sky" was a little faulty. For some reason, "The Odd Ones" particularly tickled my fancy, even though I assumed all along that Dickson's human characters were male and female.

I especially liked your editorial, not only for giving me a bit more insight into your preferences for stories but for the general discussion of science fiction. I agree thoroughly that it should be primarily entertainment. Whatever lessons of psychology and philosophy may or may not be concealed therein, the magic of literature that is pure entertainment never palls. I still remember the charm of Edgar Rice Burroughs when I was a boy; and Jack Williamson's "The Green Girl," the first science fiction serial I ever read.

—Charles L. Fontenay, 424 Chadwell Drive, Madison Tenn.

After the preceding letter and the one to follow, I am happy to say "thanks" to the author of Escape Velocity *and* Blow the Man Down. *—jlq*

Dear Mr. Quinn:

To say the least, your editorial (IF, March-55) aroused my interest more ways than one. First, it is uncommon to find such material in the usual stf publications. But you seem to feel that since stf bases much of its premises and concepts on sociological factors, a stf mag should be the most likely place for sociological dissertations. That's all good and well. More power to men in the publishing field who don't remain stereotyped and primitive in locomoting themselves editorially.

However, none of the above obviates the fallacious thinking employed in the message you wished to impart. Since you seem to express yourself along lines of wanting more democracy in what obviously is an age bereft of much of it, then allow me to continue. And if you can see your way to doing it, reproduce this letter in one of your future issues so that some of your readers derive democratic satisfaction from "hearing" both sides.

To begin with, you state that with an all-powerful union in America (like the AFL-CIO merger now being contemplated) "A dictatorship" could very well be "the next easy step." But this has always been the feeling of countless numbers of people since the first vestiges of unionizing were found in this country close to one hundred or more years ago. What you base your ukase upon is hardly anything new, nor is it just and logical. Unions have always been cited as tyrannical, too overbearing, and rather high handed in their dealings with the "poor, suffering, misunderstood 'boss' and industrialist," who, of course, has nothing but the welfare of his employees at heart and who "knows" better than they do what is good and right. . .

Next, part of your argument is based upon the fact that even small union organizations—despite their smallness—have been able to paralyze vast shipping areas around the country, or have immobilized the steel industry (which in turn suspended industrially all automotive, construction, and various concerns dependent upon steel). But to that I say: well, so what? No, don't misunderstand my tone as being blasé, apathetic or filled with pique. Bear with me a moment. By "so what?" I and no doubt millions of others mean:

So what if various people can't get their pleasure cars on time and have to wait perhaps a few months more? And, what of it if many can't get milk a few days, a few weeks, or even a month (I can't remember a milk strike which lasted too long)? What of it when millions belonging to the laboring classes have had to do with less than half the milk required, in order that a family be healthfully sustained, not for years but one to two decades or more? For that matter, what of the many millions who still can't afford a car, even though car-buying terms have never been more liberal than 1954-55? Well, someone could say, they can always ride on the trains or buses. . .

The trouble with the kind of thinking

portrayed in your editorial stems from a number of factors, not just one. It is a matter of conditioned belief, not sound analysis. You mention unions and Caesar, Stalin, Hitler and Mussolini in the same breath, although scientifically and sociologically these four personalities are inimical to unions. Unions aren't represented by only one man or even two men as the philosophies and governments of Stalin or Hitler were. One might easily liken unions as a semi-state within a state. They are composed of millions who are members. These members all have an equal voice in their affairs. When something is amiss or must be righted, they have the power to legislate and straighten them out, knocking out any of their leaders from power if necessary. And as lawful citizens of the country, just like the President, members of the House, yourself, your family, and all others, they too have the right to collectively run their affairs the way they wish.

But basically your entire argument is mostly founded on an illusion of "what might happen". That is to say, you try to predict something short of chaos arising out of a national union stronger than it's ever been before. Yet you overlook the fact that as a result of increasingly stronger unions this nation has been able to fight off depressions that have been more than once imminent for the last ten years. That doesn't mean that we may not have depressions because unions exist, or that one united and powerful union would stave it off. However, it definitely indicates that such a vital social force *is* all too often importantly responsible for warding off national or world-wide economic cataclysms.

