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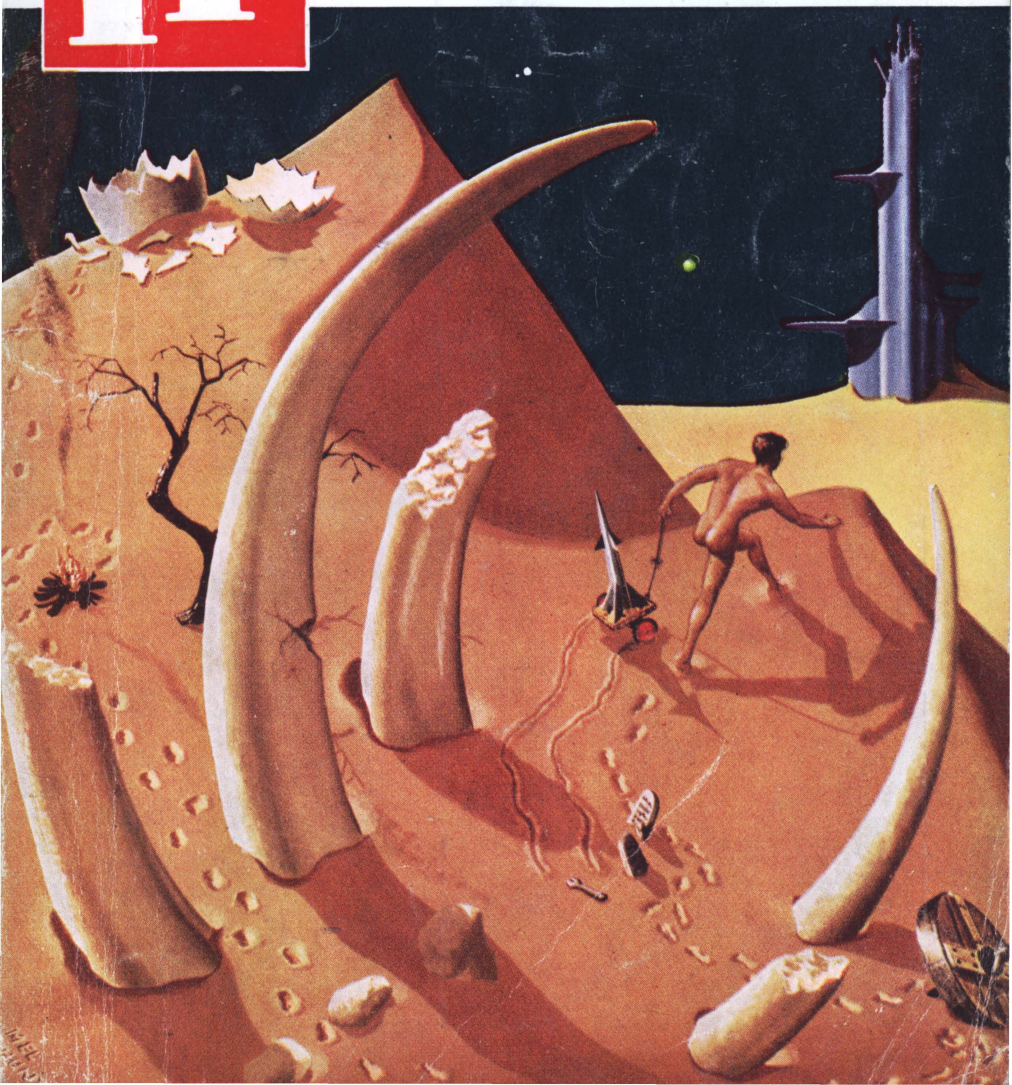

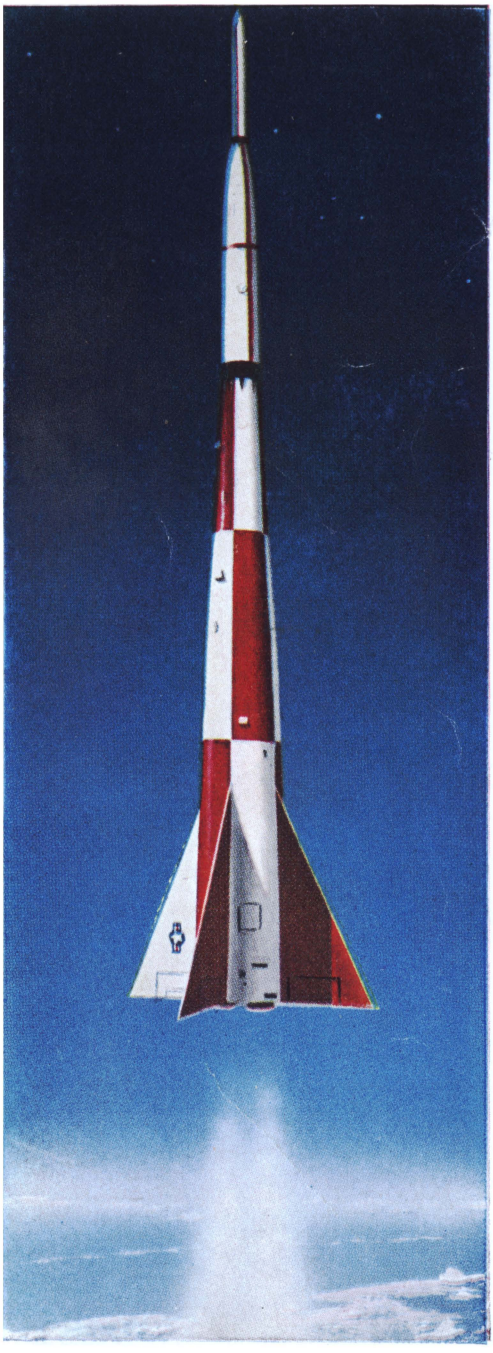

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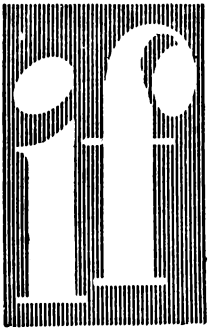

WORLDS of SCIENCE FICTION

DECEMBER 1956

All Stories New and Complete

Editor: JAMES L. QUINN

Assist. Editor: EVE WULFF

Art Editor: MEL HUNTER

SPECIAL!

NOVELETTE

SHORT STORIES

FEATURES

COVER:

A Symbolism of "This Lonely Earth", by Mel Hunter

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EDITORIAL AND BUSINESS OFFICES, KINGSTON, NEW YORK

Next (February) issue on sale December 12th

Editor's REPORT

Not so many weeks ago "the greatest show on earth" folded its tents for the last time. Just a short time before this dramatic announcement, other major circuses went into bankruptcy or were forced to shut down. It was an era dying, an era of fanfare and color and superlatives and fun for all ages passing into history. No more thrilling clamor of the midway, smell and roar of the animals, barking of pitchmen, swelling tones of the calliope, and the excited shrieks and laughter of children. Some reports say the major circuses will play hereafter in big air-conditioned arenas. Some say they will fold forever. But even if they do continue in the big arenas, they'll never be the same again. Not to me, anyway. I've seen the circus at Madison Square Garden and I've seen it under the big top pitched in country meadows. But the city arena of concrete and steel was never as exciting and suspenseful and filled with the spirit of holiday as the canvas and ropes.

Every now and then an author will ask what is our approach to science fiction and the answer is the same as it has always been: A philosophical approach with good writing getting the call over gadgetry and scientific gimmicks. And I am always glad to receive a letter from an author reporting that at local gatherings of authors and artists the majority feel the same way. Fox B. Holden (his real name), who wrote *Dearest Enemy* (Oct. IF), and *A Matter of Order* (Aug. IF), recently said: "I began writing science fiction while still in college because I felt that science goes —or can go—a long way beyond the production of gadgets. Taken far enough it really, to my mind, becomes one with philosophy. And philosophy, after all, is just thinking—the kind of thinking that is impossible for animals, but of which Man is allegedly capable.

"It's the kind of thinking that can give us all a glimpse of the might-be—which usually is a brighter subject than the might-have-been. Hope, they call it—and it does something to keep a guy's chin up—even if it is sometimes worked through a negative "better not do *that*" approach. And how could you evaluate positiveness, anyway, if you didn't have a few minus signs here and there to go by?

"So—science-philosophy. And when it's put down by people who like to spin yarns, it becomes science fiction."

Fox Holden, incidentally, lives in nearby Poughkeepsie and is a part-time science fictioneer whose full-

time job is that of publicity writer for the electronic research division of one of the world's large manufacturers of typewriters and computing machines. He is a graduate of Middlebury College in Vermont, getting his sheepskin after putting in four years in the Infantry, Air Force and Armored Forces. Before going to his present job, he served seven years as a newspaper man. In his present work he is as close to a push-button world of gadgets and technology as a writer could possibly be—yet his science fiction writing reveals ideals far, far afield.

Two new anthologies are due for early publication—a collection of Richard Matheson's short stories and a variety of authors compiled by Ted Dikty. Included in the Matheson selections is *Being* one of the most suspenseful, eerie and chilling tales to ever appear in IF. Frank Reilly's *The Cyber and Justice Holmes* is included in the Dikty selection . . . *Hero Driver* by Alfred Coppel, who seems to have drifted from science fiction circles, will soon be released as a movie by United Artists . . . Bourgey and Curl, late comers to science fiction book publishing, will bring out *For These, My Children* by Raymond F. Jones. Ray Jones has appeared in these pages on a number of occasions, always with some top-notch entertainment . . . A writers' magazine recently reported Harlan Ellison's age as "just sixteen". If true, he sure got married mighty young and learned an awful lot at a tender age to have written *The Crackpots* (June IF). . . Gordon Dickson has something of a lulu in *Lulungomeena* which is scheduled for X-Minus-One, the N.B.C. science fiction TV show . . . Head of what is perhaps America's largest stable of science fiction writers, among others, is a stocky, well-set, dark haired dynamo of an agent you sf readers seldom, if ever, hear about. His name is Scott Meredith and his staff of readers, located on the 18th floor of a Fifth Avenue office building, outnumbers the personnel of many good-sized publishing houses . . . It becomes more evident each day that the most constant thing about science fiction is the interest of the American fans. May their tribe increase. Prime example: About the time you read this, The Los Angeles Science Fantasy Society will hold its 1000th meeting. *That,* brother, is being constant! . . . Two offers for Dr. Alan E. Nourse to practice in a "quiet town where there is time to write science fiction"—one from California and one from Alaska (see August IF). By the way, Dr. Nourse is working on an outline for an article on the future of medical progress that promises to be one of the most fascinating you ever read. It will be in an early issue.

And don't forget about *The First World of IF.* Wrap around cover and end papers are by Mel Hunter. Preliminary color sketch for the cover is a honey. We'll list proposed stories and authors in the next IF. Incidentally, it will be a rather small printing for newsstand distribution, so ask your news dealer to save you a copy. —jlq

Illustration by Orban

IT'S COLD

Outside was miserably primitive, while the City-State was Utopia. What reason could a person have for swapping heaven for hell——unless it was for laughs!

OUTSIDE

BY RICHARD WILSON

THEY'D FOUND a way to make it stop raining in the city and he didn't like that. Oren had one of the few outdoor gardens remaining in Greater New York and he'd had to hook up an irrigation system fed by hose from a tap in his basement. While he was at it, he ran another hose up to sprinklers above the windows of his ground-floor study and arranged them so they could send a shower of water against the panes from outside.

He turned the rain on hard so that water drummed against the glass with the realistic sound of a downpour. It was almost satisfying. The bright sunlight streaming through the drops spoiled it, somewhat.

Oren had known people who'd missed more than the rain. Some had bid good-by to the city proper and moved to the suburbs, though they remained within the boundaries of the City-State. Others had fled Outside.

But there were those who had wanted, or needed, the benefits of the super-metropolis—and they compromised, as Oren and his wife had.

They'd diverted the rain away from the cities because it was mostly a waste to have it fall there. It was better to shunt it over to where it could fill a reservoir or unparch a desert or put out a forest fire—provided these places were on resources land belonging to one of the City-States. All very laudable, Oren supposed, but it was an interference with nature that he didn't care for. He was a conservative, an anti-progress crank.

Actually, euphemisms aside, he knew he was an anti-regimentarian. Had he been one outside his private thoughts, though, he would have been considered an undesirable member of society. It wasn't illegal, yet, to question the Suggestions of the City-State Council. Thus far, the Suggestions lacked the force of law. They served, however, to establish customs which most citizens found it wise to follow if they cared to avoid harassment by the green-tunicked members of the Council Guard.

It was no more illegal to be an anti-regimentarian in Greater New York in 2009 than it had been to be a Jew in the early days of Hitler-Germany, a Communist in the latter days of the United States, or a Conciliationist during the States' Rights Wars—in which the victors became the City-States and the losers were banished Outside.

But obviously it was healthier to keep quiet and follow Council-decreed custom than to seek justice in the letter of the law.

Oren was just sitting there in the study, smoking, not really thinking consciously about any of this, when his wife came in. His body was cradled to the optimum relaxation point in the restochair, but he was nervous.

"Oh, you've got the rain on," Edith said. "That's nice. But the sun kind of spoils it."

"Yes, it does," Oren said. "Pull the blinds, will you, honey?"

She darkened the room and curled up into a resto next to his. "That is better," she said. "Makes it more cozy."

He lighted a cigaret for her and for a time they sat quietly while smoke rose to mingle with the shadows of the room.

"It is today, isn't it, Oren?" she said finally. "I haven't been able to concentrate on a thing. I've got that orchestration sitting on the piano—the one the maestro wants by tomorrow—but I don't have the patience to finish it."

"It's just routine, isn't it? Nothing you couldn't knock out in a

couple of hours, I should think."

"Yes, but I seem to be so jumpy," his wife said. "I know I'm not supposed to be. It isn't Modern, and all that, but I am."

He laughed and reached out a hand to pat her flat waistline.

"Old skinny-tummy," he said. "It used to be that only the husbands went through waiting and smoking themselves into a frazzle. Now the female of the species knows what it's like, too. Relax," he said. He tried to give it the casual touch. "Our baby will be born at the proper moment, sanitary, strong and just as squally as the old-fashioned ones. The obby said he'd call immediately from the delivery lab and we'll probably see him tomorrow, when the little bugger's adjusted to things."

"The obby!" Edith said. "What a terrible expression. Dr. Morales is the best obstetrician in Greater New York and you call him an obby, as if he were some kind of gadget."

"Well, isn't he? I think I'm being very modern and enlightened about this whole impersonal business. Our first child is being born six miles away in an antiseptic laboratory while its mother and father sit smoking and discussing terminology. Nine months ago they got a droplet of goo from me and one from you and mixed them up in a high-gear cocktail shaker and ever since it's been growing in a bowl of heat-controlled expando-mush on a shelf where they look at it every so frequently and see that it's not going sour and agitate it a bit so it won't think its forgotten. If that doesn't entitle me to call Dr. Morales an obby I don't know what does."

"Really, Oren, you're terrible," she said. "You talk as if somebody put something over on you. After all, you're the one who wanted to do it this way. I was perfectly willing to go about it in the old-fashioned way. There's no law against it—not really. Just a Suggestion. And we could have moved Outside, if necessary. We'd have gotten along all right."

"We've been over this so many times, Edith," he said. He was being angry in his icy-calm way. "Let me enumerate the points for you. One—we're both Intellectuals, so called. You're a musician; I publish talking books. It just so happens that the seats of our culture—the only places we could make a living—are the city-states. We're not farmers or workers and we'd be of no use on the Outside.

"Point two—if we left Greater New York where would we go? Chicagoland? The Bay? Dixieton? One's as bad as the other—and besides none of them has a decent publishing house, even if you could write your music wherever you had a piano.

"Point three—although it would be socially unacceptable to have a natural baby here, it would be safe. You'd have the best facilities, even if you got lectured at while you used them. Who knows what would happen to you Outside?"

"I'm sure people survive natural pregnancy on the Outside just as they used to," Edith said. "I think you've listened to the Council so

long that you're beginning to believe everything you're told. Next they'll be telling you what kind of books to publish, if they haven't already."

She had become angry herself, now, as she did when he assumed his superior-logic tone of voice. Instantly he was contrite. He realized that he had been sharp with her only because she had verbalized the dilemma he wanted to avoid having to recognize.

"I'm sorry, Edie," he said. "I'm all tense. This waiting around for someone else to have our baby for us has me on edge. And you're right about the Council. They sent us a Suggestion last week. Very logical thing it was, too, on the surface. They'd noted that some of the titles on our back list haven't been moving well lately. That's true enough. They rarely do. They're standards, though, and the sales are steady, if small. But the Council Suggested that we let them go out of print. In the interests of conservation, of course. It was just a Suggestion, mind you; we can take it or leave it."

"And if you leave it?"

"I don't know. I think it's just a feeler the Council is putting out, to see how far it can go. I suppose if enough publishers took it, instead of leaving it, the next step would be a Resolution, to bring the rest of us into line."

"What kind of titles are they Suggesting you drop?" Edie asked. "Simply to help save tape, of course."

"Oh, some works on politics and government, as you might expect, and some less likely—such as a whole list of titles by Haskell, the naturalist."

"You're resisting the Suggestion, I hope."

"I don't know," he said. "We're having a conference on it tomorrow. We did take one of their Suggestions, but that was strictly meritwise."

"Oh?"

"It wasn't exactly a Suggestion. It was a letter of recommendation sent along with a manuscript by a Dr. Stern, the head of the Health Department. We're taping his book. It's about his pet theory, but it's sound. You know, the one about the creativity of women. I told you about it."

"I don't remember," she said. "But I don't think I'll like it."

"It applies to you, though. Stern's theory is that for so many hundreds of centuries women had been conditioned to motherhood that as a group they had a block against other channels of creativity. Even the unmarried and childless couldn't break the pattern because they themselves were the products of motherhood. Theoretically, that would be why you're having such difficulty with your music."

"But my mother was deconditioned," she protested. "She was born naturally, but I grew up in a bowl of mush, as you call it, and I intend to break the pattern."

"It's a three-generation process, Stern thinks," Oren said. "Not that I agree with him necessarily, but if we had a daughter, and if she were an obby baby, she might be the first to break the pattern in our family—

if she had any talent, of course."

"You and your Dr. Stern can have his theory. I intend to break the pattern myself," Edith said. "Provided I don't fall back into it by having a baby myself in the normal way. I'll write that symphony yet, you'll see."

"Now you're being inconsistent."

She smiled as she recognized the truth of his remark.

"All right," she said. "But that's my prerogative. They haven't bred that out of us yet. I'm still a woman." She became serious again. "And I guess that's why I don't know whether I want to have another baby this way. It's so impersonal, so cold—like going shopping. This way is so easy; it saves so much time and makes everything so simple. But do you appreciate the things you get the easy way, or do things only become precious to you when you'd had to suffer to have them?"

"Now don't give me any of that martyr talk," Oren said. "Were you any less precious to your mother because you were an obby baby?" He grinned. "As I recall, you were about the most spoiled creature in existence until I snatched you from the bosom of your family."

His joke failed to return the smile to her face.

"I'm worried about something else," she said. "Aside from the psychological aspects of the thing. I mean, have I deteriorated . . . as a woman? I don't want to be just a brain and a talent, if I am that. I want to be interesting in that other way, too—the way grandma was when she was a girl."

He turned in his chair to look directly at her. "Believe me, Edie, you're interesting. Oh, yes. Believe me."

Then he leaned over and kissed her soundly on the mouth.

"If you wish," he said, "I'll elaborate on that comment."

"Do that," she said.

But the elaboration had to wait. There was a musical tone and a voice said:

"Dr. Morales calling Mr. and Mrs. Oren Donn."

"There he is," said Edith. "There he is!"

"Now calm down," her husband said. "Are you ready? Would you like a drink or anything before we talk to him?"

"No. Go ahead, answer him."

Oren spoke the words that opened the communications circuits of their home to the doctor's call.

"Donn Fourteen. Hello, Doctor, this is Oren Donn. Edith's here, too."

"Hello," said Dr. Morales. "Your son has been born."

"A son!" Oren cried. "Do you hear that, Edie? It's a boy!"

"That's wonderful," she said. "How does he look, Doctor?"

"Perfect," Dr. Morales said. "He's a lively little tike. Got good color, too. Not all red like these natural children. He's had his first cry and his first meal and now he's sleeping. You can see him tomorrow at—say fourteen hundred. Will that be convenient for you?"

"That'll be fine," Oren said. Edith nodded agreement. "I'd like

to bring him a little present, if I may. A little gold wristband my father gave me when I was born. Sort of a family tradition, you know."

"I'm afraid that won't be possible, Mr. Donn," the doctor said. "You know the rules. No foreign matter must touch him except what the laboratory provides. That's why you were advised not to buy any clothing or bedding in advance. We have all the things the child needs right here. In six weeks, when you take him home, you can dress him in an Indian suit, if you wish, but until then you must abide by our rules."

"Of course, Doctor," Edith said. "We understand. Tomorrow at fourteen hundred, then."

"Right. Goodby."

"Goodby."

The double goodby switched off the communicator and a single musical tone signalled that the connection was closed.

"Well," said Oren, "there he is. Born and everything. How do you feel?"

"A little weak. Honestly," she said. "I feel as if something had happened to me physically, just now. A lightening of pressure, sort of, and yet a kind of frustration. I can't explain it, really."

"It's strange," Oren said. "I don't know how a natural father used to feel, after he'd been sweating it out in a hospital corridor, but I'm pretty excited. But what bothers me is that I had the same sort of feeling when the dealer called up last year to say that our new gyro was ready to be delivered."

"Funny," she said. "He won't really be ours for six weeks. And until then I won't even be able to hold him in my arms except half an hour a day. What is that horrible name they have for it?"

"Parent Acclimatization."

He took her hand and squeezed it. Then he got to his feet decisively.

"I'll get you a drink. A good stiff one. Then I want you to go in and finish that orchestration. We've got to snap out of this."

"All right," she said.

"And while you're working, I'll go out. I feel like taking a walk in the rain."

"But there isn't any rain," she said, "except just outside the window." She turned a switch and stopped the drumming of the water on the panes. "You are in a state, aren't you?"

"He laughed. "I certainly am. All right, then, I'll fix us both a drink."

Later, when Edith had finished the orchestration, Oren asked:

"Shall we see what's on the triveo?"

"I don't care," she said. "If you like."

When television first went three-dimensional it was called tri-video, to distinguish it. In time this was shortened to triveo, first with a long *i*, then with a short one. And there were many, like Edith, who changed the word once more—to *trivia*.

There was always a discussion about the triveo before they

switched it on. Sometimes weeks went by during which it lay silent and unseen. Probably it was the least-used piece of equipment in the house, a price it paid for its lack of intelligent programming.

Oren pushed a button on the panel attached to the arm of his restochair and a section of the living room wall became the front page of the daily gazette. He dialed for the triveo section.

"It says Jerry Hilarious is on," he said.

Edith squinted at the projected page. There was a flat shot of a man in evening clothes, with his eyes crossed and his tongue held grotesquely in a corner of his mouth.

"Looks more like a Jerry Gruesome," she said. "Who is he?"

"A comic, it says. It's his triveo premiere. He's made a big hit in the pleasurants, it also says."

"I'm glad we eat at home, then," she said, "where we don't have to have belly laughs with our roast beef."

"Let's try him," Oren said. "We can always turn him off."

"All right," she said. "But you never do. You hang on to the grim end of everything."

"You've got to give them a chance. We wouldn't have any talent at all if everybody was condemned sight unseen."

"Off with their heads!" said Edith cheerfully; and later, when Jerry Hilarious had made his debut, she asked: "You call this *talent?*"

The comedian was a short, skinny man who gave the appearance of brash boyishness, though he must have been well into his thirties. He had a crop of scarlet hair whose vividness resulted either from dye or the affinity of the triveo cameras for the primary colors.

Jerry Hilarious also had an amazingly plastic face which he contorted at will and a repertory of startling gestures made still more fantastic by his apparent ability to throw each limb out of joint.

One of the gestures, delivered as if from a pitcher's mound, sent his forefinger streaking out by triveo magic so it seemed to be only an inch from the viewer's nose. Then the outthrust arm and finger moved to the southwest and its owner's comic high-pitched voice would say to a stooge with the utmost scorn: "Aw, g'wan *outside!*"

The gesture and the gag line were used several times during the program and it was obvious that these had helped to win him a spot on the City-State Network. It also was obvious that a new catch phrase had been born and that the Donns could expect to hear it often from amateur comedians among their acquaintances.

MARK OLAFSON had to be careful now. He had to use the utmost caution while appearing to be casual. Moving by night, it hadn't been too hard to cross open country undetected into the town on the outskirts of the City-State. From there, by stages, he had traveled nearly to the west bank of the Hudson River.

At the bus terminal, Mark went to the men's room and, waiting for a moment when he was alone, quickly but carefully redusted his face with talcum to hide the redness of the skin that marked him as a man from Outside. That done, he rubbed the excess off his hands and adjusted his borrowed clothing.

It was the best in the village and it had been pooled from among various owners for his mission. The village's best was only a seedy approximation of the everyday clothing of those he was among now. He pulled a telltale burr from the pants leg, wiped the shoes, adjusted the hat and, taking a deep breath, walked out into the terminal.

Mark ignored the moving pavement as being too open to scrutiny, and too slow. He bought a ticket to Timesquare and found the right bus. There were plenty of empty seats and he chose one in the back next to a window and tried to sink into it inconspicuously.

He saw the bus driver look back in his direction and he averted his eyes quickly. The driver seemed to be staring at him, but finally turned back. A few more people got on. No one sat beside him, luckily. The driver started the engine, closed the doors and the bus moved out onto the ramp leading to the tunnel under the river.

Oren Donn was sitting in his temperature-controlled, windowless office trying to decide whether to use good old reliable Smithson, with his fine familiar voice, to read the new pot-boiling historical romance into the tapes, or to experiment with a new voice, when the reception screen announced a visitor.

Oren pushed the papers to a corner of his desk and got up to greet the caller. The name, Mark Olafson, sounded familiar but he couldn't quite place it. But the man's face and the handclasp he gave him brought it all back.

"Mark!" said Oren. "You old scoundrel! I haven't seen you since school."

"That's right," the visitor said. He looked around the quiet, efficient office and dropped into a heavy lounge chair. "Hope you don't mind, I'm about beat." He sighed. "Been traveling." He looked carefully at Oren.

"Make yourself at home," Oren said. "Brothers of the Oath don't stand on ceremony."

Mark Olafson laughed. "Remember that, do you? It's been a long time since that schoolboy binge. You were pretty crocked."

Oren pretended to look hurt. "Held my liquor as well as a certain other eighteen-year-old I could name."

"Good old Donnie," said Mark. "Does the oath still hold?" He was serious suddenly.

"Of course." Oren looked at his visitor's clothing. He saw the rubbed places in the cloth and the worn shoe-soles. "I don't have a lot of cash with me, but you're welcome to what I've got—and I'll be here tomorrow."

Mark grinned. "That's more than I can say. Thanks, Donnie, but it's not money I need. Principally I

need a friend—someone I can trust—a brother."

"Just a minute." Oren lifted a section of his desk and pressed a button.

Mark jumped to his feet.