To say the least, the political and democratic welfare of the nation hardly has everything to do with union leaders. Merely the results of the last Presidential elections and recent national elections of Nov., '54, proves this to be so, contrary to Union exhortations to elect the entire Democratic ticket. The balance of votes and in the way they were divided cross-country showed the most healthy trend, politically or ideologically, this nation has taken to date. Doesn't this indicate that the union contingents are human beings with their own free-will and minds to think? That they aren't the "1984" automatons with a Big Brother over them which you try to describe.

It seems peculiarly odd to me that a person who has such a keen taste for selecting the higher caliber material you've brought into IF to date can express himself so archaically, practically maliciously, and so much like the robber barons who tried running the country back some decades ago. Probably you've got an axe to grind being a publisher and since publishing costs have soared up about 325% (maybe more) since 1949. That's a shame—but it seems to me that a few more besides a publisher, his family, and the handful of people who make up his staff have the right to eat and live better. As for the publisher: don't worry, you've made a nice little pile when you could; and if you haven't done so in the last few months or recently, blame yourself. . .

A class of workers that has long been underrated, overworked, and grossly underpaid is the white-collar group. This includes secretaries, clerks, filers, writers, commercial artists, and those who work on editorial staffs, etc. Perhaps it may not make you happy, but the time is growing ever nearer when this working class has at long last a strong union to back it up. There is no room for *cheap labor* in a progressive society . . .

Finally, the only thing this nation has to fear is the day when no one has either voice or "pull" with which to express himself and righteously wield the power inherent to all men. At this time I cannot think of a better voice for most people than unions. If a better voice someday manifests itself, no doubt I'll go along with it. Until then unions do much more than suffice.

—G. Constantine Beck, 20 Woodcliff Ave., North Bergen, N. J.

The "hue and cry" on that March issue editorial is coming in like a load of bricks. However, my opinion is my opinion, but if I can continue to duck those bricks until the next issue we'll print more of "the other side". —jlq

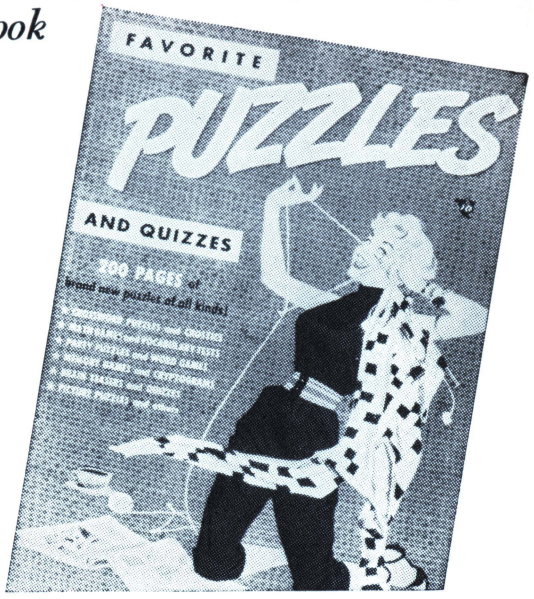
ATTENTION, PUZZLE LOVERS!

This big, wonderful book of puzzle pleasure

FREE!

If you subscribe now to

QUALITY CROSSWORD PUZZLES



THIS ONE big volume, FAVORITE PUZZLES AND QUIZZES, contains the largest, most fascinating, varied and interesting selection of puzzles, word games, math games, quizzes, brain teasers, etc. you ever saw!

AND THIS wonderful book is yours *FREE* if you subscribe to 12 issues (two years) of America's most outstanding puzzle magazine . . . the magazine that offers a real challenge to any puzzle doer. Besides the crosswords, there are topicals, crostics, cryptograms, mathograms, diagramless, puns and anagrams and others. Special features of QUALITY CROSSWORD PUZZLES are *The American Way of Saying It,* a sprightly series on the American idiom, and a topical *Quiz* which will make your encyclopedia a close friend.

AND YOU SAVE $1.00 on this $3.50 value! Twelve issues of QUALITY CROSSWORD PUZZLES plus the big book of FAVORITE PUZZLES AND QUIZZES are both yours for only $2.50.

MONEY BACK IF NOT HAPPY

If you do not agree that here is the most puzzle pleasure you ever saw for the money —after you have examined both the book and your first issue of QUALITY CROSSWORD PUZZLES—just write us explaining why, and we will return your money at once. You keep the magazine and the book.