Oren looked surprised. "Just wiping the tape. Don't be alarmed. I start it up in the morning and record all conversations. It's just a business gimmick."

"Does it go anywhere else?" Mark asked.

"No. I have it for my convenience. Lots of people do. Helps you remember things, if you've got a memory like mine. Here, take the spool. There's nothing important on it today." He unhooked it and handed it to his visitor.

"I'm sorry," Mark said. He sank back into the chair. I've got a case of nerves." He took out a handkerchief and wiped his face. Some of the talcum came off. "You see, I'm from Outside."

"Oh." Oren looked grave and drummed on the desktop with his fingers. "That's where you've been. Pretty grim, I imagine."

"Yes and no. It depends on what you're used to—and what you want. For instance, I'm used to not having much—but I want a great deal. Does that sound paradoxical?"

"Yes."

"It's not, really," said Mark. "I don't have time to go into it right now, but one day we'll have a yarn about it. In the meantime, old brother, what I need are clothes that will get me by without suspicion, some kind of cosmetic to cover up my ruddy outdoor face that'll stay put for more than half an hour, and your solemn promise not to say a word to anyone—not even your wife, if you've got one."

"I have. She's Edith Riordan Donn, the composer."

"So she's your wife? Well congratulations. We hear her music out there, once in a while. 'The Storm that Wasn't,' for instance. Good subversive stuff."

Oren wasn't sure this was a joke. "Look, Mark," he said, "I'll help you all I can. I give you my word, which should be superfluous. I'll bring the clothes and the makeup and I won't say anything to anybody. But because I do have a family—there's my little boy, too—I don't want . . . "

"I understand," his visitor said. "Don't worry. I'm deeply grateful and I wish I didn't have to be so mysterious. But that in itself helps protect you. And I'd go a long way toward Death to avoid involving you and your family. I mean that."

Oren felt a thrill of vicarious adventure, but it was short lived. "I believe you," he said. "Shall I bring the clothes and things tomorrow. Here?"

"If you will. It's a busy office building, with people coming and going all day. Better than my going to your house, or meeting you someplace else." Mark Olafson stood up. "Now I've got to run. I'm very grateful to you."

Oren waved away the gratitude. "Tell me," he said. "Do you think—? I mean if my family and I—"

Mark Olafson's glance was keen but impersonal as it swept up from Oren's good clothes to his pale,

well-fed face and around the luxurious, gadgeted office.

"Somehow, Donnie," he said. "I don't think you'd like it out there."

Martin was a very good baby. He never cried, never was any trouble. He was sent to them in an ambulance ("Delivery truck!" Oren called it) from the hospital. He arrived in a cage of glass called a Sleeprplay. It was to be his home till he outgrew it. The thing regulated the temperature to the baby's needs, kept out insects, bathed him with anti-germ beams and made him inaccessible to random pats, cuddles and chin-chucks.

There was also a switch they could have used to soundproof the cabinet if Martin had been too noisy. But even if he had been the worst wailer in the world they wouldn't have considered using it against him, they said, and wondered who would be so heartless.

But though they derided the glass box, they found it a useful improvement over the old-fashioned crib and play pen. And much more sanitary.

There was a Chango at one end of the gadget. Oren never quite lost his fear that it would swallow up his son whole one day. It was operated by plunging the baby into it up to his waist and holding him there. Then, behind the scenes, the old diaper was stripped off, the baby washed and oiled and a new, pinless diaper fastened to his loins. The whole operation took thirty-seven seconds and the manufacturers were looking for a safe short-cut which would reduce the time to half a minute flat. But they hadn't yet found anything to make the diaper itself obsolete.

Martin was so little trouble that they sometimes forgot he was in the house. He ate without fuss and slept well and the glass box discouraged much playing.

So Edith had plenty of time for her music. She worked hard and, sometimes when the baby was asleep and the piano was making a great racket, she would soundproof the Sleeprplay so he wouldn't be disturbed.

But she was often discouraged in the evenings when Oren returned from work and soon he found it was better not to question her about her progress. Tonight he had tickets to a theater. It was a surprise for her—a dance act was going to use some of her old music.

She met him at the door and, before he could tell her about the tickets, she threw herself at him with a hug that almost tumbled him off his feet.

"What's up, Edie?" he asked. "Martin been doing something precocious?"

He sometimes was bitter about their son; about the machine-like way in which he was progressing, without mishap, through infancy. And he always called the baby Martin, never Marty or any pet name.

"Now you stop that," Edith told him. "This isn't about the baby at all; it's about me."

"All right, I'll be good," he said. He followed his wife into the studio.

She sat him down in a resto-

chair, handed him a highball and went to the piano. "Now don't be too critical," she said. "This is just the theme, with a few embellishments."

She sat for a moment with her hands poised over the keyboard, and then began to play.

There were five majestic notes at the beginning. Edith wove them powerfully into a statement which spoke authoritatively of revelations to come. Her right hand was the harbinger of the calm future, her left the evoker of monumental discord, raging in the dying throes of the tortured present. There was strength in her playing and meaning in the music. It stirred him even on this first hearing.

There was a kinship here with Beethoven, he thought, in the feeling, and yet it would be unfair to make a comparison on any other basis. He had sense enough not to mention it.

She finished on a chord that echoed away in the big room, then picked up a pencil and made a change in the rough score propped on the stand beside her.

Oren's face was serious when Edith looked at him.

"Not so hot, was it?" she said.

"Edie," he said, "you couldn't be more wrong. It's tremendous. I'm impressed more than I can say. I'm an old duffer about music—all I know is what I like—but you tell me I have good taste in good stuff. This is good stuff, Edie. It's the real thing."

She went to sit next to him.

"Do you really think so? Don't give me any malarky, Oren—not about this. It's too important to me."

"Of course it is," he said. "And it's going to be important to a lot more people, I think. Did this all happen today?"

"Sort of. It all went together today. I've had the theme—those first five notes—going through my mind for a week or more. I'd feel them pounding through me when I was doing something altogether irrelevant—like dipping Marty into the Chango, or hydrating his formula—but they didn't come out until I sat down at the piano today. Then there they were. They just came out of my fingers. I didn't even write them down, at first; they were so much a part of me I knew I'd never lose them."

"That's wonderful," he said. Then he asked: "Where do you think it came from?"

"What do you mean? The music? I wrote it, of course."

"Of course you did. I mean, do you think it has anything to do with the Stern theory? The one about non-babying helping women create? You're a generation ahead of his schedule, if there's anything to it."

"I think his theory is a lot of egotistical male nonsense," Edith said. "The only reason women haven't become great musicians or artists—or generals, for that matter—is that we never got a chance to show what we could do. Not till lately, anyhow. Remember, it's been less than a century since women were permitted to emerge from the cocoons that the men had spun for them."

Oren smiled but said nothing.

"My theory is that Dr. Stern is just a crackpot," Edith said. "It's a matter of environment and opportunity, that's all. Otherwise why did it take man so long to write his first novel from the time he spoke his first intelligible grunt as a caveman? I wrote that music myself, without any mystic help from a sublimated sex urge. And I'd have written it just as well if Marty had been born in me instead of in a laboratory."

"Good for you," he said. "Then we've got a reason for celebrating." He told her about the theater tickets. She was pleased and ran to dress.

The dance act wasn't good and Edith's music seemed to her to be badly played by the orchestra. But it was an evening out and Edith squeezed Oren's hand to reassure him.

They hadn't expected to see a movie, too, but the curtains parted after intermission and there it was, in Ultra-Dimension, Authenticolor and Tactilivity, presented as a public service by the Department of Information, Greater New York.

A breath of cooled, somewhat rancid air swept across the audience and the sound apparatus played a stylized theme borrowed from a Tin Pan Alley relic that Edith recognized at "Baby, It's Cold Outside." The title of the film, formed by blocks of ice, was, simply, *Outside.*

The movie purported to be a travelog but they recognized it as propaganda. Nevertheless, after two reels of cineramic proximity to the gaunt, sullen-looking people who had chosen to live beyond the blessings of the City-States, they decided they were extremely fortunate to be living where they were.

Oren, in addition, had the recent memory of Mark Olafson. His caller, who had been so nervous, so suspicious in the office, might easily have been one of the people in the film.

"That's not for me," Oren said later. "That's going back two hundred years—going Outside. Those shacks they live in—what did the commentator call them, quaint?—they're not quaint, they're primitive."

"I suppose that is the impression we're expected to go away with," Edith said. "But I don't see how we could have any other. The cameras don't lie. If that's freedom, they've changed the definition and they can have it."

Oren recalled Mark Olafson's words. No, he and Edith wouldn't like it out there.

THE SYMPHONY went slowly for a time. But its progress was steady. Edith knew what she wanted to say through the music and she said it forcefully. Sometimes the statement came originally at her piano as she sat and coaxed the black and white keys to express a phrase that was throbbing through her body.

At other times whole passages suggested themselves to Edith with such clarity that the piano was superfluous.

The third movement was a

revelation. The entire theme of it suggested itself to her in one brilliant mass as she was coming home from a department store sale. She was riding the moving pavement, clutching a few parcels she hadn't wanted to entrust to the delivery tubes and hemmed in by a crowd of other women shoppers. There, one flight underground, moving north at the speed of fifteen miles an hour and trying to ignore the advertising placards set into the tunnel ceiling at an angle just overhead, she felt the music hit her.

It came not as a phrase or snatch —not as a tender seedling thrusting hopefully through a crack it had made in the soil—but full-blown, like the bouquet of flowers a magician would produce from an empty fist.

The movement exploded in her mind, in a fraction of a second, fully-developed. It was a natural outgrowth of the first and second movements, over which she had worked so hard, and, although it was similar to them thematically, it was a totally original concept of their potentials. It was as if the first two had mated and produced the third, spontaneously and perfectly.

Edith was transfixed as the music throbbed through her. She was carried two exits beyond her own before she realized it and then in her excitement elbowed her way to the slow lane and off, where she took the escalator to the street.

She walked home from there, quickly. She was running when the front door cushioned closed behind her. She threw the parcels to a couch, dropped her coat to a floor, sailed her hat across the room and was at the piano.

She was still at the piano, the floor around her littered with paper and pencil stubs and the ashtrays piled with cigaret butts, when her husband came home.

"Hi, Edie," he said. "How's the baby?"

She was irritated that his first thought should be of the child. But then she said:

"Oh my God! The baby!"

"What's the matter?" Oren asked. Alarmed, he headed for the nursery.

She followed him. "I plugged his sleeper into the sitter connection when I went shopping and when I came home—frankly I forgot all about him."

Martin was asleep, peacefully. If he was damp he didn't show it or object.

"What a terrible mother I am," Edith said. Anxiously she pressed a button and a voice said, almost instantly:

"Nursaway, Incorporated. Everything was just fine while you were gone. One moment, please."

That was just Tape A, but it did mean there had been no trouble; no need to send a nurse in person from the central sitter office.

"Electronic nursemaids," Oren snorted. He was about to elaborate when a viewscreen which could be seen from the baby's Sleeprplay went alight. The image of a young woman in a crisp white uniform appeared. She said:

"Martin was wonderful while you were gone. He slept most of the time. Once he got a bit cranky, but we ran off a puppet film on the screen, which amused him, and then played a Soothe-tune. He went back to sleep. You have a very fine baby, Mrs. Donn."

"Yes, I know," Edith said. "Thank you."

"Will there be anything else?"

"No. Thank you very much, Nurse."

"Thank you."

The screen darkened and Edith plugged out the connection.

"So everything's under control," Oren said. "I'll change him and feed him later, if you like." They went back to the studio. "You seem to be busy." He looked around at the mess.

She laughed and curled up on the couch, moving the parcels to the floor.

"You have no idea," she said. "I've been going like a mad one all afternoon. And the reason why? This will kill you." She spoke self-consciously. "Your strictly no-talent wife thinks she has something good. She thinks she has it and she may not lose it, if only she keeps working at it like fury so as to keep it from getting away."

"Of course you've got something," he said. "We both know that."

"But this is different. It's the third movement. It's all there. Part of it's down on paper—there," she pointed her chin at a mass of papers on the piano top, "and part of it's up here." She rapped her skull with her knuckles. "Or down here," she added. "I seem to feel it in my stomach, too. Is that the way great music is written—with the stomach?"

"I don't know," Oren said. "But if that's the way you write, that's the way you write."

"Well, this is ulcer music. Maybe I'll give it a name. Symphony Number 1 by Edith Donn, subtitled 'The Brain and the Ulcer.' "

"Good," he said. "Now you're relaxing. I'll get us a drink and you knock off for the day so you can go at it fresh in the morning."

"Thanks," she said. "I'll take the drink, but I've got to get back to this. I can't risk losing it. If you don't mind getting your own supper, that is? I don't think I want anything."

He came back from the portable bar and handed her a drink.

"In the old days I'd have blown my stack," he said, grinning. "Work hard all day and then have to stand over a hot stove while my wife makes merry in the music room. But even though I'm Apologist Number One for the old-fashioned way, I must admit this modern cooking has grandma's methods beat all to hell."

"You know how to do it, don't you?" his wife asked. "The freezer's full of all kinds of meals. All you have to do . . ."

"I know," he said. "From the freezer into the Electronicook and onto the table in ten seconds flat. Then into me, and what's left into the Disposo. But just to be perverse, I think I'll have a couple of medieval sandwiches. If I fix you some and tiptoe in quietly with

Illustration by Emsh

them, you'll eat them, won't you?"

"You're a darling," Edith said. She gave him a quick kiss and went to the piano. "Yes, I will."

At twenty-three thirty Oren Donn came out of the shower and peeked into the studio. Edith was still hard at work.

He wrote a note, tiptoed in and put it on the piano top:

"Baby's all tucked away. Now I'm tucking myself away. Please come to bed soon."

She read the note at a quick glance, smiled, blew him a kiss and nodded vaguely.

When he awoke the next morning the first thing he was conscious of was the muted sounds of the piano.

He went in to her.

"Honey, for God's sake!"

Her face was pale and drawn but her eyes were bright. She would play a few bars, then write a line of notes in quick, expert strokes. There was a little box of tabodex on the piano top next to a glass.

"I'm fine," Edith said. "Don't worry about me. It's a bit tricky in spots, but it's really coming along."

"You've got to slow down—have some rest," he protested. "I won't let you do this to yourself."

"No," she said. "The music is more important. You run along. With luck, I'll be through with this movement by the time you're home."

He conceded defeat, respecting her judgment and sense of values as she had always respected his.

"All right, but don't overdo it. I'll make you some scrambled eggs and coffee. And I'm going to call Nursaway and get a sitter for Martin so you won't be disturbed. Except that she'll be instructed to feed you lunch—forcibly if necessary."

Edith put down her pencil, got to her feet, put her arms around him and rested her head on his chest.

"I just want to tell you," she said softly, "that you're the most wonderful, perfect, sensational, terrifically colossal person in the whole world and I love you love you love you love you." Her tears wet the skin of his chest in the V of his bathrobe. "Thank you for you," she whispered.

He kissed the top of her head and then on each wet cheek and gently on the mouth.

"Okay," he said, considerably affected. "Okay, fine. I'll go fix the eggs. And you write this thing good, Edie. Give it hell, Sweetheart. Give it hell."

Oren pushed open the door of the apartment that night and called:

"Edith. Edie!"

He went into the studio, but it was empty—and clean. The piano lid was down. The ashtrays were empty and sparkling. The papers were gone from the floor.

"Edie!" he cried.

A nurse in starched white came from the bedroom. She had her finger to her lips.

"She's in bed, Mr. Donn. I tried to call you at the office, but they told me you'd just left."

"What is it? What's the matter?"

"It's all right. Strain and fatigue is about all. I've given her a sedative and she's sleeping now. Dr. Harrons is on his way, but just as a precaution."

He pushed past the nurse and into the bedroom. Edith lay quietly in the center of the double bed, breathing just a bit heavily. He stood at the edge of the bed, looking at her.

The nurse followed him. She put her hand on Edith's forehead, in a gesture which she combined with the smoothing of the sleeping woman's hair, adjusted the covers and turned to smile at Oren.

"I'm sure there's nothing to worry about," she said.

"Poor kid," Oren said.

"I put her to bed," the nurse said. "And called you and the doctor. But as I said, it's just strain, I'm sure."

"Thank you, Miss Loring. I guess you didn't bargain for all this when you came to baby-sit."

"I'm glad I could help," she said. "Would you like me to fix you some coffee or anything while we wait

for the doctor?"

"No, thanks. I'll go visit with Martin, I think, till he gets here. Has the baby been good?"

"Perfect," she said. "A real doll."

His son was asleep. Oren sat and looked at him and worried about Edith.

Doctor Harrons was packing his things away in his bag. He refused a drink but accepted one of Oren's cigarets and sat down in a straight-backed chair. Oren stood and fidgeted in front of him.

"It's as Miss Loring said." The doctor took out a prescription kit. "Fatigue, mostly. Your wife was driving herself on borrowed energy —she'd taken a few of those Tabodex things, you know. Perfectly all right, of course, occasionally, but you do have to let yourself catch up afterwards. Mrs. Donn just went a bit too far before allowing herself to catch up. A good night's rest and a minimum of activity tomorrow and she'll be as good as new. Who is your regular doctor?"

"We don't have one. We had Dr. Morales, but he was just the obby —the obstetrician for the baby. A laboratory baby, of course."

"Good man, Morales, in his field. But I would suggest another in this case. I mean no criticism of Morales whatsoever, but he is a specialist. He'd be the first to tell you so himself. No, if I may make a recommendation, I'd say Dr. Leif."

"If you say so," Oren said. "I suppose you're too busy to take on another patient yourself?"

The doctor carefully ground out his cigaret in an ashtray. He looked at Oren, began a smile, then stopped it in the middle.

"Mr. Donn," he said, "apparently I have news for you. Have a drink yourself, Mr. Donn. Your wife is pregnant."

Oren stiffened. His face went through a series of contortions as it adjusted itself to the emotions chasing around behind it. He ended his confusion by breaking out into a broad grin.

"Pregnant!" he cried. "You mean pregnant? You mean she's going to have a baby? The way people used to do? The old-fashioned way? Naturally?"

"Naturally," said Dr. Harrons, grinning back.

"Oh, boy!" Oren exploded. "Oh, boy-oh-boy! That's wonderful!" He walked up and down the room in excitement. "Pregnant! Imagine that! The little devil! Doctor, I'm going to have a drink and you're going to have one with me."

"Well," the doctor said, "all right. Just a weak one."

Edith slept through the night.

Oren sent word to his office that he was taking the day off and he was anxiously hovering over his wife when she stirred into wakefulness.

"Hello, Maw," he said when her eyes opened.

"Hello, darling," she said. She stretched out a hand to him and he put it to his lips. It was warm and soft. "I feel so lazy and relaxed," she said.

"It's about time," he said. "And that's the way you're going to stay."

"Oh, but I can't. I have so much

work to do. I've—" She frowned and looked around the sunlit room. "It's morning," she said. "I don't remember going to bed. What happened?"

"It's all right. Just relax."

"But it's not all right. I have work to do. I have to finish the symphony. I have a lot of work to do."

"You finished it," he said. "You finished it last night. Before I came home."

She frowned down at the covers. "I remember now. Yes, I did finish. But that was only the third movement. It was good. It came out all right, Oren. I remember. But I don't remember after that. Did I fall asleep in the studio?"

"Yes," he said. "And the baby-sitter put you to bed. You were knocked out."

"Well, I'm not knocked out any more. I've got to get right up and start the last movement. That's going to be a humdinger to tackle. I've got no ideas whatsoever. The third took everything out of me."

"So I hear," he said. "Now you listen to me. You're going to stay in bed all day. That's an order. Doctor's order. Maybe tonight, if you're very good, you can get up for a little while. But not before. You've got to take care of yourself. You owe it to the baby."

"Poor Marty. I've certainly been neglecting him. All right, I'll be good. I'll stay in bed and behave. And maybe you'll bring him in and he can stay with me, the way he's never had a chance to, in that damned old scientific box of his all the time."

"Edith Riordan Donn," he said to her, grinning. "Mrs. Oren Donn, I want you to stop talking like an idiot. The doctor has been here, and he's told me everything, and there's no point in your trying to hide it any longer because I know. I, your husband Mr. Donn. I know."

"Know what, silly? What doctor? What are you talking about?"

"You know perfectly well what I'm— Don't you? You mean you don't know? Don't you really?"

She laughed. "No, I don't. And if you keep mumbling to yourself like a fool I never will. What are you talking about?"

He took both her hands in his and said:

"Edie, darling. The doctor was here. He examined you after you passed out. He said you'd been overworking yourself. He said you need a rest. But he also said— He said, and I think it's wonderful—he said we're going to have a baby."

She looked at him, her eyes wide.

"Oh, no!" she said.

She withdrew one of her hands and pulled it down the side of her face.

"Not no, yes. We're going to be real live parents. No bowl of mush stuff, with all due respect to Martin, but an honest-to-God old-fashioned baby."

Her staring eyes were focused on nothing. When she spoke again her voice was barely audible.

"Now I'll never finish the symphony," she said. "It's no good any more. I can't do it now."

"Silly girl," he said. "You sound like Dr. Stern. Surely you can't

agree with him now. You can have your baby and your symphony both. You can have a dozen babies and write a dozen symphonies, if you want to."

"No," she said dully. "Not now. I was talking a lot of bravado then. Now I'm just an ordinary woman, like all the rest. We can't do two things at once. We're strictly one-track people. It's our fate."

"Fate hell!" Oren exploded. "What a lot of nonsense you're talking. You did three movements, didn't you? You can do anything you want to do, if you'll only get out of this defeatist frame of mind."

"You're shouting at me." She looked at him, her eyes grown cold. "You did this thing to me and now you're shouting at me." Her voice rose and she had a wild look. "You're jealous of my work. I was doing something creative and you weren't and now you're jealous of my work and you're trying to destroy it. That's why I'm pregnant. You did it on purpose. You did it maliciously. Well, I won't let you destroy my music. I'll destroy your child first!"

She thrust the bedclothes aside and got unsteadily to her feet. He sprang up to help her. She shoved him aside, with more strength than he thought she possessed.

"Honey," he said.

"Hypocrite!" she yelled. She clawed a dress from a hanger in the closet, gathered together other clothing and ran to the bathroom, where she locked the door against him. He pounded on it.

"Edie," he said. "You're sick. Open the door. Come back to bed. I'll call the doctor."

"You needn't bother," she said. "I'm going to the doctor. I'm going to have an abortion."

Oren, pale and shaking, went to the communicator. He set it for private and whispered:

"Medical emergency."

A minute later the bathroom door opened and Edith came out, dressed for the street. Her face was ashen under its makeup. She carried her purse in her left hand and behind it she was shielding something she held in her right hand.

Oren stood at the front door, barring her way.

"You're not going out," he said softly. "Please, darling, be reasonable."

She walked toward him. She lifted the purse so he could see the large pair of scissors in her other hand, the point of one blade just touching her body.

"Open the door, my dear husband," she said. "Let me go out."

He hesitated only a moment, watching her mad eyes, then opened the door for her.

THEY BROUGHT her back on a stretcher ten minutes later. She was unconscious. At Oren's gesture the two men carrying the stretcher took it into the bedroom and the young medical officer with the gold badge on his white tunic helped them transfer her to the bed.

"Preventive paralysis," the officer said to Oren. "She's all right. We tracked her from the street door

as soon as we got your call and made contact in person a minute or two later."

"But you had to use the para ray?" Oren asked.

"She was carrying those shears and we couldn't take a chance. She seemed to be wandering aimlessly until she saw us. Then she began to run and we pre-parred her. No one saw and Dr. Soames caught her as she fell. There'll be no publicity, I think I can assure you."

"Thank God for that." Oren knelt by the bed and pushed a lock of hair away from his wife's face. She was breathing peacefully and the mad look had gone.

"There will be a few questions, though, if we can go into the next room. Dr. Soames will see that Mrs. Donn is made comfortable."

"Questions?"

"Just routine," the medical officer said. "For the department records. Confidential, of course." He took Oren's elbow and guided him out of the bedroom.

The questions, if routine, were extensive. At one point Oren angrily crushed out a cigaret and said:

"What is this, anyway? You make it sound like a police matter. If we're charged with anything let me know and I'll get a lawyer. I don't like this inquisition."

"Well, now," soothed the medical officer, "you know that there's often a very fine line of demarcation between a medical case and a police matter. Our department must have the facts if the case is to be closed."

"Don't call it a 'case.' You make me sorry I ever called you."

"You might have been sorrier if you hadn't," the officer said coldly, his affability slipping for a moment. "Our job is to safeguard all the citizenry and it's people like you who make things difficult."

Oren jumped to his feet.

"Listen, you young squirt," he began. But Soames came from the bedroom then and after a grave look at Oren whispered into the officer's ear.

The medical officer frowned.

"What is it?" asked Oren. "What's wrong?"

"Mr. Donn," the officer said reproachfully, "you didn't tell us your wife was pregnant."

"You didn't give me a chance to, with your stupid questions. Well, what of it?"

"We should have had that fact in our possession at the time we answered your emergency call," the officer said sententiously. "Then we would have proceeded differently. As it is, you must take responsibility."

"Responsibility for what? What do you mean?"

"I mean this. Preventive paralysis is harmless, generally speaking, but its effect on a foetus or embryo is not completely known and may even be harmful. Therefore we disclaim responsibility for any injury or mutation which may occur in the course of this natural birth. I have a form here which I must ask you to sign, to absolve the departm—"

That was when Oren socked him in the jaw.

It was thirty-six hours before the

Donn household was back nearly to normal.

Oren had been under house arrest for twenty-four of those hours. During that time the house had been aswarm with Council Guards, medics and medical officers, a lawyer, nurses, a baby-sitter and reporters from half a dozen news media. One reporter carrying a creepy-peepy sent the scene out for triveo.

Finally all of them had gone except Oren's lawyer, in whose custody he was paroled.

"Not only don't they have a case, Oren," the lawyer said, "but you might have a strong action against the Council. I say this in the strictly legal sense, of course, without consideration of such extra-legal little gimmicks such as Suggestions and Resolutions they could whip out at the spur of a moment, and assuming that they'd allow a suit. I imagine, though, that all you want is peace and privacy again."

"Exactly, Burt," Oren said. He kicked at a fax tabloid whose headline screamed:

"MUSIC HER BABY"
—SCISSOR PSYCHO

"You could sue that sheet, at least," Burt said.

"Forget it."

The bedroom door opened. Oren pushed the tabloid under the couch with his toe as he got to his feet.

Edith came in, wearing a hostess gown and smiling uncertainly.

"Hello, darling," she said. "Hello, Burt. I've been a bad girl, haven't I?"

Oren went to her and led her to the couch. She was a bit unsteady on her feet. She relaxed gratefully.

"We're not going to talk about anything unpleasant tonight," her husband said. "We'll pretend that Burt is here on one of his rare social evenings."

They pretended as best they could but it was not a success. Oren was worried about his wife's condition and was not talkative. Edith, who had not been told there was anything to worry about, was pale under her makeup and wore a fixed half-smile which soon choked off Burt's attempts at conversation.

So in desperation they switched on the triveo.

It was Jerry Hilarious night and the scarlet-haired comedian was in rare form.

His material usually was topical, and tonight it was right up to the minute. They had turned him on in the middle of a routine which obviously was a parody of the Donn case. Since they had missed the beginning, it wasn't too clear what was going on, but in the act with Jerry Hilarious were a couple wearing heavy glasses—which he had made symbolic of the intellectuals the City-State so despised. Moreover, the girl was wearing as a costume a print dress polka-dotted with music notes and a hat that was a grand piano, while the man, obviously a snob, carried a heavy old-fashioned book under his arm.

"Oh, he's subtle," said Burt. "Subtle as a kick in the teeth. Shall I turn him off?"

"No," said Oren. "We might as well see ourselves as The Common

Man sees us—unless it upsets you, Edie?"

"It's all right," she said. "It has a certain fascination."

The triveo couple, with Jerry Hilarious laughing it up in the foreground, were singing:

"We don't like the City-State
But we think *we* are just first rate."

The couple, with their faces fixed in expressions of the utmost gravity, were going through a series of insane antics as they sang the verses, and the studio audience was roaring with laughter as Jerry Hilarious mugged, cross-eyed, and danced around the pair with his arms and legs flailing fantastically.

The production ended with a crash of music and a sudden silence in which Jerry Hilarious wound up and let fly his gesture of banishment.

"Aw, g'wan *outside!*" he cried.

A wind machine went into action and, as it howled, snowflakes pelted the ridiculous, bespectacled couple. They cringed away from the gesture and crept toward an icy gate.

Edith, with a switch next to the couch, cut off the triveo. Her expression was angry and her lips were pressed into a firm line.

"You know," she said, "I'd like to do just that."

THE DOCTORS—both the Health Department experts and the Donns' private physician—couldn't tell what the effect of the para ray would be on Edith's unborn child. It was alive, they agreed, but whether it would be normal after birth was something they could not yet say. They put her through a Diagnosticon, they thumped on her belly with fingers and X-steths, they examined smears and slides and dials and they said they'd be back to run some more tests when she was five months pregnant. It was thoroughly humiliating.

Oren was tried on the assault charge. The trial was held in chambers with the press barred. Nothing had appeared anywhere about the fact that Edith was pregnant when she was rayed down by preventive paralysis and the Council intended that nothing should. The case was handled as one of simple assault and the judge sentenced Oren to a year in Correction, then suspended the sentence. He was free then, but from that time on the Donns were under surveillance.

They planned one Restday to go on a gyro trip with a picnic lunch. They hadn't ever made such a trip as a family unit, and little Marty seemed to sense their anticipation. His heels kicked against the lunch pack as they wheeled him the few blocks to the gyropark. But the plane wasn't there. A hostile attendant, speaking from the back of his booth as if fearing contamination, told them the Council Guards had confiscated it.

Marty sensed their mood of frustration and bitterness as they wheeled him back home and he began to cry. He was still crying when they reached the house and Oren

on an angry impulse put the infant in the Sleeprplay and cut off his yowls by turning the soundproof switch. Then Oren went into the study and turned on the artificial rain; the streams of water slammed against the window. But suddenly the sound stopped. He looked up and saw a Council Guard looking at him from outside the panes. The booted, green-tunicked guard motioned to him to open the window.

He did, and asked belligerently, "Did you turn that off?"

"I did," the guard said. "As you must be aware, there's a Suggestion against artificial rain. In addition to being wasteful, it's naturalistic."

The guard took out a pocket Listener and aimed it at Oren.

"I didn't know about any such Suggestion," Oren said. He was leaning out the window and talking loudly to the guard standing in the garden below. "And if there is such a Suggestion, it's petty tyranny."

"Oren Donn, with two n's," the guard said into the Listener. "And 'tyranny.' That was the word you used, wasn't it, Mr. Donn?"

"Go to hell," exploded Oren. "And get the hell out of my garden. You have no right here at all."

"And use of profanity to a guard in the performance of his duty," the guard said. "People under surveillance are subject to loss of certain rights. I'm sure that was explained to you at the time of your trial."

Oren bit the inside of his cheek then, and was silent. The guard looked up at Oren, smiled faintly and put the Listener back in his pocket.

"Nothing else to say, Mr. Donn. Too bad. I was enjoying your lecture, as I am sure the Council will when it is transcribed for them. Nice garden you have here. Very natural."

The guard turned and on his way to the gate at the back of the garden his heavy boots tramped through a border of moss roses.

Oren bit off a little piece of the inside of his cheek.

A man had been standing in the street beyond the garden, watching the scene, and he walked on leisurely as the guard left. The guard gave him a passing glance and disappeared around a corner. Oren recognized the man. Mark Olafson, the man from Outside. Oren was about to speak when Mark shook his head almost imperceptibly. Then he, too, disappeared from view.

At his office the next day Oren spent the entire morning failing to get anything accomplished. Half a dozen times he began to tackle the correspondence that had accumulated over the weekend and half a dozen times he yanked the page out of the voicewriter. He was still in his mood when the reception screen showed that he had a visitor. It was Mark Olafson, but the name he gave now was Ross Buckley and his appearance was that of a successful businessman.

Oren looked his surprise.

"Well," he said. "Made a go of it, have you?"

"You might say so." Mark replied. "In a manner of speaking."

"I saw you go by our place yesterday, but I had no idea you'd had such a complete change of fortune. Why didn't you come in? Or is that a stupid question? I'm not much of a conspirator."

"You're not a conspirator at all, I'm afraid," Mark said. He lifted a flap in Oren's desk and pressed the button that wiped the conversation tape. "You'll pardon me. No, Donnie, you're just a victim of an evil, stupid government. I saw that little drama in the garden yesterday, and I know more about you and Edith than you might suppose —never mind how. I've been busy since you and I last talked. In several ways. And I know that things have changed with you."

"They have, Mar—Buckley. They certainly have."

"Good lad. Thanks for the 'Buckley.' We'll make a conspirator of you yet."

"They're driving me into it," Oren said. "Or out of the City-State, at any rate. Edith is already half-way thinking about that Jerry Hilarious thing as being a good idea —that 'g'wan outside' business. I guess you've been here long enough now to know about Jerry Hilarious."

"Yes," said Mark. "I've become very well acclimated. You know, Donnie, once I told you I didn't think you'd like it out there. Now I'm not so sure. It hasn't changed any Outside, except insofar as it's always changing—for the better, we think—but . . ."

"I know," Oren said. "I've changed. I'm waking up."

Mark Olafson looked at the other man intently. "I shouldn't do this," he said. "It's not my primary job, directly. But if you like, I'll help you go."

"Oh?" Oren chewed his lip for a while. "I'd like to think about it, and talk to Edith. Could we make a living? We're not farmers or laborers, you know. And—could we take it?"

"Yes, to both. I suppose you've been saturated with the propaganda films about Outside. I'll not tell you they're fakes, because they're not exactly. They're factual as far as they go. But they only go as far with their cameras and spies as we let them go."

"Oh?" Oren said again. "You mean there's more than—"

"Lots more. I think I can safely say—to you—that you'd be pleasantly surprised. Some of our people are farmers, of course, and some work in factories. But we have a thing called a Constitution, pretty much the same as the one a bunch of the boys hammered out back in the seventeen hundreds. It says things, for instance, about freedom of the press, and that means books, and books means somebody has to publish them."

"Books?" said Oren.

"Of course. Your business. Ours don't talk, yet. You still have to turn the pages and know how to read. But it's something you could do if you didn't mind going into the print shop once in a while and getting your hands inky."

"Printer's ink," said Oren, "How I used to love that smell! But how about Edith's music?"

"We're not barbarians, except

maybe when the City-State turns its cameras on us. We have music, too."

"Well." Oren's eyes had a far-off look in them.

"Well?" Mark echoed the word, smiling.

"I don't know what to say. I'm tempted, very much, to pack right up and move out there, but I don't know. This is my country, even if it's wrong in a lot of ways, and maybe I should stay and try to help make it right instead of deserting it."

"That's a noble thought. I don't mean that flippantly," Mark added quickly. "I respect you for it. But can the few people like you who are left still do anything—from Inside?"

"I don't know," Oren said. "I'll have to think about it."

"I'll be around," Mark said. "Now that I'm respectable, or almost, I'll be keeping in touch with you."

"Good. What are you doing here—as Ross Buckley, I mean?"

"Officially—at least as far as the City-State is concerned—I'm in the talking book business. Just like you. That's why it'll be easy for me to see you often, after I've really got started. Unofficially—you might say I'm in the business of counter-propaganda, or recruiting."

Oren realized that he'd be of no use in the office the rest of the day, either, and decided to go home and talk to Edith.

"You'd better let me go ahead, by about five minutes," Mark said. "I don't think we should be seen together in public until things have firmed up just a bit more."

Oren never saw him again. When he reached the street he found a crowd of people watching the departure of a Council Guard van. He asked the doorman what had happened.

"They got an Outsider. He puts up a struggle but they beats him over the head and takes him off."

With his stomach squeezed tight Oren asked, "where did he come from?"

"Somewheres in the building. Just by luck the same elevator jockey brings him down as takes him up and remembers the floor he comes from. The guards are up there now. They got the whole thirty-sixth floor sealed off and every last soul up there is getting their heads grilled off."

Mark Olafson must have walked three flights before and after his visit. Oren's office was on the thirty-ninth floor.

MARK'S ARREST brought new tension into the Donn home. Oren knew Mark would never mention his name but he was frightened by the efficiency of the Council Guard in tracking down the Outsider despite his elaborate precautions. Apparently no one but the mechanical reception screen had seen Mark visit his office and fortunately it was not one that kept a permanent record. But presumably they knew where Mark Olafson lived and the clothes Oren had brought for him might be traced, if Mark had kept them.

Although Oren tried to keep his

new worry from Edith, she finally forced it from him. But with it went the picture of Outside as Mark had described it for him and that, at least, was a consolation. The couple talked more and more seriously about making the break with their once-comfortable life and fleeing to the wilderness that now seemed more a promise of paradise.

But where once they could have made the emigration with no difficulty other than the scorn of their friends and the sneers of a government which would have confiscated their funds as it stamped their visas, they now were trapped in a land they had come to loathe. As a man under surveillance, Oren had only limited freedom. They'd already taken his gyro and he was sure that if he strayed far from the route between his home and office he'd soon be tapped on the shoulder by a Council Guard.

In this atmosphere Edith's music stagnated. It was an academic question now whether the fact that she was naturally pregnant meant that she could not write a great symphony. She knew she could not write a bar now if she was a sixteenth generation obby baby whose female ancestors for three hundred years had been born in bowls of laboratory mush.

Then, in the fifth month of her pregnancy, the Health Department specialists came back for the reexamination. All the exhaustive tests again were made but still there was none among them who could say with any certainty if Edith's child would be normal after birth. Preventive paralysis was a tricky thing. That was about all they could state positively, and there had been only a few cases of an expectant mother having been preparred.

The specialists went into a conference and emerged with a Recommendation which they sent to the City-State Council. The Council deliberated and issued a Suggestion to Mr. and Mrs. Oren Donn.

A Suggestion to a person under surveillance had the power of a Resolution and, of course, a Resolution was an Edict, backed by whatever force was needed to carry it out.

The Suggestion was that the mother should enter a Health Department hospital at the beginning of her ninth month and be subject to exhaustive tests under rigidly-controlled conditions. Then, if it was indicated that the birth would be normal—if something so old-fashioned as a natural birth could be considered "normal"—a film record would be made of the birth and of the infant's progress.

It would of course be necessary to have a complete record until such time as the child was found to be either normal or abnormal and therefore it was Suggested that the child would become a ward of the City-State while doubt remained. The mother would be free to return home after the birth.

That was when Oren and Edith decided they'd had it. They read the copy of the Suggestion which had been brought to them for their signatures. They signed it, received the thanks of the medical officer for

their intelligent cooperation, and then made their plans.

There was to be, on the Restday after next, the annual Rededication Jubilee in State Square, a vast public amphitheater. It was the one day in the year when the Members of the Council made a public appearance and of course everyone went to pay his respects and add to the din of applause and cheers when the Members made their brief speeches. It was also the day awards were made in the form of medals and scrolls to citizens who had done most for the City-State during the preceding year. Mostly the recipients were officials of the government, but they never were the Council Members themselves, who year after year modestly refused their nomination by the awards committee.

This alone should have been enough to guarantee attendance, but there was always entertainment besides. The greatest names in the movies and triveo appeared, each with a special new act never before seen anywhere. The star of stars this year was to be Jerry Hilarious, that sensational new triveo comic.

There was no triveo of the Jubilee, however. It was thoroughly understood that it would be unpatriotic not to be one of the crowd personally taking part in the Oath of Rededication that climaxed the occasion. Therefore there would be no one at home to see a triveo cast of it. Films were made, though, for showing at a later date to those who had to work on the holiday and those in institutions.

Jubilee Day dawned hot and sunny. Oren and Ethel knew that their best chance would come when the ceremonies ended and the mobs of people swarmed in all directions for home. They and little Marty in his baby buggy would be part of that anonymous crowd and they would let that part of it which swarmed west take them with it—toward the setting sun, and Outside. Just exactly how they would escape notice when they reached the outskirts of the City-State, or how they would cross the boundary, they did not know. But if there was a way they would find it.

It was a long day. They'd taken nothing with them except some changes of clothing for the baby, and only as much money as they would normally be expected to carry with them, and Edith's music—the manuscript of the first three movements of her symphony. But though they were traveling light they had the weight of fear with them until they had worked themselves well into the center of the crowd in the great square. They found seats.

Under the broiling sun—the heat only slightly mitigated by the frigeration towers—the program began. The vast audience was restless despite the brevity of the official speeches but when each ended the applause was deafening. Oren and Edith applauded, too, looking cautiously around to see if any guards were watching. None was in sight anywhere near them.

Jerry Hilarious romped onto the stage and was welcomed with a roar of laughter. At first the Donns forced themselves to laugh at his

antics, not to seem out of place, and as they watched they realized that the short, wiry redhead was genuinely an artist and not just a buffoon.

He was giving a masterful performance and through his special material could be seen the man, warm-hearted, inventive, instantly responsive to the mood of the crowd. Oren and Edith relaxed and felt their tension ease off. They gained strength through the respite for the journey ahead. Only when Jerry Hilarious wound himself up and threw his familiar catch line at the crowd did Edith fail to laugh.

"Aw," boomed the words, "g'wan *outside!*"

"Amen," said Edith under her breath.

Finally, after repeated encores, Jerry Hilarious left the stage. Act after act followed and at last, in late afternoon, the program ended with the solemn Oath of Rededication. The Donns mouthed the promissory, meaningless words, stood up from the folding chairs for the recessional music and then joined a throng that was heading west.

The crush was so great that Oren took Marty up and carried him while Edith collapsed the baby buggy to briefcase size and carried it. They found a kiosk and, surrounded by humanity, made their way down to the westbound moving pavement. Clinging together so as not to lose each other, they were propelled along at a steady fifteen miles an hour.

The pavement and the throng took them under the Hudson River and into what had once been New Jersey but which now was just another part of Greater New York. The crowd had begun to thin as the pavement branched north and south but there were still many thousands of people heading west. Marty was asleep with his head on his father's shoulder and Oren's arms were beginning to ache. Edith had a pain in the back of the neck, as if someone were staring at her there and any moment would tap her on the shoulder and say "Go back."

Miles later the moving pavement ended, at the top of a rise. Nearby was a loading platform for buses. Neither of them knew where they were or in which direction to go next.

A dilapidated old gasoline bus that still carried the lettering *Pennsylvania Greyhound* was marked *Borderville* and they boarded that one.

They were exhausted when the bus reached its terminal. It had been crowded when it started off. The Donns had found seats but many others stood. At the end of the line, however, less than two dozen persons still were aboard.

Wearily the Donns got up. When they left the bus it drove off. Their fellow riders melted away into the dusk and the Donns walked at random down a street of ancient houses and old-fashioned stores with full plate-glass windows. They tried to look as if they had a destination.

Several blocks later they saw a sign in red neon tubing which once had spelled HOTEL. They would have to go in. They could do noth-

ing more tonight.

In the dimly lit lobby, an old man sat in a heavy armchair behind the counter, dozing. There was no one else.

Oren cleared his throat and the man opened his eyes.

"Hi, there," he said. "Customers, eh? Always get a customer or two on Jubilee Day. How was the show?"

"Great," said Oren without enthusiasm. "Could we have a double room, please, with an extra cot for the baby? I don't suppose you have a crib."

"Sure do," the old man said. "We ain't so antiquated as you might think, though we are a mite far off from the center of things. Like a room with a bath, or would down the hall do you? Five credits cheaper for down the hall."

"With bath, please," Oren smiled. He couldn't remember that he'd ever had to make the choice before.

"Right you are, sir. Sir," he repeated. "Sometimes forget to say that." He cackled. "You from Outside? Or maybe goin' there? I know you ain't from around here."

Edith looked at Oren with weary, frightened eyes and Marty whimpered sleepily as Oren shifted him to the other shoulder.

The old man cackled again. "That's all right," he said. "You don't have to say nothin'. Lots of Outsiders sneak across on Jubilee Day. And vicey versa. Nobody pays much mind. I certainly ain't goin' to make a fuss about it. All I care about's you pay me twenty credits in advance, seein' as you got no luggage."

Oren fished out his wallet and handed it to Edith, who counted out twenty credits to the old man, who put them in his pocket and took a key out of a cubbyhole.

"Second floor," he said. "Elevator got cranky couple years ago and it ain't worked since. Hope you don't mind the stairs."

The stairs creaked loudly as they climbed them. Their room was just off the stair well and there was a film of dust on the battered chest of drawers. When Edith took the spread off the big double bed, though, she found fresh linen underneath. Oren put the baby down with a grunt of relief.

"I'll bring the crib up in a little while," the old man said. "Anything else you'd like?" He was dubious when Oren asked about the possibility of having a meal sent up to the room but finally agreed to see what he could do. Maybe the place down the street, if they weren't too busy. He went out.

The food came sooner than they had dared hope. It was hot and good, although they had to eat off a rickety card table the old man brought up with the crib.

They ate the meal, fed the baby and put him to bed and then, while Edith ran herself a hot bath, Oren went down to the lobby to buy cigarets.

The stairs creaked under his feet but the sound was drowned out by a crash as the street door was thrown open and a crowd of people entered in a babble of loud talk. There were about a dozen of them. Two of them were women and all

of them seemed to be drunk. All were well dressed.

Oren froze on the landing, half in the shadow. He dared not go back up for fear of attracting attention to himself, so he stood and watched.

One man, apparently the leader of the noisy group, went to the counter and pounded on it.

"Innkeeper!" he commanded. He took off his hat and sailed it neatly onto the branch of a coat-tree across the room. The gesture revealed a flaming shock of red hair. There was no doubt of his identity.

Jerry Hilarious.

Oren drew himself farther back into the corner of the landing.

The old man came around a corner of the lobby.

"There you are," said Jerry Hilarious. "Throw open the bar for these good people, Innkeeper. They're beginning to run down."

"Ain't got no bar, strictly speakin'," the old man said.

"I have hung up my hat and I intend to stay," the red-haired man said. "You have tables in the lobby. These will do. Put liquor on them. Or would you rather"—he wound up and let fly his gesture of banishment at the old man—"g'wan *outside!*"

One of the other men in the group slapped a third on the back and howled:

"That Jerry Hilarious—he kills me!"

The old man spat calmly into a flaked enamel cuspidor. "Don't kill me," he said. "If you got money I guess I can rustle up some bar whisky from someplace. We get all kinds here. You come from the Jubilee, I take it?"

A florid-faced man in a checkered tunic pushed importantly forward and slapped some credits on the counter. "Take it!" he cried, laughing drunkenly. "We brought the Jubilee with us—hah, Jerry?"

"I have brought this roistering company," Jerry Hilarious said, "to see the outside of the Outside. But if you don't hurry they'll start to unroister, which is a disheartening sight. So hasten with the liquor, Innkeeper."

The comedian ended his little speech with a crazy dance that evoked more laughter. The old man brought bottles and glasses from under the counter and set them out on the tables. One of the women hiccupped in a moment of silence and leaned against her escort for support.

"Music!" cried Jerry Hilarious. "Turn on the triveo!"

"Trivia!" shouted the man in the checkered tunic. "Turn on the trivia!"

"Sir," said Jerry Hilarious, pirouetting and jabbing a finger into one of the checks, "you slander my profession. G'wan outside!"

"G'wan outside! G'wan outside!" the others echoed, laughing, and the company was roistering again.

"Ain't got no triveo," the old man said without apology. "Got an old video, though." He switched it on.

"I don't think this is a very good party," said the woman who had hiccupped. "I'm depressed."

"Can't expect all the conven-

iences, dear, when you get so far from civilization," her escort said. "Can you, Jerry?"

"Extemporaneous reply," Jerry Hilarious said. He sang:

You'd feel worse in a hearse—
You'd be drab on a slab.
That is the curse
Of being inside the Outside.

He went into one of his fantastic dances as music blasted out of the video.

Oren took advantage of the diversion to slip back upstairs and into their room.

Edith came out of the bathroom with a towel wrapped around her.

"What's all that noise, Oren?" she asked. "It worried me."

"It's Jerry Hilarious, of all people. He's got a crowd with him on the tail end of some private Jubilee."

"Jerry Hilarious!" she said. "Did they see you?"

"I don't think so."

"Why did they come all the way out here?" she asked.

"Educational tour, apparently. Slumming to see how it is in borderland so they can congratulate themselves on living where they do. We can't leave. About all we can do is try to get some sleep and see what happens in the morning. I don't think they'll make a night of it. A couple of them are pretty bored already."

But an hour later, as they were dozing off, they heard the stairs creak.

It wasn't the tired tread of the old man. Someone was taking the steps two at a time. They listened in alarm to the footsteps, then in dread as they stopped just outside their door. There was a knock, a brisk tattoo.

They dressed quickly. Oren opened the door.

Jerry Hilarious stood there.

Oren's heart sank. Edith came to his side.

"Oh," she said. She took Oren's hand.

"Hello," Jerry Hilarious said. He was smiling. "May I come in? I could only get away for a minute."

"So you found us," Oren said in despair. He opened the door wider, then closed it behind the comedian.

"And we were laughing at you—with you, really—just this afternoon," Edith said. "I know you have to work for them that way, but I didn't think you were their bloodhound, too."

"No, no," said Jerry Hilarious. "I've never hunted anything, except laughs. I'm sorry if I frightened you. I'm on your side, the way Mark Olafson was."

"You know Mark?" Oren asked.

"I knew him. He's dead. They beat him to death. They'd beat me to death, too, if they found out about me."

"Then you're an Outsider, too?" Oren asked. Relief swept through him.

Edith grasped the comedian's hand. "Mr. Hilarious," she said. "Oh, I could cry."

"Call me Jerry. That's my real name. The Hilarious is strictly for laughs."

"Poor Mark," Oren said. "It was

(Continued on page 116)

What are the chances of Man finding intelligent life on other planets? Here is the answer by a world ranking aerophysicist!

THIS Lonely Earth

BY DR. WALTHER RIEDEL

IN THE incredibly long, yet so pitifully brief span of those few million years since Man began fitfully to acquire the ability to observe, contemplate, and deduce, he has become more and more self-conscious of his lone position in the midst of all other creatures. The first domestication of wild animals may have arisen as an answer to his psychological desire to find at least semi-intelligent creatures among other branches of the animal kingdom, just as much as through his physical need for a plentiful food supply which was not dependent on the vagaries of the hunt and chase. From this same psychological root may stem our present interest in all the animated world; our eager striving to unravel the mystery of the homing sense of migrating birds, or that of the world of social insects which solved complicated political and sociological problems several hundred million years ago, as well as our simple love of the pooch in the parlor. Our evolution, from animal-like acceptance of our surroundings, to searching contemplation may have left entangled in our

personality the deeply rooted vision of the Garden of Eden as a reflex of that long gone dawn age when pre-Man vigorously lived out his short life in ignorance, and often in terror, but as yet uncursed with the concept of loneliness.

This perpetual loneliness of mankind, in the midst of teeming life, results in mythological contemplation, in religious endeavor, and in philosophical and scientific study. Modern science fiction often presupposes that extraterrestrial cultures and civilizations do exist in time coincident with ours, and that their locations in space will be within range of our future technology in travel and communications.

This concept implicitly embodies three conditions which must be fulfilled if human space expeditions are to have any chance ever to encounter Extraterrestrial intelligence. We believe that today we are able to judge these three questions with sufficient reliability to secure answers which are likely to be close to reality. Starting with those beyond our own control, we have to judge:

1. a. Chances for the existence of intelligent life in the Universe in our Galaxy, in our planetary system.
2. Odds on the timely coincidence of outside intelligent cultures within the limited span of existence of our own species, Homo Sapiens.

EDITOR'S NOTE

Dr. Walther Riedel is perhaps best known for his work on rockets during the second World War. Following a series of important posts during his earlier career, in 1940 he became attached to the Rocket Research and Development Station at Peenemuende, becoming a key figure in the advancement of German rocketry. At this station he was Scientific Co-ordinator between the Technical University and Peenemuende for two years, then Chief Designer for one year; from 1943-45 he was Director of Development and Design and vice-Director of Peenemuende Station, heading up some 4500 technical personnel. From 1944-45 he was Governmental Co-ordinator for all German rocket propulsion systems development and production.

Following the war, he came to America and for ten years was engaged in the advanced development of American rockets and guided missiles.

Dr. Riedel's article is a scholarly approach to the question of whether or not we will find intelligent life in outer space and gives us a startling concept of time, space and Man.

3. Possible future range of human space expeditions.

The elapsed span of some four million years since our ape-like oldest ancestors acquired the right to be called forerunners of modern man, can be divided into five periods of rapidly diminishing length:

1. Several millions of years spent in animal-like acceptance of nature.
2. One million years of mythological explanation for nature's demonstrations.
3. Several thousand years of religious world concept.
4. A few thousand years of philosophical approach.
5. A few hundred years of exact Science.

Rudiments of these five epochs are mixed within modern man to varying degrees, and this individual composition in each of us is a part of our "world picture". This alloy of so many diverging influences gives us the strength, usually, to withstand the daily impact of quarreling impressions—and gives us, now and again, the very common mental headache against which no remedial aspirin has been found, beyond a few infamous narcotics. Perhaps, out of this pot-pourri of thinking systems, arises also our gift of simultaneously considering the thought of Man as the "crown of creation" together with the reluctantly forgiven egotism implicit in such a notion.

Intelligent life in this universe and within "our" galaxy?

Strange as it may seem, this question is simply answered. We shall have to think, for the moment, in well established large, even gigantic figures. Because of their enormous size, we will here give them in powers of ten*.

*(that is, 10^{21} is the short way of writing 1 followed by 21 zeroes. Similarly, 10^{6} is the same as 1 followed by six zeroes, or one million. Readers interested in calculating the above figures in terms of millions, billions, and trillions, etc., may simply add the number of zeroes, indicated by the raised 'power' numeral immediately following each 10, to the numeral 1.)

Modern scientific thinking has evolved a draft of the dimensions and content of our Universe which may be described in the following terms: In a volume of space 6×10^{9} light years in diameter* are distributed 10^{55} grams of matter.

*(one light year is a figure close to 5,865,696,000,000 miles; i.e., the distance a beam of light travels in one year at the constant rate of approximately 186,000 miles per second.)