QUALITY CROSSWORD PUZZLES I-6
Kingston, New York

Send me at once my *free* copy of FAVORITE PUZZLES AND QUIZZES and enter my subscription for 12 issues of QUALITY CROSSWORD PUZZLES, which I will receive every other month for the next two years. Enclosed is $2.50 which will be refunded to me if I am not completely satisfied.

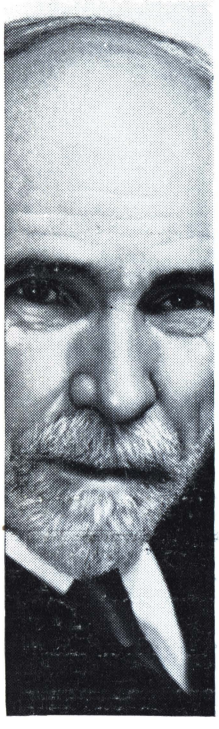
NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

How You Can Master GOOD ENGLISH

. . . in 15 Minutes a day



THOUSANDS of persons make mistakes in their everyday English—and don't know it. It is surprising how many persons fail in spelling such common words as "business," "judgment," "beneficiary," and "receive"; say "between you and I" instead of "between you and me"; use "who" for "whom"; and mispronounce the simplest words. And it is equally astonishing how few know whether to use one or two "c's" or "m's" or "s's" (as in "recommend" or "disappoint"), or when to use commas in order to make their meaning clear. Most persons use only common words—colorless, flat, ordinary. Their speech and their letters are lifeless, humdrum.

What Does Your English Say About You?

Does your English help or hinder you? Every time you talk, every time you write, you show what you are. When you use the wrong word, when you mispronounce a word, when you punctuate incorrectly, when you use commonplace words, you handicap yourself enormously. English, the very tool you should use to improve your business or social position, holds you back. And you don't realize it, for people are too polite to tell you about your mistakes.

But now Sherwin Cody offers you a common sense method of acquiring a mastery of English in only a few minutes a day. It's so easy to stop making the mistakes in English which have been hindering you and learn to present your ideas clearly and forcefully on all occasions — *without even thinking about it*

What Cody Did at Gary

For years Mr. Cody studied the problem of creating instinctive habits of using good English. Several years ago he was invited to teach English to all upper-grade pupils in Gary, Indiana. Mr. Cody *secured more improvement in these pupils in five weeks than previously had been obtained by similar pupils in two years under the old methods.*

100% Self-Correcting Device

The basic principle of Mr. Cody's method is habit-forming. Suppose he himself were standing forever at your elbow. Every time you made a mistake, suppose you could hear him whisper: "That is wrong, it should be thus and so." In a short time you would habitually use the correct form and the right words.

Mr. Cody's patented 100% Self-Correcting Device does exactly this. It is his silent voice behind you, ready to speak whenever you commit an error. It finds your mistakes and concentrates on *them*. You are not drilled upon anything you already know; and there are no rules to memorize.

The study of English has been made so simple that no more than *fifteen minutes a day is required*—and not of study, but of fascinating practice! Those who take advantage of Mr. Cody's method gain something so priceless that it cannot be measured in terms of money. They gain a facility of speech that marks them as educated persons in whatever society they find themselves. They gain self-confidence and self-respect. As for material reward, the importance of good English in the race for success cannot be over-estimated. Surely no one can advance far without it.

Write for FREE BOOK

If you are ever embarrassed by mistakes in grammar, spelling, pronunciation, punctuation, or if your vocabulary is limited, this free book, "How You Can Master Good English in 15 Minutes a Day," will prove a revelation to you. It can be had free upon request. There is no obligation. Send the coupon or a letter or postal card for it now. No agent will call. SHERWIN CODY COURSE IN ENGLISH, 1455 Central Drive, Port Washington, N.Y.

SHERWIN CODY COURSE IN ENGLISH
1455 Central Drive, Port Washington, N.Y.

Please send me, without any obligation on my part, your free book, "How You Can Master Good English in 15 Minutes a Day." No agent will call.

Name.....

Address.....

.....

☐ If 18 years or under check here for Booklet A.