About half of this total weight of existing matter is embodied in the form of stars, or suns, the total existing number of which we may estimate to be approximately 10^{22}. These suns are organized in large, separate groups, which we call galaxies, and which may be estimated to be roughly 10^{10} in number.

Therefore, the average number of suns contained in an average galaxy is about 10^{12}. If we assume that, among each million suns, only one is gifted with one planet upon whose surface exist conditions suitable to the maintainance of life (as we can presently define it), then it follows that in this Universe there are 10^{22}-divided-by-10^{6}, or 10^{16} suns encircled by at least one planet which is capable of developing and supporting intelligent life. Just for impact, this last sentence means there are 10,000,000,000,000,000 such suns, with such planets capable of life, in existence throughout our Universe, right this moment.

This stupendous number of planets in the Universe which display Earth-like conditions demands we answer a clear "yes" to the question of whether intelligent life exists in the Universe, and "yes" again, even when we narrow our field of consideration down to the single, more or less average, galaxy in which our own sun is a very unimportant member among trillions of others. The above figures show that, in our own galaxy alone—just in our own Milky Way—there are 10^{12}-divided-by-10^{6}, or approximately one million suns which are likely to have planets which resemble Mother Earth with regard to conditions for life. Even if Nature should have only 1% success in developing intelligent life where conditions are favorable, we would still have to expect a minimum of a thousand planets gifted with intelligent life here in our own galaxy.

Conclusion: The existence of intelligent life within the Universe, and within our own Milky Way galaxy is beyond doubt.

Intelligent life in our planetary system?

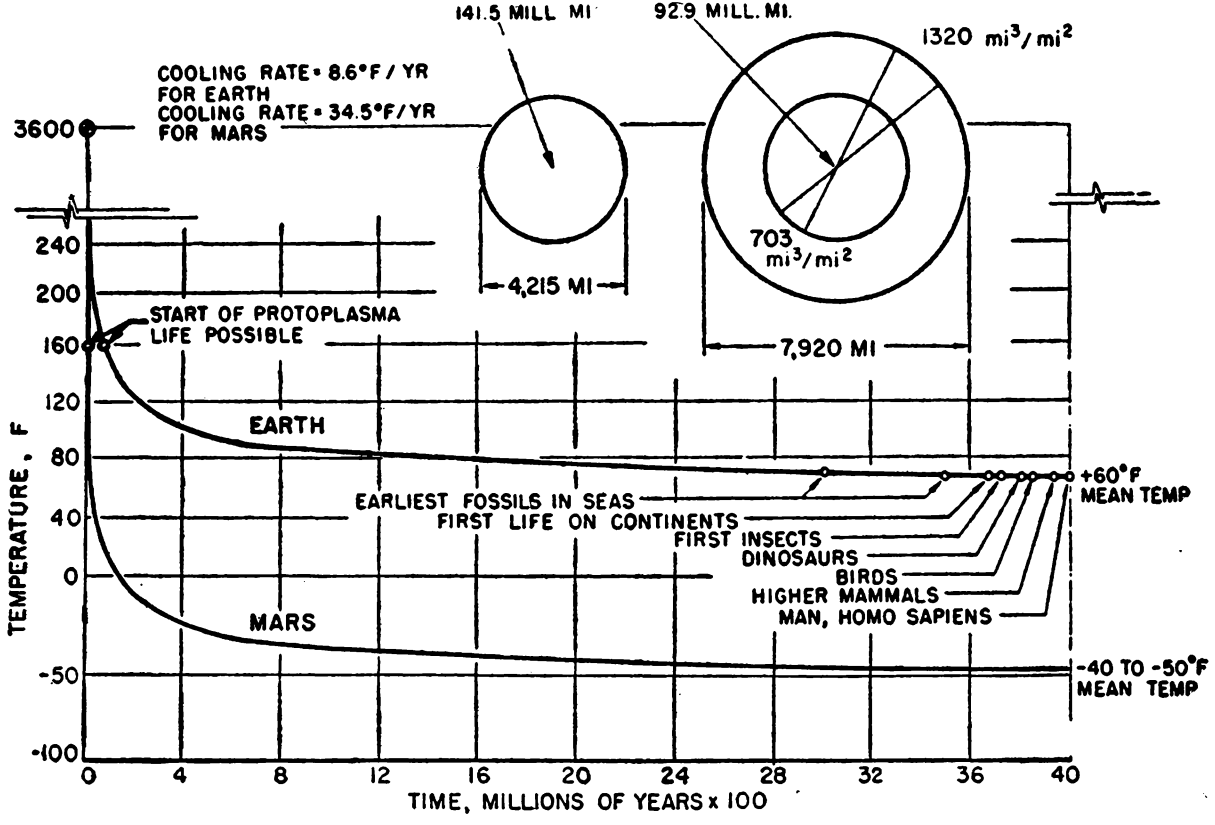
Within our Solar System, the climates of the four inner planets are fairly well known; i.e., Mercury, Venus, Earth, and Mars. Mars would appear to be the most feasible object for close study by human space expeditions, after they have reached our neighbor Moon. In comparing its climatological conditions with those of Earth, many experts may be found leaning over backwards to call them "unliveable". We should not underestimate the tenacity with which life can adjust itself to an enormous span of physical and chemical conditions. Man has populated the Earth from the Arctic Ice Cap to the sizzling heat of parched deserts and the soggy drip of brooding jungles, from sea level to the majestic peaks of the Andes. Lowering temperatures, rarification of the atmosphere, and depreciation of chemical resources can be mastered by capable civilizations to an amazing degree, as our still infinitesimal history already shows. The slow increase in the importance of problems seems to produce solutions to solve them. For instance, the decrease of easily available fuels, here on Earth, would eventually have resulted in the detection of nuclear energy sources, even if the Second World War had not brought about peaceful applica-

tions of atomic energy almost as a by-product. Therefore, such adjectives as "unliveable", when applied to a planet such as Mars, do not properly take into account the ability of life to adapt itself to changing conditions, particularly to those slow changes which are the result of the normal aging of a planet the size of Mars. Such aging, in the case of Mars, has been vastly more rapid than that of the larger Earth, as shown in the accompanying illustrations; but to our human senses, during the whole span of the existence of human life on Earth, it would have been almost imperceptible.

THE accompanying graphical illustration shows temperature plotted against the passage of time for both Earth and Mars. The dense canopy of primeval clouds, surrounding both hot planets, began to condense to heavy rainstorms after temperatures below 212°F. were reached—very early on Mars (after 1000 years) and only 3000 to 4000 years later on Earth. Early forms of primitive life may have evolved shortly after the water temperature passed below 160°F.—less than one million years after "zero time" on Mars, nearly a hundred million years later on Earth. At an age of ten to fifteen million years, the average temperature on Mars must have been close to that of the Earth when it reached an age of four billion years.

If we assume that organic life developed on Earth after the average surface temperature sank below the coagulation point of protoplasm, some one hundred million years after the birth of the Earth, the gigantic span of three thousand million years elapsed before there developed species whose residual remains were enduring enough to leave evidence of their existence scattered through the jumble of the upper strata of the Earth's crust in the form of fossils. Only a few million years after the emergence of the first insects, ants, termites and bees had already reached an astonishing perfection. In the Eocene, the early Tertiary period, termites had already evolved winged versions to undertake the task of spreading the species by means of the deadly honeymoon flight. In the Oligocene, the existence of sterile 'workers' has been established.

With regard to such ancient "archaic" inhabitants of Earth, Man, as such, is a very young newcomer. My graph shows Man at the right-hand end of the time axis, some four billion years since a droplet of molten matter started its trajectory around Mother Sun to eventually become the Earth upon which we live. If we could spread the graph in such a way that the time axis would be as long as our distance around the equator of the Earth, then a distance on it of ten kilometers (6.214 miles) would correspond to one million years. Therefore, only 40 kilometers, a tiny segment of this circumference, represent the time since a simian-like type of animal learned to walk erectly. In freeing its two front feet


141.5 MILL MI
92.9 MILL. MI.
1320 mi³/mi²
COOLING RATE = 8.6°F / YR
FOR EARTH
COOLING RATE = 34.5°F/YR
FOR MARS
3600
240
200
160
120
80
40
0
-50
-100
703 mi³/mi²
4,215 MI
7,920 MI
START OF PROTOPLASMA
LIFE POSSIBLE
EARTH
MARS
EARLIEST FOSSILS IN SEAS
FIRST LIFE ON CONTINENTS
FIRST INSECTS
DINOSAURS
BIRDS
HIGHER MAMMALS
MAN, HOMO SAPIENS
+60°F
MEAN TEMP
-40 TO -50°F
MEAN TEMP
TEMPERATURE, F
0
4
8
12
16
20
24
28
32
36
40
TIME, MILLIONS OF YEARS x 100

from the task of walking, it developed that most agile natural tool, the hand. The span of history from the far-off day of that most ancient primitive root from which the race of modern man has sprung, to the modern day in which we live, is thus seen to cover only a tiny 1/1000 of the total history of the planet Earth. And only within the last 200,000 years has a more advanced type started to spread over the planet's face . . . a type for which we have coined the name "Homo Sapiens". These 200,000 years correspond, on our expanded graph, to a distance of only 2 kilometers, out of roughly 40,000 for the total history of the planet. On the graph as it is printed, these 200,000 years would be represented by a dot less than 1/1000 of an inch in width, which is far too small to be visible to the naked eye. The diameter of the dot for "Man", as you see it, represents thirty million years, or one hundred and fifty times the actual life span of the human species on this Earth. Who dares to say that Homo Sapiens will still exist when the steadily creeping time will have covered the full diameter of this little dot on the right-hand corner of the graph?

YOU MAY consider these big numbers futile! Yet they establish that the time for intelligent life on our own, or other planets is extremely short; so short that any timely coincidence of intelligent life on two or more planets within our small planetary system is highly improbable.

By the same logic, it is possible that, at this very time, intelligent life does exist elsewhere in the Universe. To clarify this apparent contradiction, notice that the graph illustrates the results of calculations of the temperature of identical age, as that temperature is influenced by their size only. The two circles illustrate the relative sizes of Earth and Mars which, for rough consideration, have diameters in the ratio of 2/1. Therefore, by the familiar calculations, Earth possesses 4 times the surface area of Mars, and 8 times its volume. These proportions indicate about twice the volume of matter per unit of surface for Earth in comparison to Mars. More exact figures in the graph show that one square mile of Earth surface must radiate the heat stemming from 1320 cubic miles of earthen matter, while one square mile of Martian surface radiates the heat content of only 703 cubic miles of matter. Neglecting the influence of the different distances of both planets from the Sun, and assuming that heat-capacity, radiancy and nuclear processes are similar in both bodies, the resulting temperature-versus-time curves have been calculated. In the beginning, with both planets at a temperature of around 3600° Fahrenheit, the cooling rate of Earth must have been on the order of 8.6°F. per year, and that of Mars about four times as high, 34.5°F. per year. Since the possible date for the beginning of protoplasmic life on Earth down to our present day, nearly four billion years have passed, resulting in an average-temperature drop to

100°F. on Earth, and to 50°F. for Mars. Even if Martian life succeeded in speeding up its development under the pressure of decreasing temperature and dissipating atmosphere, it must be very much doubted that this rapid development lead to intelligent beings which have managed to survive the enormously long time gap between the age of their first appearance and ours.

The statement that Mars is an "old" planet becomes, in the light of these considerations, erroneous. Mars is a planet which is of the same geological age as the Earth, yet which possesses, due to the nature of its geometry, a higher cooling rate.

Mars seems to us to be fairly unfavorable to life because of its low mean temperature (–30 to –40°F.), low density of atmosphere (surface atmospheric pressure on Mars equals that of the Earth at an altitude of eleven miles), rarity of gaseous oxygen (0_2 content of Mars' atmosphere seems to be 1% to 1/10% that of Earth), and 60 m.p.h. sandstorms roaring across its eroded surface. But there is no necessity that a Martian-born intelligence should feel the same way about his home climate as we do now, from so far away, and as we still will when human expeditions first set foot on Martian soil. It is quite possible that intelligent beings have passed through millions of years of evolution on Mars since the establishment of life on that planet, but that they died out under the pressure of increasingly severe climatological conditions, and have been gone for uncounted ages.

The result of these conclusions is that the first expeditions which Man succeeds in throwing out to Mars will not, upon setting foot upon that barren planet, find traces of former civilization. Only after long and very detailed studies, and with equipment which will require several transits between Earth and Mars, might they possibly detect traces of former intelligent life, should such traces have survived accidentally or intentionally some two thousand million years of chemical and physical attack by the natural forces of their environment.

Not a single human product of today would be able to survive the ravages of such a tremendous length of time, in any form sufficient for some intelligent explorer of the far-off dim future to identify it as an artifact, or relic of our present civilization. The five thousand years since Cheops built his pyramid are not worth mentioning in this context. Even the twenty thousand years since the first crude Neolithic culture represent only 1/100,000 of that gigantic span by which Martian culture may have preceded us.

It would not be too surprising if, after centuries of careful studies on Mars, we may find that, if once there were Martians, they may have chosen to emigrate, rather than to die, to some other part of the Solar System and in doing so by-passed Earth because of *her* unfavorable climate for the Martian emigrant.

The decades to come will increase

and refine our knowledge about the climates of the planets in our Solar System. And, since the escape velocity of a space-bound rocket ship is only 25,000 m.p.h., or 5 times that of the two-stage Bumper fired several years ago (V_2 plus Wac Corporal), mankind will solve the problems of travel through space to the Moon, and then to Mars, within a short time. Yet the minimum energy route of 250 days for a one-way trip to Mars, or that to Venus, as she circles in her canopy of brilliant white clouds, or even that to the broiling Sunward face of Mercury, might be called still in the rubber band class, when compared to the task of spanning the tremendous distances between Earth and Jupiter and the other outer planets. Jupiter protects himself by this great distance from us (the one-way trip would require two years and nine months with the same techniques sufficient to cover the Earth-Mars run) and by his formidable gravity, which would necessitate an escape velocity of 130,000 m.p.h., or more than five times that necessary to leave Earth. An unmeasurable period of technological development will therefore be necessary—as well as the development of propulsion methods completely unforeseeable today—before mankind will find it possible to touch even the inmost of the outer planets, or one of their many satellites.

Light covers the distance from the Sun to Jupiter in four minutes and thirty seconds. Yet it must travel 4.2 years to reach our next-door-neighbor sun within the galaxy. Only if it were possible for Man to span distances of many thousands of light-years in his explorations would a decent statistical chance evolve for him to encounter extraterrestrial intelligent life. This fact must be taken at face value, in spite of the great number of suns, even in our own galaxy, with planets on which intelligent life will have existed and died, may be active now, or will evolve in future.

With these conclusions in mind, we can now answer our basic questions. We can predict that within the entire range of Mankind's future existence as a living species of this Earth, any chance for his physical contact with intelligent life *outside* this Solar planetary system is impossible, even though the chances for the existence of such remote-in-space, but congruent-in-time intelligent life are so high as to be beyond doubt. Whatever chances there are for Man to encounter intelligent life are limited to this planetary system which surrounds our own Sun; and, for an extremely long period, to the inner planets alone. Unfortunately, the chances for the existence of any intelligent life on the inner planets, within the time-span of Man, would appear to be on the order of nil.

But when did Man ever cast the die of his future according to logic. He will go and look. • • •

It was a war of survival. Children against old men.

And not a chance in the world to bridge——

THE chasm

BY BRYCE WALTON

THE OLD man's face was turning gray with fatigue under the wrinkled brown. He was beginning to get that deadly catching pain in his left chest. But he forced himself to move again, his ragged dusty uniform of the old Home Guard blending into the rubble the way a lizard merges with sand.

He hobbled behind a pile of masonry and peered through the crack. He angled his bald head, listening. His hands never really stopped quivering these days and the automatic rifle barrel made a fluttering crackle on the concrete. He lowered the barrel, then wiped his face with a bandanna.

He'd thought he heard a creeping rustle over there. But he didn't see any sign of the Children.

He'd been picked to reconnoiter because his eyes were only comparatively good. The truth was he couldn't see too well, especially when the sun reflecting on the flat naked angles of the ruined town made his eyes smart and water and now his head was beginning to throb.

A dust devil danced away whirling a funnel of dust. Sal Lemmon looked at it, and then he slid from behind the rubble and moved along

down the shattered block, keeping to the wall of jagged holes and broken walls that had once been the Main Street of a town.

He remembered with a wry expression on his face that he had passed his ninety-fourth birthday eight days back. He had never thought he could be concerned with whether he lived to see his ninety-fifth, because there had always been the feeling that by the time he was ninety-four he would have made his peace with himself and with whatever was outside.

He moved warily, like a dusty rabbit, in and out of the ruins, shrinking through the sun's dead noon glare.

He stopped, and crouched in the shade behind a pile of slag that had once been the iron statue of some important historical figure. He contacted Captain Murphy on the walkie-talkie.

"Don't see any signs of Children."

"Max said he saw some around there," Murphy yelled.

"Max's getting too old. Guess he's seeing things."

"He saw them right around there somewhere."

"Haven't seen him either."

"We haven't heard another word from Max here, Sal."

The old man shrugged. "How could the Children have gotten through our post defenses?" He looked away down the white glare of the street.

"You're supposed to be finding out," Murphy yelled. He had a good voice for a man two months short of being a hundred. He liked to show it off.

Then Sal thought he saw an odd fluttery movement down the block.

"I'll report in a few minutes," he said, and then he edged along next to the angled wall. A disturbed stream of plaster whispered down and ran off his shoulder.

Near the corner, he stopped. "Max," he said. He whispered it several times. "Max . . . that you, Max?"

He moved nearer to the blob on the concrete. Heat waves radiated up around it and it seemed to quiver and dance. He dropped the walkie-talkie. There wasn't even enough left of Max to take back in or put under the ground.

He heard the metallic clank and the manhole cover moved and then he saw them coming up over the edge. He ran and behind him he could hear their screams and cries and their feet striking hard over the blisters, cracks, and dried out holes in the dead town's skin.

He dodged into rubble and fell and got up and kept on running. The pain was like something squeezing in his belly, and he kept on running because he wanted to live and because he had to tell the others that the Children were indeed inside the post defenses.

He knew now how they had come in. Through the sewers, under the defenses. He began to feel and hear them crawling, digging, moving all over beneath the ruins, waiting to come out in a filthy screaming stream.

Sal was still resting in the corner of the old warehouse by the river.

A lantern hung on a beam and the dank floor was covered with deep moving shadows.

Captain Murphy was pacing in a circle, looking like something sewn quickly together by a nervous seamstress. Doctor Cartley sat on a canvas chair, elbows on knees, chin in his hands. He kept looking at the floor. He was in his early eighties and sometimes seemed like a young man to Sal. His ideas maybe. He thought differently about the Children and where things were going.

"We're going to get out tonight," Captain Murphy said again. "We'll get that barge loaded and we'll get out."

Sal sat up. The pills had made his heart settle down a bit, and his hands were comparatively calm.

"Is the barge almost loaded now? It better be," Sal said. "They'll attack any minute now. I know that much."

"Another hour's all we need. If they attack before then we can hold them off long enough to get that barge into the river. Once we get into the river with it, we'll be safe. We can float her down and into the sea. Somewhere along the coast we'll land and wherever it is will be fine for us. We'll have licked the Children. They know we've found the only eatable food stores in God knows how many thousands of miles in this goddamned wasteland. They can't live another month without this stuff, and we're taking it all down the river. That's right isn't it, Doc?"

Cartley looked up. "But as I said before, squeezing a little more life out of ourselves doesn't mean anything to me. What do we want to get away and live a little longer for? It doesn't make sense, except in a ridiculous selfish way. So we live another month, maybe six months, or a year longer? What for?"

Sal glanced at Murphy who finally sat down.

"We want to live," Murphy said thickly, and he gripped his hands together. "Survival. It's a natural law."

"What about the survival of the species?" Cartley asked. "By running out and taking the food, we're killing ourselves anyway. So I don't think I'll be with you, Murphy."

"What are you going to do? Stay here? They'll torture you to death. They'll do to you what they did to Donaldson, and all the others they've caught. You want to stay for that kind of treatment?"

"We ought to try. Running off, taking all this food, that means they're sure to die inside a few weeks. They might catch a few rats or birds, but there aren't even enough of those around to sustain life beyond a few days. So we kill the future just so we can go on living for a little longer. We've got no reason to live when we know the race will die. My wife refused to fight them. They killed her, that's true, but I still think she was right. We've got to make one more attempt to establish some kind of truce with the Children. If we had that, then we might be able to start building up some kind of relationship. The only way they can survive, even if they had food, is to absorb our knowledge. You know

that. Without our knowledge and experience, they'll die anyway, even if they had a thousand years of food supplies."

"It can't be done," Murphy said.

Cartley looked at the shadows for a long time. Finally he shook his head. "I don't have any idea how to do it. But we should try. We can't use discipline and power because we're too weak. And too outnumbered. We'd have to do that first in order to teach them, and we can't. So there has to be some other way."

"Faith?" Sal said. He shook his head. "They don't believe in anything. You can't make any appeal to them through faith, or ethics, any kind of code of honor, nothing like that. They're worse than animals."

Cartley stood up wearily and started to walk away. "They hate us," he said. "That's the one thing we're sure of. We're the means and they're the ends. We made them what they are. They're brutalized and motivated almost completely by hatred. And what's underneath hatred?" He turned back toward Murphy. "Fear."

Sal stood up. "I never thought of them as being afraid," he said.

"That doesn't matter," Murphy said. "It's the hate and vicious brutality we have to deal with. You do whatever you want to do, Cartley. We've voted, and we've voted to move the stuff out tonight on the barge. The world we helped make is dead, Cartley. The Children grew up in a world we killed. We've all got bad consciences, but we can't do anything about it. The chasm between them and us is too wide. It was wide even before the bombs fell. And the bombs made it a hell of a lot wider. Too wide to put any kind of bridge across now."

"Just the same, we ought to die trying," Cartley said. When he went outside, Sal followed him.

The barge was about loaded. All outer defense units had been pulled in and were concentrated on the head of the pier behind walls of sandbags. Burp guns and machine guns were ready, and the barge lay along the side of the pier in the moonlight like a dead whale. There were several sewer openings near the head of the pier. Men were stationed around these sewers with automatic rifles, hand grenades and flame throwers.

Sal walked to where Cartley stood leaning against the partly closed door of the rotting warehouse. Jagged splinters of steel and wood angled out against the sky.

After a while, Sal said softly, "Well, what could we try to do, Doc?"

Cartley turned quickly. Some of the anguish in his eyes had gone away, and he gripped Sal's shoulders in hands surprisingly strong for so old a man. "You want to help me try?"

"Guess I do. Like you said, we only have a little time left anyway. And if we can't help the Children, what's the good of it?"

They stood there in the shadows a while, not saying anything.

"This way," Cartley said. He led Sal down away from the pier and along the water's edge. Dry reed rustled, and mud squished under their shoes.

"Here," Cartley said. There was a small flat-bottomed rowboat, and in it were several cartons of food supplies, all in cans. There were also several large tins of water.

"We'll need a little time," Cartley said. "We'll have to wait. I figure we'll row upstream maybe a few hundred yards, and hole up in one of those caves. We can watch, Sal. We can watch and wait and try to figure it out."

"Sure," Sal said. "That seems the only way to start."

Cartley sat down on the bank near the boat, and Sal sat down too.

"The Children," Cartley said, "never had a chance to be any other way. But we're the oldsters, and we've got this obligation, Sal. Man's a cultural animal. He isn't born with any inherent concepts of right, or wrong, or good or bad, or even an ability to survive on an animal level. We have to be taught to survive by the elders, Sal. And we're the elders." He hesitated, "We're the only ones left."

A flare of horrid light exploded over the warehouse down river and it lit up Cartley's face and turned it a shimmering crimson. His hands widened to perfect roundness and he raised his hands in a voiceless scream to stop the sudden explosions of burp guns, grenades, machine guns, and rifles.

Looking down river then, Sal could see the flames eating up through the warehouse. The pier, the barge, everything for a hundred square yards was lit up as bright as day, and the flare spread out over the river and made a black ominous shadow of the opposite bank.

"They're getting away," Cartley said.

Sal watched the barge move out. The Children came screaming out of the blazing warehouse, overran the pier, streamed into the water. But a steady blast of fire from the barge drove them back, and in a few more minutes the barge dissolved downriver into darkness.

Cartley's hands were shaking as he gripped Sal's arm. "Let's go now. We need time. Time may help us a lot, Sal. We can wait and watch. We can figure something out."

Sal heard the screams and mocking savage cries coming up over the water, and then the jagged cries of some oldsters who hadn't managed to get away.

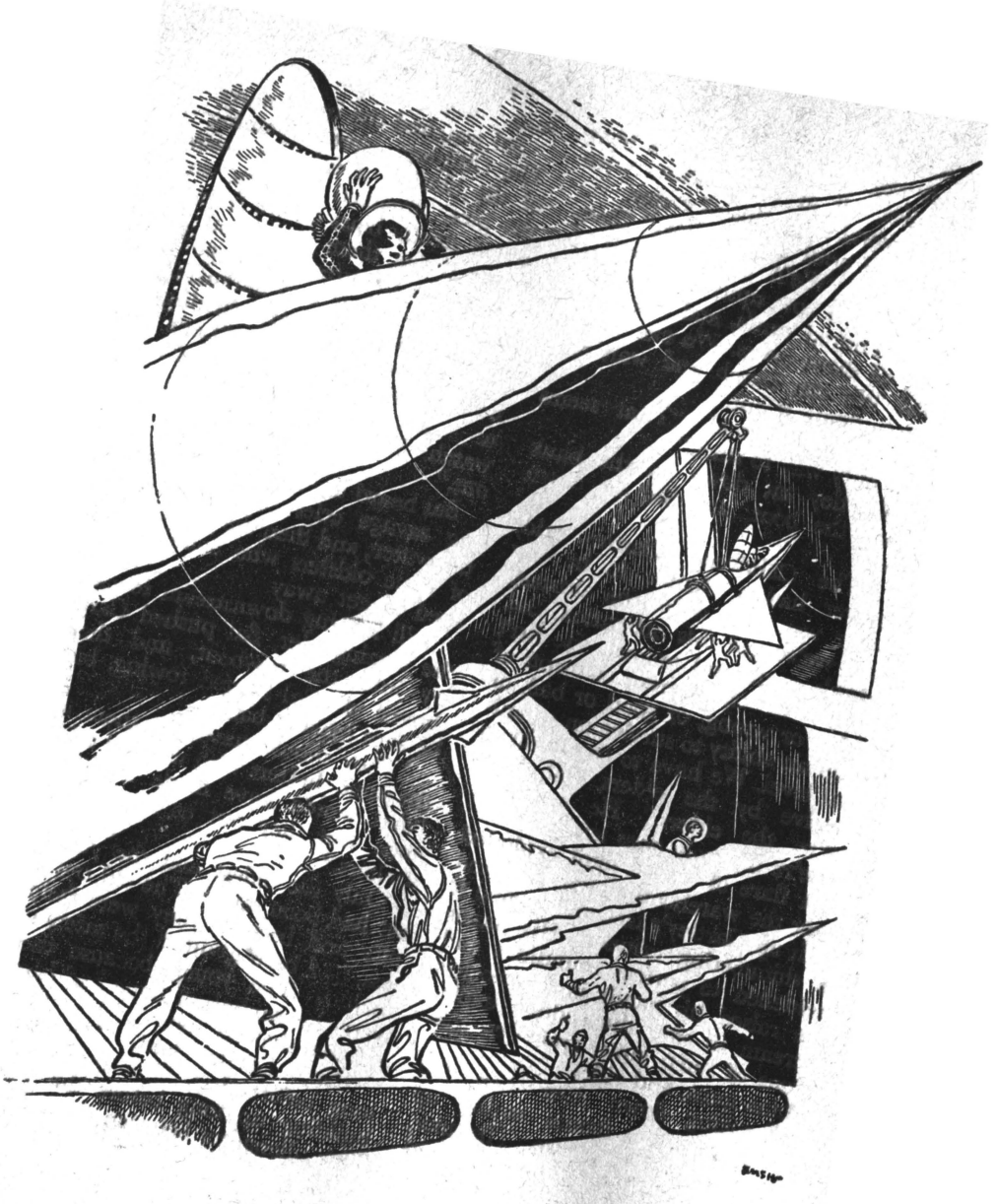
Still looking downstream toward the blazing pier, Sal pushed Cartley into the rowboat, and they shoved off. Sal started rowing, but he kept looking back.

"They should have put them in the same shelters with us," Sal said, "that would have made a difference. But they put us in separate shelters."

Only the oldest and the youngest had been saved. The old out of pity and because they were helpless, had been granted the safety of shelters. The young because they were the symbols of hope had been granted shelters, too.

"No," Cartley said. "It started long before that. The chasm was building up long before the war. This alienation between the young and the old. Between the sun and

(Continued on page 101)



Illustrated by Ed Emsh

Hurtling through space to meet the enemy in equipment too delicate to step on, without enough fuel to get back, and knowing you're completely expendable is just——

ROUTINE *for a* HORNET

ALARM BELLS filled the wardroom, screaming off the metal walls and filling the room with their flat, metallic clang. Cressey leaped up, spilling the table with its checkerboard to the floor.

Running to the suitlocker, he wondered if the bells had to be loud enough to jar a man's mind. The other on-duty men in the wardroom were running with him, and the corridor outside reverberated to the sound of pounding feet on metal. As his hand automatically manipulated the zippers on his G-suit, he noticed that his heart was beating furiously. At this point, Cressey had never been able to tell whether he was frightened or not. As far as he could know from what

BY DON BERRY

his belly told him, there was no physical difference between plain old chicken fear and the body's normal preparation for action.

The men pounded 'up' the metal stairs to the Hornet's Nest on the satellite's rim. The Hornet's Nest. Cressey thought suddenly how irrational it was. When a nickname stuck, it carried its aura to everything around it. He didn't know what live-wire journalist had first used the name Hornets for the Primary Interceptor Command, but now, inevitably, the launching racks were Hornet's Nests and the sleek missiles Stingers.

He suddenly felt slightly nauseated. He hated this light-headed, slightly sick feeling, listening to the roaring of blood in his head and the thundering of his heart. The medics had told him these physical symptoms were just nature's way of preparing the body for sudden activity. Cressey didn't know. It felt like fear to him, and he was afraid now.

His ship this run was PIC-503, and when he reached it the Stingers were just coming up the loading elevators. Long, slim, twenty-foot pencils of death, glistening in the harsh glare of the overheads. They had their own sort of lethal beauty, those Stingers, and a power about them, as if they were quiescently submitting to these puny men for now, for their own mechanical reasons.

Each Hornet carried two Stingers, slung beneath the stubby delta-wings. The Stingers were twice the length of the Hornet itself, projecting fore and aft of the ship for five feet in either direction. The Hornet looked ungainly, riding atop those slim needles, like some grotesque parasite hitching a ride on two silver arrows.

They're—quite small. Who had said that? Mackley. Captain Mackley, the glib Information Officer who'd told Cressey everything he was allowed to know about Hornets before he saw one.

I'll be frank with you, Mr. Cressey. Strategic Command has Hornets listed not as aircraft, but as portable launching racks. Their job is to take Stingers to the Outspace ships. There's a man in them because we can't build a computer as efficient as man at such light weight. And we couldn't afford to if we had the necessary knowledge.

Cressey remembered his shock at being told he was a light-weight computer, and some of the bitterness. He watched the loading crew lock the Stingers into position beneath the Hornet's wings and throw the hooked boarding ladder over the edge of the cockpit. Cressey mounted past the red-painted NO STEP signs on the wings and settled himself in the cramped cockpit. As the crew carried the ladder away, he flipped the switch by his left hand and listened to the hum as the canopy rolled forward and locked into place with a metallic clack. NO STEP, he thought wearily. His own god-damned life, entrusted to a piece of equipment too delicate to step on.

He swung the fish-bowl over his head and locked it into place. He coupled the hose leading from his

right hip to a similar hose which disappeared into the floor of the cockpit, and partially inflated his suit. No detectable leaks. If his check crew had done their job, he was ready.

Opening the communications channel, he listened to the other 'hot' Hornets checking off.

"427."

"Ready out."

"493."

"Ready out."

"495."

"Ready sir. Out."

"501."

"My fuel gauge doesn't register, sir."

"Scratch 501. 503."

"Ready out," replied Cressey. He wondered what was wrong with 501. No fuel? Or gauge just out of whack somehow? The way the Hornets were built, you could never be sure of anything. They were made for one trip, no more. No matter how the intercept worked out, they never went home again. There was not much money wasted in their construction. Mackley had easily justified that, too.

Cressey, you must understand one thing. We are desperate. The Outspacers caught us totally unprepared, and some of the measures we must resort to are not what we would normally desire.

When the Outspacers came into the system, six years ago, we had only two manned satellites in operation. Within two years this was increased to six, and it was still inadequate. For this reason, another ring of stations was set up, this time one-man Detector Posts. There are twelve of them, two reporting to each Satellite Base. Their orbit is roughly half-way between the orbits of Earth and Mars. Two concentric circles about the Earth, do you see? When an Outspacer crosses D-line, a signal is flashed to the nearest Satellite Base and the Hornets launched.

The point I'm trying to make, Cressey, is this: it took nearly forty years to set up the first manned satellite, and that after all the means were in our hands. Then, in just over two years, we put up four more satellites and twelve D-Posts. We were not geared for that effort.

Translated into personal terms, Mackley had meant that the planet could not afford to enclose Cressey in an adequate ship. Too much would be lost if the Outspacer weapons caught it.

The loading crew had retreated into the sealed cubicle from which they would watch the launching. The huge, curved walls of the hull began to roll back, and even in the cockpit, Cressey could hear the air roar out into space with a brief explosion of sound. The air hissed out of his cockpit, and his suit inflated full. Still no leak.

He felt a momentary panic as the launching rack swung him out, pointed away from the Satellite directly into the emptiness of space. Now he could not see the reassuring bulk of the mother ship. He was alone, with only the incredible myriads of stars before him, and the two needle points of the Stingers projecting full into their mass. The tens of thousands of bright specks that seemed so close

gave no comfort. His eyes told him space was full, crammed to bursting with stars, and his mind told him it was as empty as death.

Pointed out into loneliness, riding the two graceful arrows, Cressey heard the Communicator rasp, "Gentlemen, you are on an intercept to an Outspace ship. The safety of your world rides with you. Do your job well." The hypocritical son-of-a-bitch, thought Cressey angrily, sitting in his snug control room telling *us* to do our job! Well, maybe it made an impression on the first-timers, he couldn't remember. This was his third, and he could no longer remember any farther back than when he climbed into the cockpit. It was better not to remember his other missions, much better.

The roar seemed to come a split second before the pressure, and then Cressey was slammed into his acceleration cradle by the sudden impact. His body suddenly weighed over a thousand pounds, and his blood sloshed wearily in his veins as a straining heart refused to pump such a load.

"Captain Mackley," said Cressey, "I've heard it said that Earth is the aggressor in this war."

"Have you ever seen the London Crater?" asked the Information Officer.

"Pictures, yes, but what I want to know is, who attacked first?"

"It doesn't really matter, does it Cressey? There is a war, and we've got to fight it, no matter how it started."

"Yes sir," said Cressey, "but I wanted to know."

"All right, I'll tell you then. The Outspacers contacted this system roughly six years ago. The first eighteen months they spent on the outer planets. During the second year they came in as far as Mars, and established a base there. Six months later, one of their ships left on an obvious course toward Earth. It was destroyed by a missile launched from Satellite II." Mackley shrugged. "You know the rest. They retaliated. Satellite II was vaporized."

"But Earth fired first?"

"I told you, it doesn't make any difference now. One Outspacer later got through the defense rings, and now there's nothing from London to Cambridge but glass. Whatever the hell they use for weapons, they're effective."

"So we don't know whether or not they were originally hostile."

"No, we don't. It had to be assumed they were. We were not in a position to make allowances. You must realize, Cressey, we were dealing with something totally unprecedented, a completely unknown force. Common sense is enough to tell you the Outspacer had to be considered inimical to us, until proven otherwise."

"They weren't given much of a chance to prove it."

"That may be. The point is irrelevant at the moment. We are committed to a line of action, and we must follow it through. On their part, the Outspacers are doing the same."

Cressey was silent for a moment, and Mackley continued in a softer

voice. "Look here, son. I don't have to tell you all this. I could just as easily shoot you full of starry-eyed patriotism and send you out to save the world from the Bug-Eyed Monsters, but the military isn't doing things that way any more. There is a possibility that we've made a mistake, I'll admit that, but we're stuck with the consequences of the original action. We're defending our planet with everything we've got. The Hornets are the only weapon that has proven even remotely effective."

"I'll have to think it over, Captain."

"Of course," said Mackley. "It's not an easy decision to make. Come back again, any time you like, and we'll talk it over some more."

And Cressey had gone back.

ACCLERATION PRESSURE abated, and Cressey's face resumed its normal shape. The red haze in front of his eyes cleared, and he could see out through his canopy again. The thick blanket of stars remained motionless, though he knew he was moving with tremendous speed toward the Outspace ship.

In front of him behind the instrument panel, he could hear the insect-like buzzing as his course computer was fed information from his Base Satellite. With both the outer D-Post and the Satellite tracking the enemy, fairly precise positioning was possible. Unfortunately, because of the enormous distances involved, not precise enough to pinpoint the Stingers themselves. You had to be closer to do that, and the way to get closer was in a Hornet.

For a few minutes now, Cressey had only to watch his own scope for the first pip, and consider his insane position. It was his third mission. Of nearly a thousand Hornetmen, forty-three had more than one mission. If he got out of this one, he had two more before compulsory retirement. He was not sure he could go two more missions, even if he survived physically.

Five missions, then retirement. It had looked good to him, a year ago. When he left college for Primary Interceptors, it had seemed the very best kind of an idea. Five missions as a Hornetman, then home. Home as a hero, as a king. At twenty-one he would never have to worry about anything again. The pension Mackley had mentioned was so high as to be inconceivable. And that was just from the government. Being a hero had other, less official compensations. A shack in Beverly Hills, worth a hundred thousand or so? Hell, they'd force it on him, just for being a hero. A woman? What woman could resist a five-mission Hornetman? Every daydream he'd ever had, and a hundred he'd not thought of, free for nothing. Or free for running five intercepts.

It had looked good to him until his first mission. Then it had suddenly lost its charm. He had learned why, so far, there were no five-mission Hornetmen.

Abruptly he heard the "ping" telling him his radar was tracking. The Satellite had guided him true

enough. He was within the limited range of his own radar.

"Radar contact made," he said into the lip mike. "503 going on manual control. Out." He clicked the Com switch and settled down to fixing on his target.

From the size of the blip on the screen, he could see the Outspace ship was huge, as all of them were. Funny, there had not even been enough contact to know how many different sorts of ship the Alien had. They were not battleships, nor cruisers, nor anything else specific. They were simply Outspace, and he had to seek them out and destroy them.

A single ship, as usual. He wondered why they had never sent more than one ship at a time. Perhaps their thinking was so completely foreign it had never occurred to them. No one knew anything about how they thought, except that they retaliated when attacked.

Cressey wondered how the conflict looked through Outspacer eyes. Perhaps they were completely bewildered by attack. Perhaps those god-awful disruptor beams were meant for some other, more peaceful purpose, and were being pressed into use as an emergency weapon by frightened beings. It was even possible the aliens did not know they were under attack by sentient creatures, and wrote off the loss of their ships to natural calamity of some unknown nature.

There were a thousand maybes. It useless to speculate in the total absence of data. You couldn't be sure of anything, so you couldn't take any chances. You had to act as though they were hostile just to be on the safe side. The malignant neurosis of humanity, making it behave as though all things unknown were dangerous. Or perhaps just realistic thinking. You couldn't know, unless you knew all about the universe. Perhaps the idea of conscious animosity was incomprehensible to the Outspacers, but there was no way to tell. He reached between his legs to the cockpit floor and threw the switches there, arming the Stinger warheads.

On his first mission he had actually gotten within visual range of the Outspace ship, launching the Stingers at not more than three miles range. The ship had been bulky, almost grotesque by his own standards, covered with lumps and bulges of indeterminate purpose. There had been no lights visible, no ports. Perhaps the Aliens did not see in our spectrum, or perhaps they had radiation screens across the ports, there was no way to tell.

Cressey smiled ruefully. This miserable war was turning him into a philosopher.

On his second mission he had not seen his target. He had launched at six miles, out of fear, trusting to the followers in the Stingers' noses to track. He did not know what the result had been either time. He had turned and run for home at full acceleration, and he fully intended to do the same on this mission. There was such a thing as pushing your luck too far, and he needed all he had.

The pip on his screen drifted to the left, and he gave a short burst

to center it. He begrudged having to use his infinitesimal fuel on tracking when he needed it so desperately to go home. He looked through the canopy, but saw nothing, and returned his eyes to the screen. The telltale pip had drifted slightly to the right. He had overcorrected. Cursing, he fired another burst, shorter this time, with the left bank, and watched the pip center. That was good enough.

His ranging said only twelve miles, his speed two mps, relative to target. One second, two seconds, three—there it was, occulting a tiny area of star patched sky.

Out of the corner of his eye he saw a bright flare as some other Hornet disappeared in the wave of energy released by its molecular disruption. Then another, in another quadrant. The Alien was fighting back. He jabbed violently at the Stinger release, and saw the two pencils roar fiercely out ahead of him on their own power. He cut his flimsy launching rack into as tight a turn as it would take. The familiar red haze clouded his vision, and just before blacking out he fired another last long burst on the rockets to head him toward home.

"You understand," said Mackley, "that the amount of fuel we can pack into a Hornet is severely limited by the size of the craft. There is not enough to perform the complicated braking maneuvers necessary to return to the Satellite.

"Therefore, the Hornets make no attempt to return to the Satellite from which they were launched. Instead, they return directly to Earth. This may sound contradictory, but remember that the planet has a heavy envelope of air, which the Satellite Bases, of course, have not. We use that air to brake the ships, through friction."

"But Captain, wouldn't the Hornet burn as soon as it touched atmosphere?"

"Ordinarily, if it plunged directly in, yes. But there are techniques for slowing your flight through friction without heating excessively. Basically, the operation is the same as skipping a flat stone on a lake. The Hornet actually only skims the atmosphere, entering at a very shallow angle. The entire delta-wing of the ship is a control surface. That much area, even at such extreme heights, gives a certain amount of control, and the pilot can pull up out of the atmosphere again before heating has become too extreme. He has also been considerably slowed by the same friction which causes the heating. Do you follow me?"

"Yes, I suppose so, but it seems pretty tricky."

"It is tricky, Cressey, and you never want to forget it. It takes a very considerable amount of piloting skill, but it can be done."

"Captain, how many Hornets do you lose trying to get in like that?"

Mackley hesitated momentarily. "Our losses are right around thirty-seven percent. That's due to enemy fire. It's high, but under the circumstances, it isn't extreme. We're fighting at a disadvantage, and combat is not a gentle affair. Men's lives are lost. That's been true ever since two cave men took after each

other with stone axes. It was true with bows and arrows and muzzle loaders. It was true with tanks and machine guns, and it is true now.

"It is expected in a combat situation that men will die. One of the aims of military strategy has always been to keep as many of your own men alive as possible. This has not changed either. But combat is, after all, combat; and there are some unavoidable risks."

"What's the total loss, Captain? I mean from enemy action and from the hazards of this skip approach you were talking about?"

The Information Officer stared at Cressey for what seemed like a long time before he answered. "Our total losses, Mr. Cressey, are roughly ninety-three percent."

WHEN CRESSEY regained consciousness, the Earth was a great globe, filling his entire field of vision. He could not estimate his distance, though he thought he was within the Satellite ring. His speed would plunge him into atmosphere shortly, too shortly.

Within seconds he began to feel the warmth as he entered the region where a few air molecules began to brush over the surfaces of his ship. He rotated the delta-wings full, but there was no response. He was not yet deep enough into the sea of air for the control surfaces to react. He watched the tips of the wings, so ridiculously close to him, though he knew he would not be able to see anything. Soon he began to feel a gentle bucking motion as the wings met resistance. He flattened them out, horizontal, and began to draw them up again slowly, so they would move the tiny ship upward instead of simply tearing off at the roots.

The heat was already uncomfortable, and he was slowing. Now he was pressed forward against the seat belt as deceleration increased. The control surfaces bit into the thin air more solidly now, and Cressey thought the nose had come up a bit, but it was so slight he couldn't be sure. The bucking motion was more pronounced, but there was nothing he could do about that.

Slowly, slowly. The wings had to tilt so very slowly, or they would be ripped from the pod-like hull, leaving it to plummet into thick air and glow briefly like a cigarette in the dark before it plunged down to earth. His face was wet behind the fishbowl, but he could not reach it to wipe the sweat away. Nor could he have taken his hands away from the controls in any case.

The nose had come up, he was certain of that now. He was definitely rising, but the heat was becoming unbearable. Imperceptibly, a thin shrieking had arisen in the cabin, almost out of sonic range, just enough to make a man's nerves feel as if they had been dragged across a rough file. The heat transmitted through the body of the pod and into the bucket was beginning to burn his legs. He was being held out of the seat itself by the force of his deceleration, but the backs of his calves still touched metal. He thought he could smell the fabric of his suit burning, but realized it

was probably his overwrought imagination.

His cheeks felt too large, puffed out, as though strong, implacable hands were pulling all his loose flesh forward. His eyes strained forward, threatening to come out of their sockets. The red haze began, and he had a sudden frightening thought that he might lose consciousness before the Hornet had well begun its rise out of atmosphere. The red darkened into black.

He regained consciousness. The first skip had been made. The ship began to settle back into atmosphere again, and now its speed was lower. With each pass the heat would become more intense, as the plane would not have a chance to cool completely before it began to heat again. He had to maintain a delicate balance between going deep enough to slow him, but not so deep he couldn't bring the ship up before it burned, cherry-red. His body was drenched as by a shower, and the inner lining of his suit felt soggy from sweat.

The second skip was worse than the first, and he lost consciousness almost too soon. The third was worse than the second. After the fourth, he could not lift high enough to clear atmosphere. He had gone too deep, and was now bound by the great mass of Earth below.

He was still at a shallow angle, relative to the ground. He estimated he would make at least one complete orbit, perhaps two, before his spiralling trajectory brought him to the contact point on the surface. If he were still conscious, he would leave the aircraft at 30,000 feet, and hope. He knew his speed was still too high, well over Mach 2, higher than it had been on either of his other approaches. The ship was threatening to tear apart under the furious pounding it was taking from air and shock waves.

Hobson's choice. Bail out high, and suffocate because the automatic chute release would not allow him to make a delayed opening. Bail out low, and the thick air would pound his body to a pulp, and below the steel webbed chute would hang nothing but a suit, full of a still, red messiness.

The timing had to be precision itself, but it had to be done by guesswork. There was no training that could prepare a man for this. It was all new. He uncoupled the air hose leading to his suit, and placed his hand on the ejector lever. He knew he was too high, but the wings showed quivering signs of buckling under the strain.

He pulled the lever, releasing the canopy and arming the seat cartridge. The canopy disappeared miraculously from over his head. He was deafened by the thunderous roar of air that entered the cramped cockpit, like an explosion peak that remained constant, not diminishing. Instinctively, he ducked his head, recoiling at the sound. He did not remember triggering the seat ejector.

Cressey fell. The seat dropped away from him, the incredibly strong parachute opened, all automatically. He fell forty-five thousand feet into the Pacific Ocean,

(Continued on page 120)

You don't like Darwin's theory of Evolution? Maybe you're right. Maybe Man's ancestors weren't *monkeys after all . . .*

FAMILY TREE

Illustrated by Paul Orban

HOW DO you get rid of a superman?

The method Masefield Truggles used was the tried-and-true Masefield Truggles method. Of course, he didn't know at the beginning that Blan Forsythe was a superman. But Forsythe had lived in Marston Hill most of his life—born there, in fact—while Truggles had been there only two years. So Truggles gave the case the full treatment with flourishes, including a careful reconnaissance to determine vulnerable spots in Forsythe's reputation.

Truggles determined that reform or removal of Forsythe would be his contribution to the moral welfare of Marston Hill as soon as he heard the rumors, some joking, some serious, about Forsythe's polygamous tendencies. This was a ready-made situation for Truggles.

Truggles began his research with Forsythe's ex-wife, Phyllis Allison. He had learned from experience that an ex-wife usually is a good source of information about vulnerable spots.

She served him tea in the parlor of her modest home. After a routine

BY CHARLES L. FONTENAY

round of chit-chat designed to put her at ease, Truggles approached the point.

"As you may know, Mrs. Allison, I am president of our Social Standards Protective League," he said, fixing his deep blue eyes on her face.

"I've heard of it, Mr. Truggles," she said in a low voice. "My duties at home keep me too busy to belong to any organizations, though."

As if to emphasize her point, she put her arm around the shoulders of her young son. The boy sat quietly beside her, watching Truggles like a young animal. Truggles figured he must be about five years old—certainly he would be below school age, for school was in session—but he was big for his age. There was something disturbing about his intent gaze.

"I'm not here in the interest of your joining the League, Mrs. Allison, though we'd be glad to have you," said Truggles. "I came to ask you for some confidential information about the shameful way your former husband mistreated you."

Her eyes opened wide.

"Why, Blan never mistreated me!" she exclaimed. "Whoever told you such a thing? I loved Blan, and he loved me. I still love him."

"If he loved you, why did he leave you?" demanded Truggles triumphantly.

"I think you're asking questions about something that isn't any of your business, Mr. Truggles," said Phyllis Allison, her eyes flashing ominously. "Blan Forsythe is . . . different. We agreed to separate because it appeared I could give him no children. We were wrong, but it was too late, then."

"So he turned to polygamy through a mad desire to produce children," murmured Truggles happily. "You say you were wrong? I thought the boy was your only child."

"Donald is my only child, but he is Blan's child," said Phyllis, patting the boy on the shoulder.

Truggles raised bushy eyebrows.

"Wasn't it seven years ago you and Mr. Forsythe were divorced?" he asked pointedly.

"Yes, and Donald is only five," she answered defiantly. "My husband—Dr. Allison—tells me I'm foolish to have the feeling I do that Donald is Blan's son. He says it's impossible. But I know it's true. I've been working with Donnie, and, Mr. Truggles . . ."

She leaned forward intently and fixed her gaze gravely on Truggles' face.

". . . Donnie has the Power!" she said in a tense whisper.

Truggles blinked. Phyllis Allison sat back and looked embarrassed, as though she had not intended to confide so much.

Truggles asked no more questions. He did not pursue the line of inquiry this revelation at once brought to mind. He took his leave as graciously as possible and left the house.

He knew that both Phyllis Allison and her son watched him as he walked out the door with shoulders bent in a show of humility. But it was the boy's eyes he felt.

Phyllis Allison. The fresh memory

of her slender beauty, her wide, honest eyes, struck pain in Truggles' heart. They were rare—but why did he seem to run across them so often?—these women who reminded him of *her*. His lost love, his long-lost love, the smiling fairy with the dancing heart, without whom life never had been quite complete again.

The woman really believed the boy was Blan Forsythe's child. It was pathetic. And that reference to Donald's having "the power:" Truggles wondered how many women he had known who thought their sons were "different," who even convinced themselves that the children had been sired by a dream prince or such like. Deluded souls, to so excuse their sins!

He straightened and ran his fingers through his short-clipped gray hair as he strode along the walk. The extensive lawn of Blan Forsythe's mansion stretched only two doors away from the bungalow he had just left. It was decked with flower beds and evergreens.

Truggles was too circumspect to do anything openly at this stage. But he shook a fist at the stone pile, mentally.

Behind him, Truggles had a record of nothing but successes. There had been the alcoholic in Hantown, the Negro fortuneteller in New Bacon, the member of some queer religious sect in Steckleville. Truggles had set his face against them. He had shown the people of these towns what manner of creatures they harbored in their bosoms. They had been driven out (it was unfortunate, in a way, that the alcoholic had been hit by a brick and killed in the confusion of public reaction, but such accidents happen); and eventually Truggles himself, purring inwardly at the consciousness of a job well done, had moved on to fields of further effort.

Blan Forsythe was not big enough to escape his righteousness.

If the mayor of Marston Hill would cooperate, it would save Masefield Truggles a lot of work and possibly some unpleasantness for everyone. Sometimes mayors did cooperate, especially when elections weren't far off.

Truggles was not offended that Mayor Ben Sands received him in the garden of his home on the edge of town. He had known many fine gentlemen with dirt on their hands who abhorred dirt in the mind.

"I haven't seen Blan much lately, but he used to spend a lot of time out here," said Sands, taking his battered pipe from his mouth to speak. "He was interested in the flowers. Those asters, now. They're tetraploid. He developed 'em. Used colchicine."

He looked at Truggles inquiringly, to see if he understood. Truggles allowed a smile to quirk his lips and shook his head slightly.

"Extract from the autumn crocus," said Sands. "Makes plants tend to double their chromosomes."

Around them, the garden was a solid blaze of color. Zinnias, marigolds, phlox cast their colorful bounty to the air.

"I'm afraid I'm not much of a

horticulturist," apologized Truggles.

"Well, it's like this," said Sands. "Every cell of every plant of the same species has the same number of chromosomes—you know, those bright little threads that hold the guiding genes of growth and development. Mutations in plants come when there are changes in individual genes from time to time. But when you hit them with colchicine, the chromosomes sometimes double without the cell dividing. Creates a new species, usually bigger, stronger, slower growing. Call them tetraploids. I've heard it called 'cataclysmic evolution.' "

"You mean man tampers with the basic laws of nature?" asked Truggles, awed and disturbed.

"I reckon you could call it that. Lots of plants have been treated that way—tomatoes, snapdragons, alyssum. Of course, it happens naturally, too. Wheat developed from the crossing of an inferior early species, einkorn, with a wild grass. Einkorn and the grass had seven chromosomes each, but in crossing the chromosomes were doubled. The result was Persian wheat, a superior variety with 14 chromosomes."

Sands took the pipe from his mouth and knocked the ashes out against the sole of his shoe. Pulling a sack of tobacco thoughtfully from his hip pocket, he began to refill it.

"Blan had a theory," he said, "that doubling of chromosomes in animals in the past could have given rise to new species and explain a lot of gaps in evolution. Man has 48 chromosomes in every cell, and Blan pointed out to me that 48 is double 24, which is double 12, which is double six, which is double three. He thought that was too much of a coincidence. I reckon I do, too."

He paused and struck a wooden match, holding it against the bowl of his pipe and sucking noisily.

"I don't hold with the evolutionary theory," said Truggles stiffly. "What I really wanted to ask you, Mayor Sands, was whether you are aware that Blan Forsythe is practicing polygamy, right here in Marston Hill?"

"You've been listening to those old hens gossip," accused Sands. "Look, I knew Blan right well when he was married to Phyllis Allison. Phyllis is my niece and I was sorry to see them break up, but the young people have to live their own lives. Blan has some ideas us old stick-in-the-muds might not understand, Mr. Truggles, but he's all right."

"A dozen women live with him in that big house of his," insisted Truggles. "I've found out there's a turnover, too. When one moves out, another moves in."

"I don't poke my nose into other people's business," said Sands bluntly. "But Dr. Allison tells me Blan maintains a staff, and it's convenient for them to live in that big house. He's doing biological research, along the lines I just explained."

"Biological research, I have no doubt," said Truggles, assuming his best organ-like tone. He fixed his blue eyes on Sands, but Sands' eyes

were just as blue. They showed a gleam of anger. "You refuse to take any action against this abomination, then, Mayor?"

"I refuse to believe idle rumors," said Sands firmly. "And before you attempt to stir things up around here with your Social Standards Protective League, Mr. Truggles, I would recommend that you make some effort to secure accurate information. Dr. Allison is Blan's research assistant, and he can tell you much more of Blan's current experiments than I can."

Truggles bowed slightly and turned away. The sharp scent of the marigolds tickled his nostrils, making him want to sneeze.

"Dr. Allison," said Sands behind him, raising his voice slightly as Truggles walked away, "may even consent to tell you why Blan Forsythe's face is liver-colored. From what I hear of you, Mr. Truggles, that probably is your principal complaint against him."

Truggles straightened as though stabbed between the shoulder blades. He quickened his pace.

That had been a telling blow. Could Sands know? No, it was impossible. The recurring waves of time and travel had long since obliterated Truggles' distant past. The Brazilian was a secret demon in his own heart, his private, bitter hatred, the swarthy ogre who had crushed the flower of his life and whose face arose to torment him only in times of bitterness.

Sands was an idiot. All of these people in Marston Hill were idiots, letting a man like Forsythe fool them, liking him, looking up to him. They were empty shells, people, to be possessed alike by the strong, whether angel or demon. He, Truggles, would pit his strength against Forsythe.

As for Sands . . .

Old fool! Entrenched politician! Truggles had dealt with such civic laxity before. Direct action would be necessary.

THERE WAS a touch of frost on the grass the evening Masefield Truggles went again to the Allison home. Dr. Alex Allison, a chubby man with rimless spectacles, admitted him.

Truggles caught a glimpse of Phyllis Allison and the boy, Donald, in the kitchen as Allison led him through the dining room. They mounted a short flight of stairs to Allison's study.

Allison offered him wine and a cigar. Truggles refused. Allison placed the wine decanter back on the shelf unopened, but lit a cigar and settled back comfortably in his chair.

"Well, Mr. Truggles?" he asked briskly, with the air of a man who had no time to waste. Truggles looked him over, assessing him, and decided on the direct attack.

"I wonder if you are aware, Dr. Allison," he said softly, "that your employer is breaking up your home?"

He waited for the reaction. There was none. Allison puffed calmly on his cigar and waited. The light glinted from his spectacles as he kept his eyes fixed steadily on Truggles' face.

"Dr. Allison, your wife confessed to me that she still loves her former husband, Blan Forsythe," said Truggles, emphasizing every word.

"I was aware of that," said Allison unconcernedly. "Most women who know Blan are desperately in love with him. Is that all you came to see me about?"

He half rose from his chair. Truggles made a hurried gesture of protest. He realized he had tried to move too fast.

"No, no," said Truggles hastily. "Forgive me, Dr. Allison, but I was agitated over the situation. What I really came here for was to ask you to give me some information about Mr. Forsythe."

"Why?" asked Allison.

The flat question caught Truggles unprepared. He was aware that his mouth hung open foolishly as he tried desperately to frame an answer that would not be too revealing.

"Why—I was trying to lay to rest some rumors," he stammered at last. "Mayor Sands said you might tell me something about Mr. Forsythe."

Allison was silent for a long minute. He took the cigar from his mouth, knocked half an inch of ash into an ashtray and resumed his puffing.

"Mr. Truggles, how much do you know about mice?" Allison asked.

Truggles stared at him, unable to answer. This interview was beginning to take on a nightmarish aspect.

"What do you consider to be the principal difference between mice and men, Mr. Truggles?" pursued Allison.

"Really, Dr. Allison, I don't see —I don't know what point you're trying to make, but a mouse is an animal and a man is—well, a man."

"Nothing else?"

"Well, a man is bigger than a mouse." He began to feel familiar ground under his feet. "A man is bigger more ways than physically. He is bigger spiritually, emotionally. He thinks. He has a—"

"Ben Sands told me about his talk with you. So you don't believe in evolution? You don't believe the ancestors of men and monkeys came from a common stock?"

"I do not, sir. It is inconceivable . . ."

"How would mice strike you, then? Would you rather believe that men descended from mice than monkeys?"

Again the bewildered Truggles found himself physically incapable of answering.

"I have done a great deal of research, with the kind assistance of Blan Forsythe," said Allison precisely. "Blan is my friend. He has been my associate, even my experimental animal. I am preparing a paper on what I consider a revolutionary contribution to the theory of evolution—that men are related directly to the genus *rodentia,* and only more distantly so to the primates.

"Blan Forsythe is the real originator of this theory, as a result of his very personal interest in sudden evolutionary changes through doubling of chromosomes. It is reason-

able to suppose that the ancestor of man himself, with all of his survival advantages, arose through such a process. Man has 48 chromosomes. Now, Mr. Truggles, what sort of animal would you guess has half that number—24 chromosomes?"

"Mice?" hazarded Truggles thinly.

"Precisely. Mice. The common house mouse. There is also a variety of squirrel that carries 24 chromosomes. The *peromyscus* and *apodemus* families of mice—and some other animals, including the rhesus monkey—have 48—cousins whose chromosome doubling eons ago started them up different paths from ours. Mr. Truggles, the ancestor of man was a rodent whose doubled chromosomes gave him new attributes that worked to his evolutionary advantage."

"Is that what is called a mutation?" asked Truggles, interested in spite of himself.

"Mutation? A mutation is a change in one gene. Men mutate every day. How many millions upon millions of years do you think it would take simple mutations to build a man from a rodent—or a lemur, either, for that matter?"

"Well, really, Dr. Allison, I believe you misunderstand what I asked you. Your theory is fine, I'm sure, among scientists, but I'm interested in information about Blan Forsythe."

"That's what I've given you. Blan Forsythe is a tetraploid man. His cells carry 96 chromosomes instead of the normal 48. Every cell of his body is doubled."

"Is that why his skin is liver-colored?" asked Truggles, remembering what Sands had said.

Allison smiled.

"Coincidence," he said. "It's true that liver cells have doubled chromosomes, but that isn't the reason for the color."

"What does all this mean, then?" asked Truggles.

Allison laid his half-smoked cigar carefully on the edge of the ashtray and gazed at Truggles through his spectacles.

"Blan Forsythe is a new species," he said slowly. "He is not man. Everyone has theorized that a superman might arise from a mutation, perhaps caused by radiation. My God, a hundred mutations of individual genes wouldn't make a superman overnight! But Blan Forsythe is one—a tetraploid man—a superman."

"And what is a superman, Dr. Allison?" asked Truggles drily, thinking of Nietzsche and the Sunday comic strips.

"Who knows? How can you and I comprehend the novel qualities, the undreamed-of abilities of such a creature? Do you think a mouse could understand a man's ability to reason, to talk, to build machines? Blan may not realize them himself. After all, he was reared in a human society, and no doubt the tetraploid rodent which is our ancestor seemed little different from his associates. There are two things I'm sure of: the differences are there, and they are qualities you and I could never point to and say, 'This is an ability of the superman.' "

Truggles' mouth twisted in a

crooked smile. Allison had allowed his enthusiasm to draw him out. Allison was vulnerable now.

"And because this man—this creature—is different, you allow him to cuckold you?" he demanded in a low, ugly voice.

Allison was not vulnerable.

"Don't let Phyllis mislead you," he said quietly. "She thinks Donald is Blan's child because she always yearned to give Blan the child he wanted. Donald was born two years after they were divorced."

"She seems very sure," insinuated Truggles.

"It is possible for a tetraploid to be fertile in a mating with a normal diploid," said Allison. "Persian wheat, with 14 chromosomes, crossed with a grass which has seven chromosomes, to produce common wheat. That was Blan's hope while he and Phyllis were married, and it's still his hope with the others. I was his doctor and associate then, as I am now. Neither Phyllis nor Donald has more than the normal number of chromosomes, and Blan has not seen Phyllis since they were divorced."

"What, then, Dr. Allison, is this 'Power' that your wife says the boy has?"

Allison's face froze.

"That is a family matter, Mr. Truggles," he said icily. "I do not discuss my son's characteristics with strangers. Good night, sir."

Truggles saw Phyllis Allison as he left the house. Dr. Allison remained in his study when Truggles left, and Phyllis stepped from the darkened doorway of the dining room as Truggles opened the front door.

"Mr. Truggles," she said, placing her hand on his arm, "I don't know what your object is, but don't make any trouble for Blan Forsythe."

"My poor child, I am not trying to make trouble for him," said Truggles sadly. "I hope only to convince him that his unfortunate differences do not privilege him to flout the sound social customs of other men. If there is any trouble, it will be made by the man himself."

"You'll see him, then?"

"Certainly, I intend to try to convince him personally that what he is doing is wrong."

She sighed.

"I wish I could see him again," she murmured.

For this unhappy woman's sake if for no other reason, it would certainly be the thing to do to talk to Forsythe himself, Truggles thought as he left the house. The anticipation had a certain zest to it. Besides, Truggles believed in being fair. He always liked to give a man a chance to reform voluntarily, to bow to his righteous persuasion.

As for Allison, Truggles detested a man like that. The "scientific" mind, always so sure of its own theories. Such men could not see beyond the material, into the living realm of possession and power, the struggle between good and evil.

This theory that Forsythe was a superior creature . . . Truggles shivered with resentment. Man was the apex, the conqueror—the conqueror through his service to the good way, the right way, through

his militant demand that things be good and right.

A superior being. Truggles trembled again, this time overwhelmed by a feeling he hated, the feeling of inferiority. It swept over him from long, long ago, that bitter night when he had stood in tears before the Brazilian, when he had implored on his knees the only woman he had ever loved.

Something small and dark scurried across the walk in front of him.

Mice, he thought. The idea that man descended from a mouse was even more repellant than that man descended from monkey. But, if evolution had any basis in fact, mice might have certain claims. They lived in human habitations, they ate human foods. Their psychology was studied in mazes, and their physical makeup made them good subjects for experimentation in human diseases.

Mice. Truggles shrugged and walked on.

MASEFIELD TRUGGLES had seen Blan Forsythe at a distance, walking along the streets of Marston Hill, but Forsythe's appearance at close range was a severe shock.

The tetraploid man's skin was, as Sands and Allison had described it, the deep red color and texture of liver. His hair was short, mole-gray fur over the top of his head, and his eyes were a jade green that glowed with inner fires. Truggles was a tall man, but Forsythe stood a head taller and was massively built.

Forsythe's rugged features were not repulsive, when one became accustomed to their hue. Still, Truggles could not understand how a woman could be attracted to him. But the adoration that shone from the eyes of the pretty secretary who escorted him into Forsythe's office was unmistakable.

It was a spacious office, on the second floor of the mansion Truggles had passed so often. Why a man needed a business office to conduct private biological research was something Truggles could not understand, but this one would have fitted very well in a metropolitan skyscraper.

The weight of the pistol in its shoulder holster was comforting to Truggles. Others might not believe Forsythe dangerous. He did. He was protected.

"I understand you are determined to run me out of town, Mr. Truggles," said Forsythe pleasantly, leaning back in his swivel chair and putting his fingertips together. With his back to the window, his face was in slight shadow and he looked like a well-tanned business executive.

"You either have a well-organized spy network or some of the strange powers your associates attribute to you, Mr. Forsythe," replied Truggles easily. It would have been easier to deal with a man who did not exhibit such self-confidence, who was a little worried and nervous, but everyone seemed to be conspiring to make this project difficult for Truggles.

Forsythe smiled, and his teeth were white as shining ivory in his

dark face.

"My extraordinary powers don't lie along those lines," he said. "I'd be obliged to someone who could tell me along what lines they do lie. I've had flashes of them from time to time, but I'm afraid they couldn't be explained to you."

"I don't want to see you run out of town, Mr. Forsythe," said Truggles. "I came here in the hope of offering you friendship and help. The people of Marston Hill are disturbed—I might say, aroused—at your insistence on polygamous practices. I hope to persuade you to abandon such unsocial behavior, so I may have some background for reasoning with them in your behalf."

Truggles expected the usual retort—that the people of the town had minded their own business (i.e., been blind to what was going on) until Truggles came to town. Instead, Forsythe said:

"I have conformed to human social standards. My formal religious affiliation is Mohammedan."

Truggles quivered with shock.

"Mohammedan!" he exclaimed, possibly more outraged by that than by his original suspicion of polygamy.

"The Koran allows us four wives, Mr. Truggles. The rest must be concubines."

"You admit it! You admit that your so-called research is only a blind for a den of iniquity!"

Forsythe rose, and stepped from behind his desk. Suddenly alarmed, Truggles cringed. Forsythe was a very big man. Truggles' fingers strayed toward the shoulder holster. But Forsythe smiled.

"The research is genuine," he said. "Come with me, Mr. Truggles. I'd like for you to meet several of my wives. You may ask them questions if you wish."

He took the nervous Truggles firmly by the arm, lifted him almost bodily from his chair and escorted him into the anteroom. The pretty secretary looked up from her desk.

"Mr. Truggles, this is Trella, my youngest wife," said Forsythe. "Fortunately, she has had secretarial training, so she fits well in this office."

The young woman smiled at Truggles, without embarrassment. He was not so fortunate. He dropped his eyes, the deep blue eyes that had so often been the nemesis of evil-doers.

"You said I might question the—the young lady?" he murmured.

Forsythe laughed.

"I'll leave so you may feel more free," he said, and went back into his office.

Truggles looked upon Trella Forsythe with more self-assurance. She was a pert, brown-eyed blonde, in her early twenties. Remembering Phyllis Allison, Truggles could not but admire Forsythe's appreciation of beauty.

"How long have you been married to Mr. Forsythe, Mrs.—uh, Miss Trella?" he asked.

"Only about six months," she answered. "I hope I'll prove satisfactory."

"Satisfactory?"

"I don't want to have to leave Blan after two years," she said. "I love him."

"My dear child, how can you love a man who has a dozen other wives? How can you lower yourself to be part of such a scheme?"

"Why is it that some men never understand women?" she countered, a little angrily. "A woman may be jealous of her man's other loves, but if he's a real man the thing that matters is that he loves *her*. I get along fine with Blan's other wives. We have something in common—we all love him."

Truggles resisted a strong temptation to attempt to convert her to sanity on the spot. His powers of convincing women were potent ones, as experience had proved. But, in this case, the root of the evil was Forsythe himself and there was no point in wasting any time on the wives.

Truggles had expected Forsythe to conduct him on a tour of what he already had labeled, in his mind, "the harem." But Forsythe remained closeted in his office, and it was Trella who escorted Truggles through a portion of the building.

They met three other women, busy at various tasks, all of them young and attractive. Truggles questioned them briefly. He found substantially the same reaction he had received from Trella.

When they had mounted the wide stairs again, on their way back to the office, Truggles was introduced to another wife, Lois. The door of a room stood ajar as they came to it, and he happened to see her sitting inside, weeping.

He thought Trella appeared reluctant when he stopped and pushed open the door, but she did not protest.

"Why are you weeping, my child?" asked Truggles, after he had talked with her for a moment.

"I must leave," she explained. "I've been married to Blan two years tomorrow, and I haven't given him a child."

"That's the most inhuman thing I ever heard of!" he exclaimed. "Do you mean to say he gives you this little time of happiness, and then if you don't produce progeny for him he casts you off like an old shoe?"

"It's Dr. Allison's advice to him," said Lois. "Dr. Allison thinks it would be bad for him to have too many wives around at one time, and he considers two years long enough to prove certainly whether a woman can be fertile with Blan. I'm not the first. I won't be the last. But it's hard to have to go away and never see him again."

These women he had seen today, these wives of Forsythe: they aroused no bitter feelings in Truggles. He felt clean and strong talking to them. They were like the many women to whom he had held out sympathy and understanding over the years, who had been stubborn and wilful at first, only to melt at last and see the truth. If only he could get them from Forsythe's influence, he thought he could save these women.

Truggles turned to Trella.

"Do you see what's in store for you, young woman?" he demanded. "Do you still think it's worth ruining your life to live here in sin with this man?"

"I may be different," she an-

swered calmly. "And if I'm not, tell me, Mr. Truggles: does a mouse have the right to question the motives of a man?"

Truggles went back into Forsythe's office. The tetraploid man had swung his chair away from his desk and was staring moodily out the big window. He inclined his head at Truggles' entrance, but did not speak.

"Forsythe, this has been the most amazing, the most revolting, revelation I have ever experienced," opened Truggles. His indignation fueled his courage now, and his voice held the commanding resonance of a pipe organ. "You claim to be superhuman. I say you are inhuman, to force these poor young women to live in servitude, sharing you with each other, and then to discard them with brutal unconcern when you find they cannot fulfill your insane dream of foisting others of your kind on the earth!"

"They love me and I have a great affection for all of them," said Forsythe, not turning. "I provide for them when they leave me. Because the great experience of love cannot last a lifetime, should it be denied altogether?"

The ancient bitterness swept over Truggles in a consuming wave. Yes, yes, cried his soul, far better never to have loved, never to have known the meaning of love, than to have it snatched from the grasp in full flower! Forsythe was a monster. How could he know? Did the superman have telepathic powers? Or was it again chance, this dropping of a remark that burned deep into his writhing memories?

Forsythe's face was turned from him. One shot and this incredible thing, this liver-hued monstrosity that sat before him would be removed from the face of the earth. Truggles put his hand inside his coat. The butt of the pistol was cool under his fingers.

No. A murderer in prison has no influence. He cannot battle evil, recruiting to his shining leadership an army of righteous people. Truggles dropped his hand to his lap and said calmly:

"You speak as though they could love no one else. Is polygamy, then, to be a characteristic of the long-heralded superman?"

"Polygamy and monogamy, as such, have no moral values, for man or superman," replied Forsythe, speaking to the window. "Polygamy was a part of man's social scheme for centuries. Monogamy has been replacing it as a more desirable scheme; but to attribute moral values to it is propaganda. I challenge you to find an edict against polygamy in the basic writings of any religion—Christianity, Judaism, any of them. Remember Solomon? Monogamy has the advantage of closer companionship between man and woman, and for that reason I would prefer it."

A great thrill shot through Truggles' breast at these words. Was it possible that Forsythe had weakened? Was it possible that he could lead this strange man back to the path of truth?

"Why not give it up, Forsythe?" he asked in a low, compelling voice. "Why not eschew your dream of a

new race and leave such things to higher powers? Send these poor women back to their homes and turn back to your one true, legal wife, Phyllis, and your son."

Forsythe swung to face him. The green eyes were deep and haunted.

"Don't you think that's what I would prefer, above all else?" he asked in a low voice. "Perhaps you didn't know it, but I married Phyllis before I knew I was—different; other than my appearance, I mean. The genuine love of a man for a woman does not die. Do you think even a superman—it's your term, Truggles, not mine—enjoys loneliness? The worship of other women, my affection for them as human beings, can't fill the gap left by the loss of someone who shared complete understanding with me."

He laughed shortly.

"Besides," he added, "you're trying to talk me into committing an immoral act, Truggles. You forget that Phyllis is Dr. Allison's wife now, and Donald is Dr. Allison's son."

Truggles brushed that aside.

"That's no excuse for what you're doing," he said.

"One of the major duties of any individual, of whatever species, is to reproduce his kind, if he can," answered Forsythe soberly. "In the human community, safe as a race through its very numbers, that has been lost sight of and overlaid with social responsibilities. I'm different. I can't ignore it.

"How was the misconception ever begotten that a superman—again, it's your term, not mine—would merely mate with the daughters of men and, lo! a new race? The superman is a new species. Species do not interbreed fertilely very often, even when closely related.

"Dr. Allison found I was tetraploid, while Phyllis and I were still married. He and I have been searching for a tetraploid woman, without success. Meanwhile, I try and still hope for fertile matings with a normal diploid woman, for the tetraploid has been fertile with the diploid sometimes in plants.

"No, Donald can't be my son, whatever Phyllis says. There's more involved than the time of his birth—two years after our divorce. Dr. Allison has tested him, and Donald has the normal 48 chromosomes."

"Can't you accept the verdict of nature, Forsythe?" demanded Truggles. "If you were born a eunuch, you could never reproduce."

"While there's hope, I have the responsibility," said Forsythe slowly. "If the stream of life is to progress, something greater than man must arise from him. I know, Truggles—I *know*—I am that superior thing. And I think back in history to the geniuses, the superior men, who died without progeny and I wonder how many of them were tetraploid, as I am, but could not pass on their new abilities to the world."

Truggles shook his head angrily and arose.

"You can't succeed by flouting the social conventions man has built up," he said stiffly. "I'm afraid you'll find that out to your sorrow, Forsythe."

His mind caressed the gun inside his coat pocket. Such a direct solution appealed to him. But he resisted it. There was a better, safer way. He turned his back on Forsythe and left.

As he walked past the Allison home, and covered half a block toward town, seething inwardly at Forsythe's stubbornness; a woman arose from a sidewalk bench to accost him. It was Lois, Forsythe's dark-haired wife to whom he had talked while she wept half an hour earlier.

"Why, Mrs. For—Miss Lois!" he exclaimed. "What are you doing here? Did you escape?"

"Escape?" she repeated. Her eyes were shadowed from weeping. "Blan doesn't keep us prisoners. We come and go as we please. It's just that most of us prefer not to go out into town."

"I can understand that," he said drily. "Can I help you, Miss Lois?"

"Perhaps I can help myself, by helping you. Mr. Truggles, aren't you trying to stop Blan from keeping more than one wife?"

"I am, indeed. I expect to seek an indictment against him on bigamy charges."

"You won't succeed. He'll just sue you for false arrest, and ruin you. You don't think Blan would overlook something like that, do you? None of the girls would admit they lived with him as his wives. I wouldn't either, if it would hurt Blan."

Truggles was taken aback. After a moment, he asked: "What did you have in mind?"

"Nothing. But I thought if I could help you persuade him—as the wife who's been with him longest, I'd be the one to stay, wouldn't I?"

Thinking of an unknown number of others who might have been sent away previously, Truggles was inclined to doubt it. But he would not let such an opinion interfere with this opportunity.

"Probably," he said. "Will you help me if I promise to take no legal action against Forsythe?"

"What do you want me to do?" she asked.

"You say you're free to come and go as you please?"

"Yes."

"I just want you to tell the truth about what he's doing, as I've learned it, at a few meetings of good, sympathetic citizens during the next few weeks."

"I'll do it if you're sure it won't hurt Blan in any way," she said.

"I'm positive it won't," Truggles lied.

THE SOCIAL Standards Protective League was a small organization, composed largely of elderly women and a few men. Masefield Truggles had never meant for it to serve as anything more than a nucleus. Before he lit the flame, he spent a week building up his tinder pile.

He announced, by word of mouth and through the columns of *The Clarion,* Marston Hill's small daily newspaper, that the Social Standards Protective League would hold a series of special meetings every afternoon for a week. The public

would be welcome, he said, and there would be startling revelations of vice conditions in Marston Hill. Truggles rented the city's ancient, rickety auditorium for the meetings, and invited Mayor Ben Sands to speak at the first one.

Lois Forsythe sat on the platform that first afternoon, but Truggles did not call on her. Sands made a routine talk, the kind any mayor of a small town might, on the conscientiousness of Marston Hill's three-man police force, the lack of crime in the town, the recreational facilities and educational methods being utilized to see that the young people did not stray on the wrong path. He received polite applause.

When he had finished, Truggles arose and said:

"Sometimes after talks of this kind, we throw our meetings open to questions from the audience. Instead, I would like to ask Mayor Sands one question. Does he recall that I complained to him not long ago about the activities of Blan Forsythe, and what the tenor of the conversation was?"

"Why, yes," answered Sands, surprised. "You accused Blan of practicing polygamy. I told you that you'd been listening to too much gossip, and that Blan was doing biological research. I don't believe these good people would be interested in the nature of the research."

"I do," answered Truggles, "and it will be the subject of tomorrow's meeting. I have investigated these experiments, and they are well worth hearing about. Thank you, Mr. Mayor."

Truggles was a past master at building tension. The next day, he apologized for changing the program and gave a lecture on polygamy in human society. Backgrounded with considerable research at the Marston Hill public library, he described polygamy in Biblical times, in savage communities, in China and the Mohammedan world and among the early Mormons in the United States. He told of the social objections to polygamy and the progress made in eliminating it as a way of life.

The following day, he described Forsythe's research with tetraploid plants—not too accurately, but that didn't matter with this audience—and skillfully translated chromosome doubling into human terms until his final revelation that Forsythe was a tetraploid man left them gasping. And, the fourth day, he told, with some embroidery, of Forsythe's polygamy.

During each of these talks, Lois sat on the stage. Polygamy was a known, routine affair to her. Truggles was able to word his talks so that, to Lois, his revelations appeared calm and unbiased; but at the same time they were insinuating and inflammatory to his audiences, to whom polygamy was something strange and monstrous.

During none of the first four talks did he call on Lois. But at the end of the fourth, he announced:

"I have described to you what Forsythe told me himself. Perhaps you have been wondering who this attractive young lady is. She is none other than one of Forsythe's multiple wives, and tomorrow evening you shall hear a description of a

polygamous household from her own lips."

The first meeting had contained only the members of the small group which Truggles himself had organized, and two or three visitors attracted by the mayor's presence. But such words as "polygamy," "harem," "strange research," "monstrous plants and people" got around, as Truggles intended they should. The audience grew by leaps and bounds. By the night of the final meeting, the old auditorium was filled to overflowing; they were standing in the aisles.

Calmly, and yet not without some hint of the tragedy she herself felt, Lois described the day-to-day life of Forsythe's household; the friendship among the wives, their jealousies, their hopes and regrets. She did not realize that her words, like those of Truggles the day before, were building anger in the breasts of her hearers at something they had not experienced and could not understand.

When she had finished, Truggles took the stage, and now the calmness, the factualness, was gone from him.

"You have heard what this poor woman told you!" he cried. "You have heard how this man, this Forsythe, took advantage of her. Remember, her sisters are as unfortunate as she. Shall this lecher, this monster, go unpunished?"

Before he could say more, Lois was on her feet.

"Mr. Truggles, wait!" she exclaimed. "You told me you were going to try to get Blan to give up polygamy. I wouldn't have come here and helped you if I'd known you were going to try to arouse his friends against him!"

"My poor child, it's too late," answered Truggles loudly. "I tried to persuade the man to give up his life of sin, and his heart was as stone. He must feel the lash of just retribution!"

She stared at him, her eyes widening in slow realization. Then she burst into tears and ran from the stage. She fled down the aisle and out of the auditorium.

"Do you see?" cried Truggles to his audience. His blue eyes flashed and his voice rang like a trumpet. "Even now she cannot break his devilish hold on her! Think! Are your daughters safe from him? Are your wives, even? Do you know that the wife of his best friend, Dr. Allison, admits that her child is the child of this man, this monster?"

For five minutes, he shouted, he wept, he shook his fists, he raised his hands to heaven. Then, striding to the edge of the platform, he demanded in a low, compelling tone:

"Who will take up the sword of righteousness and go with me to drive this creature from our midst?"

For a moment, there was dead silence. Then a young man stood up in the middle of the auditorium.

"By God, I will!" he shouted.

"I reckon I will, too," called an older man near the rear. One by one, then all at once, they were on their feet, shouting and milling around. Truggles leaped from the stage and forced his way through the crowd to the door. They surged out of the auditorium at his heels and poured down the middle of the

street toward the home of Blan Forsythe, yelling.

With Truggles in the lead, the excited citizens swept onto the broad lawn in front of the big mansion, spread out over the grass, trampling the flower beds. There were fifty to a hundred of them.

Porch lights went on all over the neighborhood. From the same direction from which the crowd had come, two figures ran across the yards in the dimness and, circling the edge of the crowd, came up to Truggles. He recognized Phyllis Allison and her son, Donald.

"What is this, Mr. Truggles?" she cried, peering into his face. "What are all these people doing?"

"I'm sorry you came here, Mrs. Allison," he answered, shouting to make himself heard over the uproar of the people around them. "These people are determined to right the wrong this man has done you."

Outside lights from the mansion suddenly lit the entire lawn, and the mob that stirred restlessly on it. A momentary silence fell. Their numbers did not seem as great, their ranks not so solid, in the glare of the lights.

"Come on, Forsythe!" shouted Truggles in a great voice. "Come out and face your judges!"

The front door opened and Allison stepped out on the railinged porch. Truggles, at the front of the crowd, was about seventy feet from him.

"What is this?" demanded Allison. "What are you people doing here?"

"We've come for Forsythe," answered Truggles, and a murmur from the crowd backed him up. "Where is he?"

"I'm surprised at you, all of you," said Allison. "You people are my friends and Blan's friends. Why, you—"

He broke off as he caught sight of Phyllis and Donald.

"Phyllis!" he exclaimed. "What are you doing here? Take that boy home!"

Obediently, she turned away, but Truggles caught her by the arm.

"Get Forsythe out here!" he cried. "Let him face the woman he wronged!"

At that moment, Forsythe himself came out of the door and stood at Allison's side. A wordless cry ran through the mob at the sight of the tetraploid man's face, topped with its cap of mole-gray fuzz.

"I see you're still taking an active interest in my affairs, Truggles," said Forsythe. He did not raise his voice, but it carried across the lawn.

"Evil is every man's business," answered Truggles boldly. "These good people are enraged that you should flout the laws of society so brazenly."

"Naturally," replied Forsythe, smiling. "And you enraged them. As long as everyone here minded his own business, no harm was done."

"I expected you to take that attitude, Forsythe," shouted Truggles. "Have you no sense of responsibility, no respect for the customs that others have established for their protection?"

"Certainly," said Forsythe, but he added, logically: "Would you

be bound by the customs of a colony of mice, if they interfered with your pursuit of greater ends?"

"Listen at him!" cried Truggles, turning to the crowd and spreading his hands. "You see what high regard he has for you, who have befriended him? He scorns you! He calls you mice!"

He turned back to the mansion with clenched fists and took a step forward.

"You monster!" he shouted. "Even mice can be dangerous!"

The crowd behind him surged forward with a roar. Forsythe's voice rang out above it.

"Wait!" he cried. "I appeal to your reason! I have no higher power. I can't strike you dead, or vanish from your sight. All I can do is ask you one question. Will you destroy me because I violate your customs, when I represent the hope of your race to become something greater?"

His words fell on deaf ears. The crowd inched forward, ugly, dangerous.

A figure brushed past Truggles. It was Phyllis Allison, and she tugged the boy Donald with her.

"Stop her!" cried Truggles. "Don't let her get in his clutches!"

Alone, for these words seemed only to confuse those near him, Truggles ran after Phyllis and the boy. But they stopped, halfway to the porch, and Truggles reached them. He placed his hand on Phyllis' arm and pulled at her compellingly.

He was close enough to her to hear her words to the boy.

"Donnie!" she urged anxiously. "You remember the game we played? Use the Power!"

The boy looked apprehensively toward the porch.

"Daddy said don't," he demurred.

Dr. Alex Allison stood, his hands gripping the rail of the porch, looking out over the ugly crowd. There was no mistaking the moment. At any instant, the mob would surge over the porch.

"Blan, I can't let them kill you because I've wronged you," said Allison in a clear, agonized voice. "Donald is your son!"

There was a cry from Phyllis and she clutched the boy convulsively, twisting free of Truggles' grip. The people on the lawn fell silent, their upturned faces white in the light, waiting, sensing the import of the revelation.

"I told you there was the possibility that the tetraploid could reproduce with the diploid," said Allison. "It's true Donald's cells don't contain 96 chromosomes—but neither do they contain just 48. They contain 72 chromosomes—an even number, a viable number! Not always, but sometimes the hybrid is superior to both diploid and tetraploid. Blan, with all your unexplored qualities, you're just the vehicle of the new race. Donald is the superman!"

"But it's impossible!" exclaimed Forsythe. "I haven't even seen Phyllis since we were divorced."

"Did you think the tetraploid, the new species, would have the same gestation period as man?" asked Allison. "The gestation period is thirty months. Phyllis was preg-

nant when you were divorced, Blan, but I loved her and I didn't let either of you know. I wanted her for myself."

"So that's why you recommended polygamy so enthusiastically," remarked Forsythe.

"That's why I recommended a two-year limit on keeping any of your wives, and why I made sure they were sent far away," admitted Allison. "I couldn't let you know. You have half a dozen sons and daughters now, Blan, and Lois is going to be a mother."

There was happiness in Forsythe's dark face as he looked out over the crowd. To see happiness on *his* face cut Truggles' soul like a knife.

And all this small talk was losing his crowd. The seething emotions he had nurtured so carefully were simmering down in harmless curiosity aroused by the small private drama that had unfolded before the people on the lawn.

"It's a conspiracy to mislead you!" he howled. "If no one else will throw the first stone, I will!"

It was a symbolic gesture, his scooping up a harmless clod and hurling it to explode against the porch as he marched on the man he hated. His back to the crowd, Truggles feared with a terrible fear that it was already too late. He was chancing making himself ridiculous.

But his heart leaped as the voices of a few hotheads arose in his support behind him, and he felt, rather than heard, some of the people surge forward. How many? He didn't know, but a few would be enough to start the rest again.

Allison was leaning over the porch rail, his face white, looking not at Truggles but past him.

"Donald!" he cried in a low voice that carried intensely across the grass. "Do as your mother says! I won't punish you. Use the Power!"

And Truggles faltered and stopped in his tracks. He looked around him, confused, as some unseen force seemed to take his will and disperse it.

The harsh glare of the lights faded in the glow of a greater, softer, more glorious illumination. A soundless music filled the air, so deep and majestic that it was felt, rather than heard. Almost, Truggles expected the sky to open and a heavenly choir to appear.

Around him, he saw the familiar things of Marston Hill with new eyes. Life coursed through the green grass, bade a winter's farewell from the turning leaves of the trees. He felt for the first time that he was not a creature alone, but a part of all life around him.

The faces of the people around him showed that they, too, felt what he felt. They saw beauty in the air, in the world. As he looked on them, Truggles realized, for the first time in the heart of him, that their small faults were not vices, not innate evil—not even the hatred and fear that had been in their hearts when they stormed here with him was evil. There were only the well-meaning flaws that sprang from earnest eagerness.

Even the face of Forsythe, when Truggles looked at it, mirrored the ecstatic understanding of something that he had experienced only

partially before. And Truggles knew that the type of understanding that had opened up to Forsythe was something he himself never could comprehend.

And in the midst of this experience that transcended understanding, the boy Donald took his mother's hand and the two of them floated *up,* into the air, above Truggles' head, and forward to alight gently at Forsythe's side on the porch.

But, amazing as that was, Truggles recognized it was only a small outward manifestation of the Power. The Power of the superman was what he and all these others felt, a weapon greater than fire or sword, greater than will or reason. Under its influence, no man could raise his hand against his brother, for he *understood.*

The vision, if vision it was, faded, and only a crowd of murmuring people stood around sheepishly in the cold glare of the lights on Forsythe's lawn.

"Truggles, you've won your point," said Forsythe, and there was no animosity in his voice. "I don't need to experiment any more. I'm leaving Marston Hill with my wife and son . . ."

He caught himself and looked at Allison.

"I can't hold her," said Allison in a low tone. "I won't try to. I'll give her a divorce."

". . . With my only wife and son," resumed Forsythe happily. "I'm going to find my other children. And I don't think any of you will ever hear of us again."

He turned and entered the house with Phyllis and Donald. Allison followed them, his head bowed.

Truggles sat in his small, sparsely-furnished room and fought his soul.

For a long time, the memory of what the boy Donald had somehow shown the people of Marston Hill lingered with him: the conception of a world that was all good, all beauty, everything right. Truggles tried to cling to it, but gradually it slipped from him. There was something in him that prevented him holding it. At last, he still could remember it, but the memory was a logical thing, a thing that was incredible to him because it had no roots in emotion.

As that happened, the old torment returned ten-fold, as though it had battered outside of the vision's barrier fruitlessly until it could burst on him with renewed vigor.

Writhing inwardly, twisting his hands, Truggles stared unseeing at the room about him while he relived the agony of the past. He held Margaret—how long, how many years had it been, since he had let himself even think that name?—he held her in his arms and felt her cool lips against his. He talked with her, he felt the closeness of something infinitely good and right for him.

He lived again the angry, shouting interview when she stood with the arm of the Brazilian, De Castro, around her shoulders and said: "I'm sorry, Masefield. I like you and for a while I thought it was something more. But I've found

love with a man who's so far superior to either of us that I still can't believe he's mine."

"That foreigner?" he shouted again, and tears sprang to his eyes as they had then. "You turn me down for him? You think I'm inferior to him?"

And again he lived through the shame of falling on his knees before her, turning up his weeping face to her, imploring her to no avail. He saw on her face and the Brazilian's face the pity, the scorn, before they walked out together, leaving him to sob alone.

Truggles beat his hands helplessly on the arm of the chair. Of all the hapless people he had tracked down and tossed to the ravening, outraged contempt of the public, he had wanted most of all to conquer Forsythe. He had wanted to see Forsythe cower and whimper, beg before they hung him.

And Forsythe had won. What mattered it that he was leaving Marston Hill? Truggles had thought that would be a victory, to make Forsythe run away. But Forsythe was not going alone and hunted. He was taking with him the woman he loved, who reminded Truggles of the clean beauty of Margaret; the one woman who understood him as none of those others could.

And the boy. Was it a defeat to a man to know that his son was greater than he? Truggles knew it was not. A vision rose before him of a race of men and women who walked among the clouds, who saw only beauty in the world and looked down with sympathetic pity upon the poor creeping humans below. The new race, greater than Truggles could even imagine himself.

Truggles stirred, and awoke to his surroundings, bitterly. He would have to leave Marston Hill himself. The people would not thank him for arousing them against Forsythe. From them, he could expect only anger, contempt, perhaps even . . .

There was a sudden rattling behind him. Truggles jumped to his feet, alarmed, fearful, his heart beating fast. His apprehensive eyes searched the room.

A paper moved in a corner. It was only a mouse. • • •

Earthmen were considered stupid. But they knew something that the alien didn't —and about his own planet!

a little knowledge

BY RUSS WINTERBOTHAM

EVEN WITH modern conveniences, Caesar could never have staged such a triumph, and in the face of world history-making, he wouldn't have reason to. Olbu's visit to the earth was certainly a bigger deal for the archives than anything Caesar ever did.

"No one can say you aren't a good sport," commended Ralph Rodkey of the Interstate Broadcasting Network. "You had plenty of reason to be annoyed, especially when the mob tried to tear your clothes off. But, the people meant no harm; they just adore you."

Olbu had learned English overnight and mastered it. He hardly had an accent: "I was a little disturbed, you might say."

"Well, our people are hero worshippers," Rodkey explained. "And you're certainly a hero, being the first man from off the Earth

to land on the Earth, you might say. And then too, given an opportunity to celebrate, an Earthman will take full advantage of the slightest excuse."

"Rather barbaric," said Olbu.

"But then this is a barbaric planet."

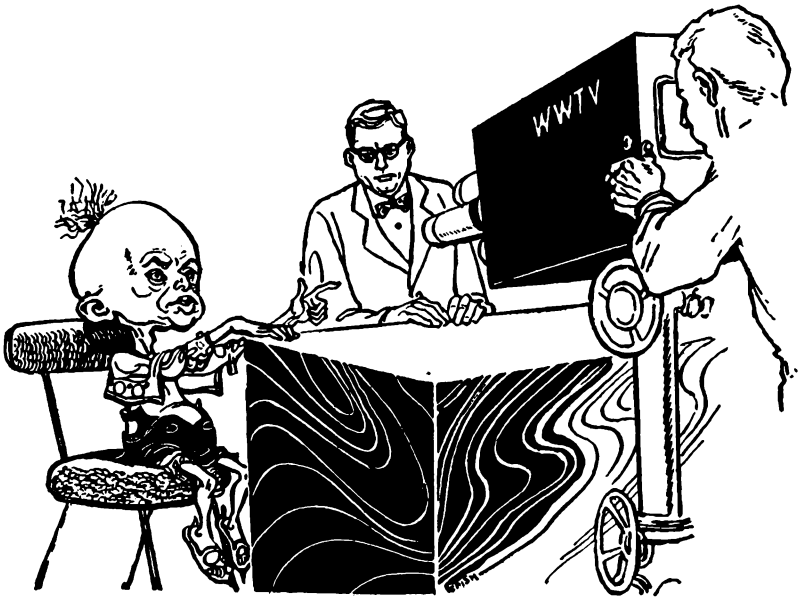
"Uh? Oh, yes. Just joking, of course. Now we're about ready for our telecast with Cecil Burroughs, the greatest commentator in the business. You'll appear with one of our leading scientists."

"I hope he can understand the things I shall talk about."

"We may not know much about space flight, but we know a lot of things; my boy," said Rodkey.

"You say you don't travel in space as yet?"

"No, and you're the first visitor from space we've had. You see no planets of this solar system are inhabited by intelligent forms of life."



Illustrated by Ed Emsh

"You can say that again," said Olbu.

"With the exception of the Earth, of course." Rodkey laughed. "We were very thrilled to have someone drop in on us."

"How strange!"

"In fact, many of our people figured that Man was unique. They thought he couldn't exist anywhere but here."

"It would be nice if such were the case," said Olbu. "But I'm afraid the galaxy is not so fortunate. Many planets have men. Some are more like men than others, if you understand what I mean. But they all have his chief faults and good points."

Rodkey had arranged for the interview in the Presidential suite of the Claremont Hotel and in the next room electricians were busy setting up the equipment. Presently the door opened and a man of about 50, clean shaven and slightly bald, paused in the doorway. He looked at the confusion for a moment, hesitated as if he were checking an impulse to flee, then spotted Rodkey through the bedroom door.

"Dr. Bruber!" exclaimed Rodkey.

Dr. Alymir Bruber beamed, extended his hand and strode forward.

He tripped over a cable, but caught himself on the doorframe with nothing worse than a bumped shoulder.

Rodkey pumped his hand enthusiastically. "It's been a long time, Doctor!" he said, slapping him on the shoulder. "Remember, we met when I interviewed you on the nervous electron factor of your diatomic equivalent energy principle back in '96."

"Oh," said Bruber. "Yes, I remember you well." He turned his head toward Olbu. One glance would have convinced anyone that Olbu was from space—or at least another planet. He had an unusually large head, small neck, skinny arms and legs and a pot belly. Everyone knows that people from other planets have all of these things. The only thing wrong with Olbu was that his eyes were just like anyone's eyes, a little slanted, perhaps, but not more so than the average oriental, and of course Olbu had no feelers extending from his forehead. But those things weren't absolutely necessary in a man who looked the part, as Olbu did.

"This must be our visitor!" Once more Dr. Bruber extended his hand and this time he tripped over the rug, but Rodkey was handy to catch him.

"My glasses," explained Dr. Bruber. "They're only bifocals, and I have trouble adjusting to middle distances."

"Olbu," said Rodkey, "allow me to present Dr. Bruber, the world's greatest living scientist."

Dr. Bruber laughed nervously and shook hands with Olbu. "I'm afraid Mr. Rodkey is being extravagant. Actually I'm not the greatest. Only the greatest in my field. I'm second greatest in three others though."

"Dr. Bruber is too modest," said Rodkey. "There's practically nothing that he doesn't know."

"No one knows nothing," said Olbu.

Dr. Bruber blinked as he tried to figure that one out. It doubtless hinged on a lingual difference to start with and so he gave up.

"Well, gentlemen," said Rodkey, "our broadcast will start in thirty minutes. Perhaps we can go over briefly what topics we should talk upon. You know we don't want to

get into anything too deep for our viewers to understand, yet we don't want to be *too* trivial, you know. Give them something interesting, I always say. Then if we have any time left, we might touch on some topics that go a little beyond that."

"Did you have a nice trip?" asked Dr. Bruber.

"It was beastly," said Olbu. "Thirty-two light years of space and not even an interesting meteor."

"We're on the verge of making an interplanetary flight here on Earth," Dr. Bruber said. "The trouble is, no one that wants a flight has any money and those that have the money don't care about space flight."

"You're probably better off all around," said Olbu.

"Come now, gentlemen," said Rodkey. "We can do better than that. You can cut loose with a few scientific terms now and then. It gives the interview an authentic flavor. Ask Olbu his opinion of the quantum jump, Dr. Bruber."

Dr. Bruber turned toward the director and blinked through his heavy glasses. "I'd rather ask our distinguished visitor why he came."

"Yes, Dr. Bruber. Please do," said Olbu.

"All right. Why did you come here?"

"We wanted to decide whether to wipe out the solar system or not."

For a moment it was silent in the room, except for the sound of the electricians outside the door.

"Goddamit," said an electrician. "You can't use that hookup on the Y-circuit. You'll cut out the monitors."

Ralph Rodkey tiptoed to the bedroom door and closed it.

"Surely you're joking," said Dr. Bruber. "Quite a sense of humor. Ha-Ha."

"No, I'm not. We discovered there was at least one habitable planet here — and where there are habitable planets, there are likely to be human beings. Human beings are dangerous."

Rodkey cleared his throat. "Gentlemen. Far be it from me to interfere in a scientific discussion like this, but if I were you I'd try another tack. A large number of our viewers might not understand it."

"You think it would be better, perhaps, if we killed them all without warning?" Olbu said, turning toward the director.

"Really, Mr. Olbu," said Rodkey. "You don't intend to blot us out, do you?"

"That decision is hardly mine to make," said Olbu. "I'll have to report to my superiors. If you're dangerous, you'll have to be erased, and there's nothing that can be done about it."

"Excuse me a moment." Rodkey rose, went to the phone and ordered liquor sent up to the room. He hung up the receiver. "I think it's best that we make your stay here a pleasant one, Olbu."

"If you intend to bribe me, I'm afraid you'll have no success," said Olbu. "I was chosen because I am impeccable."

"I'm quite sure of it," said Dr. Bruber. "And perhaps there is something in your premise that not all human beings are desirable. I should like to know how Earth is making out."

Olbu shrugged his shoulders. "So far I've seen nothing worth saving," he said. "You're a vain lot. You're trivial. You have no respect for the dignity of Man. And your worst fault is ambition. I suppose you have wars?"

"Not for a long time. Two or three years anyhow," said Rodkey.

"How long is a year? Ah yes, I forgot. It is the period of the planet on its journey around the sun. And how long does that take? One year. The usual nonsensical way you have of defining things. You don't even know how to measure time."

"How very interesting!" exclaimed Dr. Bruber. "Actually it never occurred to me that there might be an absolute method of measuring time. What is it?"

"It's the Mpto. Forty-three and a third Mptos make an Anup, and twelve million Anups make a Zorex. It's a lot simpler than seconds, minutes, hours, days, weeks and so on."

"Yes, I see," said Dr. Bruber. "But getting back to our topic. Just what should we have that would make us worth saving?"

"Stability," said Olbu. "Earthmen lack stability."

"Don't you think you should talk more about your trip?" Rodkey asked. "How did Saturn look when you passed it?"

"Saturn wasn't in the right place to be seen at all," Dr. Bruber said. "But you did see Pluto. How did it look?"

"There was nothing about it and it looked awful," said Olbu.

"I hate to be injecting my own personal ideas into this conversation," said Rodkey, "because after all, I know nothing about science. But don't you suppose it would please our viewers if we talked more about space flight than about the destruction of the human race?"

"You see," said Olbu to Dr. Bruber. "That's what I mean. No stability."

"After all, the poor man doesn't want to lose his job," Bruber explained. "I'd say that was a desire to be stable."

"If he's going to be dead, which he will be when I get word from my superiors, he'll lose his job whether he wants to or not," said Olbu.

"I'll go along with a joke as well as anyone," said Rodkey, "but gentlemen, we've only got twelve minutes till we go on the air. Now let's cut out this nonsense about destroying Earth and talk about something pleasant."

"Certainly," said Dr. Bruber. "What planet did you come from?"

"Xvik," said Olbu. "It's the fourth planet of a star you call GC1242."

"Good old GC1242!" said Dr. Bruber.

"Oh, you know that star?"

"Yes, it's a minor variable loosely attached to Lyra."

"There's nothing loose about my

star," said Olbu.

"I'm sure Dr. Bruber didn't mean it that way," said Rodkey hastily. He looked nervously at Dr. Bruber. "Did you, doctor?"

"That's one of the things I don't know," he said, wiping his glasses on his handkerchief. "Tell me, Olbu, if you should decide we aren't worth saving, how would you communicate with your superiors, considering they're 32 light years away. Wouldn't it take 64 years—thirty-two going and thirty-two coming—to get a message through?"

"Oh, no! I communicate by instantaneous telepathy," said Olbu. "It's much faster than energy forms of communication."

"I wish you'd talk about something else," said Rodkey. "Only ten minutes to go."

Dr. Bruber disregarded the request. "I don't know why people on a planet 32 light years away should consider Earth dangerous."

"Oh Earth isn't. It's only the people on it," said Olbu.

"How do you know about the people?"

"We have a method of enlarging telescopic photos to bring out every detail. We know all about Man, we've watched you from the days when your ancestors lived in caves."

"Goodness! You know more about us than we know ourselves."

"Why don't you tell our viewers about *that!*" exclaimed Rodkey.

"Yes," went on Olbu, who also seemed to have forgotten the existence of Rodkey, "we saw your ancestors fight with sticks and stones. We saw them use spears, then gunpowder. Then we saw the atom bomb and the Council decided to send me to see if anything could be salvaged."

"But the bomb was 200 years ago," said Dr. Bruber.

"Twelve Zorax," corrected Olbu. "I've been on the way here for twelve Zorax—or if you will—thirty-two light years, two hundred time years."

"Surely the atom bomb can't affect your existence when we don't even have space flight," said Dr. Bruber.

"My race has developed a type of logic that can look into the future," said Olbu. "We know that certain patterns develop from past events. In your case, you'll follow the Atom bomb with the Hydrogen bomb, and the Hydrogen bomb with the Cobalt bomb—"

"We have them both."

"Ah! You see. Our logical foresight is infallible," said Olbu. "Next you'll wipe out nations, when only one is left, you'll fight neighboring planets. Since you haven't any inhabited near neighbors, you'll have to invade Alpha Centauri. After that you'll battle with other stars, until you've conquered the cluster, then the galaxy, finally the universe. It's a very unstable state of affairs."

Slowly Dr. Bruber nodded. "You're right. I never realized where science was taking us. You have something ready to wipe us out with?"

"Yes," said Olbu. "Just beyond the moon, circling the Earth and the moon as a satellite, is a missile which I can bring here by in-

stantaneous telepathy, as soon as I have my orders from my superior."

"I trust you'll postpone the fateful message until after our telecast?"

Olbu smiled graciously. "A dying man is usually granted his last request."

"Gentlemen," said Rodkey, wiping his brow with a damp handkerchief, "they're waiting for us in the next room. We're on in a minute." He opened the door, allowed Olbu to pass through first, and then whispered to Dr. Bruber. "I guess my job doesn't matter now. At least we'll scoop the other networks on the end of the world."

"Tish, tosh, old man," said Dr. Bruber. "Your job's safe and so is the world. But if I should resort to murder in the next fifteen minutes, I hope you'll testify in my behalf."

DR. BRUBER walked through the door, tripped over a cable and sprawled in front of the television cameras. Rodkey helped him to his feet and steered him to a seat to the left of the distinguished news commentator, Cecil Burroughs. On the right of the commentator sat Olbu, bobbing his huge head and smiling.

Rodkey barely got out of camera range in time to give the signal.

Burroughs gave the commercial, which had nothing to do with interplanetary flight, or anything else of interest. "NOW, ladies and gentlemen," said Burroughs, "our two distinguished scientists have a great deal to tell us about two widely separated points in the universe."

Dr. Bruber smiled into the camera. "Just before we went on the air, Mr. Burroughs," he said, "Ambassador Olbu and I had an interesting discussion about the merits of Earth. He contends that it is unstable—"

"You are twisting my words around, doctor," interpolated Olbu. "I made it clear that it was not the planet itself, but the people who are objectionable."

"The people spoil the planet?"

"In a sense. The people are dangerous, the planet is not."

"Would it be possible for a planet to spoil the people?"

Olbu seemed to digest the words in his mind before he spoke: "That is a rather weak effort to shift the blame from the shoulders of those responsible for a sad state of affairs, doctor. You are trying to say there is something in the air, or the water, that makes Earthmen what they are."

"No, I was hinting that there might be something wrong with *your* planet, Mr. Olbu."

"Nonsense! Nothing is wrong with my planet. My people would not be affected even if the air and water were bad. We, the children of Xvik, are the highest expression of the human race."

"It's easy to see that," said Dr. Bruber. "You were pointing out to me that Earth's pattern of existence doesn't offer much hope for the future."

"That is right," said Olbu.

"Earth's future is not much to look forward to."

"But the planet is worth saving?"

"Definitely."

"Yet the people are a part of the planet."

"You should study logic, Dr. Bruber. You're trying to make me say things that are not logical."

"Okay, let's forget logic and look at what Earth is likely to do if it follows its 'natural' trend. You say it will destroy itself."

"If someone else doesn't do it first," said Olbu. "It will continue to have wars till it exhausts all opportunities for it on the planet. Then it will war in the skies, with other planets, with other stars, finally with other galaxies. Man has a thirst for power, and that thirst is never satisfied. On the other hand, knowledge leads to contentment. If the Earth should seek knowledge, it would forget war."

"Perhaps war is necessary for survival," suggested Dr. Bruber.

"War is seldom fought for survival. It is a result of a struggle for supremacy. And, might I ask, supremacy of what? After you've conquered all the galaxies, what do you have?"

"Olbu seems to have a point there," said Burroughs. "It is now time for a brief message from our sponsor."

The message had nothing to do with war, or knowledge.

"Now, Olbu," began Burroughs, "we were talking about wars, knowledge, power and survival. Do you have anything else to add?"

"Only that Earth has brought this on itself," said Olbu.

"I don't quite understand—" Cecil Burroughs wrinkled his massive brow.

"What our distinguished visitor is trying to say," said Dr. Bruber, "is that a planet is only as stable as its people. And a star system is only as stable as its planets. Isn't that it Ambassador?"

"You have a round-about method of stating nothing at all," said Olbu. "What I'm trying to tell you is that sometimes worlds must come to an end."

"Exactly," said Dr. Bruber. "I've made a study of GC1242 for many years and I'm quite familiar with it. This star, as many scientists know, became a super nova about fifteen years ago."

"What?" Olbu's eyes grew less slanting and more round.

"It was an unstable star," said Dr. Bruber. "The Earth, with all its faults, is stable. It may be young, impulsive, inclined to play with fire—atomic fire no less—but it will grow up some day."

"My star, my planet—gone?"

"You haven't been in contact with your home base since you arrived?" Dr. Bruber asked.

"I was not supposed to contact my base," said Olbu, "until—" He stopped abruptly, and those with him were aware of the fact that he was using his mental powers to call his superiors.—The lengthening silence seemed to give proof to Bruber's words.

"Since you have no world to go to," interrupted the Dr. gently, "I hope you'll be our guest. Perhaps

(Continued on page 120)

Propaganda-wise, Newsear was a wonderful gadget. And a sinister one!

THOUGHT FOR TODAY

BY HENRY SLESAR

THE MAN in the swivel chair seemed amused at Danton's wide-eyed incredulity.

"Let me get this straight," Danton said, tapping the sharp corner of the official envelope against the desk. "You mean I went through nine months of blistering basic for *this?*" The flush on his hard young face ended ludicrously at the hairline of his shaven head.

"That's right," the Newsear director smiled.

"Look. I took everything those OCS torture-hounds could throw at me. I walked through a 19.7 radioactive field. I pushed an atom tank halfway across Texas. You mean the Army is going to take all that training and—and dump it into a desk job?"

The man pointed. "You read the orders."

"But it's crazy!" He looked down at the gray-green, metal-free uniform, as if to reassure himself of his status. "I'm a trained atom tanker —an officer."

He glared at the small, owlishly-smiling man, whose short legs barely touched the floor beneath the desk.

"Angry, lieutenant?" The Director's name was Forbes. "Angry?" Forbes said. "Or relieved?"

Mel Danton turned his head away, stung by the sharp truth.

"What's the assignment?"

"That will develop later. First we want to acquaint you with Newsear, so you'll better understand its strategic importance. You see, this war has many battlefields. We consider Newsear as important as any other—and in some ways, even

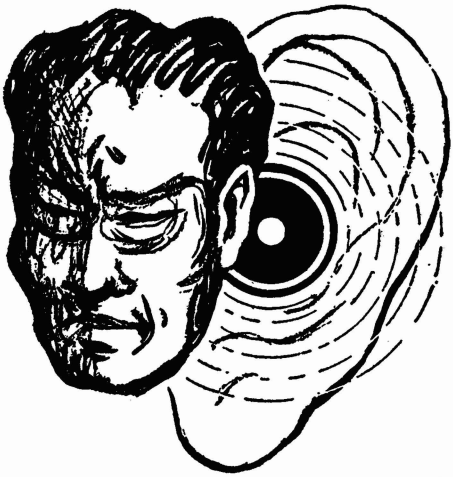
more trying."

Danton snorted.

"I know that's hard to believe. But Newsear operates directly under the office of the War Department. Don't be fooled by the civilian atmosphere. News dissemination has military importance. We're a government agency now."

"Yeah? Which government?"

The smooth voice crackled. "The government that put you in uniform. The Central Federal Gov-



ernment."

Forbes' pinched face relaxed, and he reached into his left ear and removed the tiny, colorless funnel and held it up between two fingers.

"This little gizmo," he grinned, "is one of the nation's most potent weapons. Don't ever underestimate that fact."

Danton stared at it.

"Ever use one?"

The lieutenant shook his head. "No. I never could afford it."

"You can now. We've knocked the price down to practically nothing. But as a member of Newsear, you're entitled to a complimentary unit. Here." He opened a drawer and removed a small clear-plastic envelope. He tore it open, removed another earfunnel, and extended it towards the man in uniform.

"Put it in," Forbes coaxed. "It's indispensable these days. Nobody ever knows the score without Newsear." He put a hand to his mouth and smiled behind it. "Go on, put it in. It's clean."

Danton hesitated. Then he slipped the gadget into his left ear.

For a moment, there was nothing.

Then:

". . . Canton, Seven Point Four, Cleveland, Eighteen Point Nine, Hillsboro, Four Point Two . . . Fifth Army radiation clean-up battalions presently engaged in these sectors . . . residents advised to stay indoors . . . On the Appalachian front, a small force of enemy snipers have been destroyed by local Home Guard action . . . Truce teams in the Aleutians report no progress with the Eastern-Coalition Government, warn of build-up near Dutch Harbor . . ."

Danton yanked the earpiece out. "How do you shut the damned thing off?"

"That's one way," Forbes admitted. "But most citizens prefer to keep tuned. We only broadcast on the average of three hours a day. This happens to be a busy hour."

Danton examined the object curiously. "It's a lot better than the gadgets we used in basic. For field instructions."

"That's part of our job, too. We're manufacturers as well as broadcasters. Newsear turns out something like five thousand earpieces a day for the military. Limited-frequency types. It's only recently that we've developed adequate subminiaturization techniques to produce the unit you're holding."

"I can see its military importance." Danton, no longer so sure of himself, rubbed a hand over his head where the thick blond hair once grew. "But as far as civilian importance—"

"The Government doesn't agree with you," the Director said. "Newsear is virtually the only method left for informing the public. The radio-TV blackout took care of that. How else can we reach the people?" He shrugged, as if the argument was self-evident.

He leaned forward, and his small features changed as if the light had shifted on his face. "And there's still another reason," he said mysteriously.

"What's that?"

"Ah," the Director said. He walked out from behind the desk and stumped forward towards the door. Danton hadn't noticed the artificial legs before. "That will all be clear to you in due course."

He opened the door. "Sorry we don't have a free office at the moment. You'll have to share one with somebody else." His eyes twinkled. "You won't mind too much. Your companion will be a rather charming young lady."

"But what am I supposed to *do* here?"

Forbes blinked. "You have electronics training?"

"Some."

"You understand sonic problems?"

"That's a million years ago—"

"Ah. You're modest. We are in possession of both your military and academic records. We have reason to believe that you were a remarkably capable student."

"That's not true. I was only an average student." Danton looked down the hallway. "What charming young lady?"

"Selena McKay is her name. She's been with Newsear almost three years. A very clever young girl. Come—I'll introduce you."

They walked down the barren hallway, with its dull lead-shielded walls. The Director's progress was slow and stilted, and his face reflected the effort. By the time they reached the small, two-desk office at the end of the corridor, he was puffing, and his face was moist.

The girl, with plainly-cut black hair dramatically framing a white face, looked up from her desk and greeted him.

"Welcome to Newsear," Selena McKay said.

"Glad to meet you." Danton shook her hand, while the Director beamed.

"It's all right for today," the girl said, with a fixed half-smile. "But after this—don't ever wear that uniform in this office. Ever. Understand?"

Danton turned a bewildered look at Forbes. The Director lifted his narrow shoulders. "It's purely optional, of course. But Miss McKay has an allergy to gray-green. It would only be common courtesy . . ."

The lieutenant looked back at the girl. Her bold black eyes were staring at the front of his tunic with such loathing that he unconsciously recoiled.

"All right," he mumbled.

The Director had been correct. She was a lovely girl; but the left side of her face was paralyzed.

WHEN HE reported to the Newsear building the next morning, Mel Danton wore mufti. It was the first time in almost a year, and the tweedy stuff caused his lean, tough body to itch. He squirmed with every step, and when he entered the office he shared with Selena McKay, he whipped off the jacket and flung it onto a hook.

There was a murmur of quiet, professional activity throughout the four-story building. Men of widely disparate age were moving swiftly and noiselessly through the corridors. There were radiation detection barriers on every outside entrance, necessitating a patience-trying wait for employees of the news center. The security precautions were even more elaborate than the Army's.

Danton had done little on his first day. Mostly, he had listened to Selena's dry analysis of the operational importance of Newsear, a service she performed for him without interruption of her regular duties. The extent of his labor was to sharpen half a dozen pencils for her, the points of which she had promptly destroyed with her heavy-handed scrawls on sheets of ruled yellow paper.

When she appeared this morning, she noted the tweed jacket on the hook and said: "Well. That's much better. "Her smile was strange and a trifle eerie; a half-smile that warmed just one side of her lovely face. The effect was odd, and yet, somehow, still attractive.

"I think you can do more than sharpen pencils today. I think the fifty-cent tour is in order. All right with you?"

"Fine."

"I'll just clean up the desk a bit. Then we'll have a look at Newsear."

When they left the office, he followed at a respectful distance. Her heels clicked along the corridors, and she flung open doors with the casual air of confidence.

One of the doors led to a chart room.

"This is Central Intelligence," she told Danton briskly. "We get our reports directly from the military on troop movements and enemy actions all over the world—all filtered through a sort of double censorship. The Government's, and our own. Only the events considered of pertinent importance to the citizenry ever go into their receivers. Radiation counts in local areas are reported in another room; that's an important service, of course."

"Impressive," Danton grunted,

watching the men and women moving efficiently between the gigantic wall charts and the chattering teletypes. "It's not easy to make sense out of this war."

"That's our biggest problem, of course. The distinctions between Enemy and Ally become increasingly difficult. The picture seems to change hourly; our staff of political analysts are probably the largest single group at Newsear. Come along."

The next exhibit was a laboratory.

"It's only a segment of our research organization," Selena said. "This happens to be our Sonar unit; there are some fifteen others. We're constantly seeking to improve the technical side of our service. The goal, of course, is perfection in Mass-Personal communications, striving for a single, foolproof link between every individual on Our Side."

"You've done a remarkable job."

She grimaced. "Far from perfect. You said it yourself yesterday. The military units presently in the field are sub-standard, clumsy, outdated. The civilian population is already equipped with subminiaturized funnels. But it will take months before their limited frequency equipment reaches the fighting men. And there are other problems . . .

"This is the broadcasting section. Probably the least complex section of our activities." She glanced up at the flashing red sign over the door. "Sorry, no admittance for the moment. We'll come back some other time."

"Do you have an earpiece? Mine's in the office."

She fumbled in her pocket. "Sure. Want to listen?"

"If you don't mind."

He took the small funnel in his hand and placed it within his ear. He heard:

". . . *Operation Icecube under attack . . . Alaskan patrols report enemy bombers sighted north-north east of . . .*"

He flipped the gadget back into his palm.

"The second floor is hundred-percent research," Selena said. "The third floor is a sort of hodge-podge of executive offices, including our political smart boys; I won't bother taking you there. The fourth floor—" Her face changed. "Administrative. I guess."

"You guess?"

The girl shrugged. "I've never been to Four. I only understand that it's administrative. Only what *that* means exactly . . ."

Danton grinned. "A Bluebeard floor, eh? Sounds interesting."

"Don't get ideas, lieutenant. The floor is restricted."

Back in their office, Danton broke a sudden depressed silence and asked:

"But why am I here?"

Selena looked up. "I haven't the faintest idea. Don't you know?"

"No! I studied electronics, sure. But I left college a year before graduation, to join up. And I wasn't such a hot pupil, either. There were a hundred guys with more on the ball than I had. Why aren't they here?"

"I wouldn't know."

Tentatively, Danton said: "And

how about you? What brings you to Newsear?"

"Ability," she snapped. "I'm a psychologist. One of the best."

DIRECTOR FORBES sent for him in the afternoon.

"Recognize these?" There was a folder in his hand, and he was spilling out papers.

"Looks familiar," the lieutenant grunted. "My service records."

"That's right. I understand that you made quite a mark in the mental energy tests."

"So they tell me. Frankly, I never knew what the hell they were all about."

"Few people do. But confidentially, the Army—and Newsear, I might add—consider it one of the most crucial tests in the entire examination. Even more important than psych ratings, or the standard Binet foolishness. They indicate something very important in this crazy world of ours—the ability of concentration."

Danton licked his lips. "If you're expecting some electronic miracle out of me, you're going to be sadly disappointed."

The Director looked surprised.

"I'm no psychologist, either. And no political analyst. I'm as confused as anybody as to who's fighting who. Maybe more than most."

"How about broadcasting?" the Director smiled.

"What?"

"We always need broadcasters, you know."

Danton swore. "You mean you want me for my dulcet tones? You must be kidding."

"Maybe not." The Director stood up. "But we'll talk about that later." He snapped the switch on an intercom. "Harris. I'll be out of the office for an hour. Anything comes up, you can reach me on Four."

He circled the desk and opened the door. Danton hesitated.

"What's on the fourth floor?"

"My dear young man." The Director chuckled and prodded him outside. "You're in too much of a hurry to learn everything."

A month went by, and Mel Danton became wise in the ways of Newsear.

Selena McKay was his mentor. Her knowledge of the broadcasting system was nothing short of encyclopedic. Her appreciation of the problems of war reporting was equally great. Her technical understanding was easily on par with his own college level.

After a while, Danton was comfortably ensconced in the seemingly unhectic routine of the Newsear employees, performing odd jobs for the laboratories and the reporters, and even—one nervous afternoon—sitting in as broadcaster of Newsear's end product: the news itself.

"Never again," he told Selena, after the chore was done. "I just don't have the voice."

"You did all right," she said grudgingly.

He was getting to like her more and more. But one thing bothered him. Since her first day. Selena McKay had stopped smiling.

At the end of Mel Danton's first

month in the new assignment, the Frozen People began to appear.

He heard the story on his own Newsear, and only remarked it because of its incongruity in a broadcast filled with troop actions and bombardments and truce talks.

The first Frozen man had appeared in Scranton, Pennsylvania. He was sixty-seven—twelve years above draft age—and he was discovered in the middle of an intersection, a hazard to traffic. He was removed to a local medical station, and diagnosed simply as a mental case—a catatonic.

Then three other cataleptics appeared in various districts, "frozen" people who had stopped in the midst of everyday activities, as if some inner motor had ceased to function.

The incidence became widespread. On the date of the Newsear broadcast, the announcer registered the approximate total of catatonic victims at a hundred and eighty.

"Government health authorities," the voice said in his ear, *"are investigating the possibility that these outbreaks are the result of some new enemy weapon . . ."*

Danton spoke to Selena about the news.

She replied coldly. "Frankly, I don't believe there's any sort of secret weapon involved. I think it's the state of the world. These people are retreating from an almost unbearable situation."

She returned to her work, but soon looked up again.

"As a matter of fact—this is strictly confidential—but the total we heard is a slight understatement. The smart boys are trying to determine its relative importance as a news story, so we're waiting to release the complete facts."

"You mean there are more of them?"

"Many more. Nobody has an accurate count, of course. But the indications are that there are some two thousand . . ."

Danton swallowed hard. "Two thousand catatonics?"

"At least," the girl said grimly. "People seem to be freezing up all over the country. We don't have word of any cases in the services. That's why I can't believe it's any enemy weapon. Isn't that sensible?"

"You'd think so."

"Well, it's not our concern."

"No," Danton said musingly.

THREE WEEKS after that, some sixteen thousand Frozen People had been officially tabulated, and Mel Danton was summoned again into the office of Newsear Director Forbes.

"Okay, Mel," he said cheerfully. "We're going to Four. I think you've had enough of the preliminaries. Now it's time for the main event."

He followed Forbes down the long corridor, and into the elevators. When the doors slid open, Danton had his first glimpse of the Bluebeard floor of the Newsear building.

It looked exactly like the others.

They entered an office which was bare except for a conference table with six wide armchairs. Forbes flopped into one, and invited the

lieutenant to sit down. He offered him a cigarette, normally forbidden on the lower floors.

They smoked in silence, until the door was opened and two men, strangers to the officer, entered the room. Forbes introduced them casually as Kirsch and Douglas, members of something called the "administrative Board." Kirsch was a heavy-set man with a clumsy manner. Douglas was tall, bony-thin, with a weary distinguished face and voice.

"Ah," Kirsch said. "This is the man, hah?"

"Perhaps," Forbes smiled.

"How much do you know about this?" Douglas's fingers rapped the table. "I mean, about this side of Newsear?"

"Not a thing," Danton said frankly. "I only know the lower level. Is there something else?"

Kirsch made a grating noise in his throat. Douglas looked sharply at the Director, as if displeased.

"Orientation is a luxury," Douglas said icily. "We need a new man, and we need him in a hurry. Standish is—" He paused, and frowned. "Well, you know about Standish."

"Who?" Danton said.

"A broadcaster," Forbes answered hurriedly. "One whose capabilities we overestimated. We need a replacement as soon as we can find one. We were considering, perhaps, that your own mental energy record . . ." He trailed off, and puffed on his cigarette.

"Do you have a Newsear?" the thin man said.

Danton removed it from his ear. Douglas took it, examined it with something like contempt, and sent it skidding along the slippery surface of the table. It rolled onto the floor with a tiny clatter. Danton looked surprised.

"Kirsch," the thin man said crisply. "Give me a dirty one."

The other man reached into his pocket and handed his partner a Newsear apparently identical with the first.

"Slip this on," Douglas said. "I'll give you a practical demonstration. That's worth more than talk."

"What do you mean a 'dirty' one?" The lieutenant held the thing suspiciously.

"It's just a word," Douglas answered. "We call the regular Newsear 'clean'. It was only natural that we call—*these*—dirty. Put it in."

Danton followed orders.

"We'll leave you alone for an hour," the thin man said. "Don't, under any circumstances, remove the Newsear. Do you understand?"

"Look—I think you ought to tell me—"

"I'll tell you nothing more!" Douglas stood up, his face darkening. "This is an order, lieutenant. And if you don't like taking orders from civilians, rest easy. I hold the rank of Colonel."

Danton slumped in his chair. "Yes, sir."

They left the room without another display of disagreement.

Danton felt foolish.

The Newsear was silent.

He got up from the chair and paced the room. At one point, he rattled the knob of the conference room door, and, as he expected,

found it locked.

The Director had left his cigarettes on the table. He smoked another one.

He studied the room. The walls were cork-lined, the floor bare and hard, the table of sturdy oak. The room was windowless. It couldn't have been more than thirty feet by twenty.

Yet he knew he was being watched.

He whirled, suddenly tense.

"Sniper!" he whispered.

He circled the table cautiously.

"Sniper!" he shouted.

He ducked beneath the table, trembling.

If he only had a gun . . .

He crawled on hands and knees, protected by the overhang, until his fingers touched the feet of a chair.

"Kill the dirty snipers," he breathed.

He skittered out of cover, dragging the chair with him.

"Where are you?" he screamed.

He tried to raise it over his head. It was too heavy, and crashed back to the floor. Without this makeshift weapon, he felt unprotected and afraid. He dived back beneath the shelter of the conference table.

That was how they found him, ten minutes later.

It was Kirsch who took the "dirty" Newsear out, and murmured something sympathetic. Forbes helped him into a chair, while Douglas watched them dispassionately.

Then Douglas said: "Well? What happened to you?"

"I don't know." He was still trembling. "I thought there were snipers—" He looked wildly around the small room. "Snipers. In *here.* I wanted to kill them—"

"Mr. Kirsch," Douglas said. "Read the order of the day."

The heavy-set man sighed and reached into his pocket. He withdrew a folded sheet of paper, and squinted to read the words.

"Enemy snipers are everywhere," he read. *"Kill them all . . ."*

"I don't understand."

Douglas smiled for the first time.

"This is our Newsear broadcast for today," he said. "The one you can't hear with your ears. Only your mind."

AT FOUR o'clock, Mel Danton went to the first floor to collect his gear, and more importantly, to say goodbye to Selena McKay.

The office was empty.

The man in the next cubicle, a whispy fellow with white hair and an apologetic manner, said: "She's gone for the day. Some trouble at home, I think."

"Do you know her number?"

"No. You might try registry."

"Thanks," Danton said. Registry obliged. He dialed Selena's telephone, and was forced to wait the usual five minutes before the call could be completed.

"Hello?"

"Selena? It's Mel. Listen, I came down to see you this afternoon. To say goodbye . . ."

"Yes." Her voice was dreamy. "Yes, of course . . ."

"I'm going to Four," he said tightly. "I don't quite understand it—but that's what they want."

"I understand."

"Selena—is something wrong?"

"What?"

"I hear you have some trouble at home. Nothing serious?"

"Yes. Yes," Selena said. "Fairly serious. My mother—"

"Is she ill?"

"Frozen," the girl said faintly. "Catatonic. My mother . . ."

"Oh, Lord!" Danton groaned. "Selena, I'm sorry."

"She doesn't know me." Her voice was quivering dangerously. "She doesn't know me, Mel—"

"Look, Selena. Could I come over? Would you mind that?"

"Law of averages," the girl replied, her voice sing-song. "It's only the law of averages, Mel. A thousand a day . . . Why not my mother?" She laughed abruptly, and the sound chilled him.

"Selena, where do you live?"

"De Kruif," Selena said, almost casually. "Seventh Street and De Kruif. Why do you want to come? She doesn't even know me, Mel—"

"I'll be there in fifteen minutes. Selena? Did you hear me?"

He slammed down the receiver, grabbed his coat, and left the Newsear building on the run.

The address was a semi-ruin, stripped of electrical power. Danton ran past the useless elevator, and up the stairs to Selena's fifth-floor apartment.

He found her sitting cross-legged on the floor, weeping into her lap, the eternal picture of woman in grief.

It was the first time he had ever seen so raw emotion on the girl's face. Tears poured from only one eye, but the entire effect on her lovely, tortured face was one of sorrow and desolation.

He lifted her to her feet, gently, and she leaned against him.

"Selena . . ."

"Oh, Mel. It was so terrible—seeing her like that—"

"I know, I know . . ."

"Do you?" She backed off and studied him. "Do you know what my mother's gone through? We were on the perimeter of a blast area five years ago. My father and sister were killed outright. My mother lost the use of one hand. I got out—with this." She gestured towards the unmoving side of her face. "She withstood it, Mel. Four awful tragedies—and she came through it. And now—"

She began to sob again. Danton waited patiently until the tears subsided.

"I'm sure they'll find a cure," he said softly. "There have been catatonics before. They'll help her."

She was moaning hopelessly.

"This is different . . . different . . ."

She broke from him, and walked unsteadily to the window. She folded her arms, and looked out at the gray clouds hovering overhead.

"She called me at the office this morning. Something she hardly ever does. She was so worried. About snipers, she said. She felt they were everywhere, surrounding her—" Her hands covered her face.

"Snipers?" Danton blinked.

"Oh, there have been snipers in the neighborhood before. But that was almost two years ago."

"Newsear . . ." the lieutenant said.

"What?"

"It happened to me—today—on the fourth floor."

"What did?" She turned to face him.

"I'm not supposed to talk about it—"

"Mel! If there's something I should know—"

"Selena, I've been ordered!" His voice was pained. "I'm not supposed to say a word."

She came to him. "Mel, what are you talking about?"

"Selena, listen. I can't tell you any details—and God help me if you repeat any of this—

"There's *another kind of Newsear.*"

"Another kind?" Her eyes widened.

"Yes. The earpieces the Newsear personnel wear are 'clean'—that's what they call it. The earpieces everybody else gets are 'dirty'. They have a sub-unit—a secondary function—that reaches right into the mind itself."

"What are you saying?" Her head was moving from side to side.

"It's true! There's a secondary broadcast that takes place every day on the fourth floor. A message to the public . . . a daily thought . . . a directive . . ."

"Why? What for?"

"Don't ask me to explain. I've never known about it until today. It's a way of unifying the efforts of the people—Newsear tells them what to think."

"To think?" she repeated, her voice quivering. "Mel, that's horrible! You can't direct the mind! You can't force *thought* on people! It's wrong! It's worse than bombs!"

"But they *can,* Selena! I've seen the proof—"

"We don't know enough," she whispered. "We don't know what such a thing can do. What the *mind* will do . . ."

She took two backward steps, her eyes fixed on the man in front of her, her hands covering her ears.

"Mel!" she screamed. *"They* did it. They did this to my mother!"

At 6:30 a.m. the next day, the thin man named Douglas said to Danton:

"This is your home now."

Danton looked around. It appeared to be more of a laboratory than a business office.

"You'll sit here, of course," Danton said smoothly, pointing to the well-padded leather chair. "Don't let all those gadgets frighten you. Only three of them will actually make contact with your person. These electrodes will clamp on your head; they're quite painless. A *very* mild current, nothing alarming. And you'll get used to it in time."

"I see," the lieutenant said.

"It will be your ability to concentrate that matters here. You must work very hard to keep your mind free of nothing but the order of the day."

"And what will they be?"

"The General Staff determines that. They vary from outpourings of patriotic feeling, to very specific drives."

Danton stroked the back of the chair.

"Have you heard much about these Frozen People?"

"Enough," Douglas said. "What about them?"

"What do you think is causing it?"

"I've no idea," he snapped. "I'm sure the authorities are working on it."

Kirsch came in. "We're ready to start."

"The first day is the hardest," Douglas said. "Good luck."

Strapped firmly into the chair, his arms imprisoned, his brain a tool of world affairs, Mel Danton waited for the signal to begin.

"The order for today," Douglas said, "is—beware of spies. No one is to be trusted. Report suspicious actions immediately to your Home Guard headquarters."

He clapped Danton's back.

"Now all you have to do is think."

He grinned, and left the room.

Danton closed his eyes.

"Destroy your Newsear," he thought. *"Destroy your Newsear . . ."* • • •

THE CHASM

(Continued from page 49)

the seed. That's what we've got to bring back, Sal. Between us, we have stored up a hundred and seventy-nine years of human culture. There isn't a kid back there, Sal, more than twelve years old."

"We'll find a way," Sal said.

The rowboat was about fifteen feet away from the thick reeds growing in the marshy ooze of the bank.

Cartley heard the sound first and turned, his face white. When Sal looked toward the bank, he saw the girl. She came on out from the curtain of reeds and looked at them. She was perfectly clear in the moonlight standing there. She wore a short ragged print dress and she had long hair that seemed silken and soft and golden in the moonlight even though it, her dress, her little legs and her face were streaked with mud.

Sal hesitated, then pulled heavily on his left oar and the boat nosed toward her. Up close, Sal could see her face, the clear blue eyes wet, and the tears running down her cheeks.

The girl reached out and asked in a sobbing breath,

"Granpa? Is that you, Granpa?"

"Oh God, Oh God," Cartley said. He was crying as he picked her up and got her into the boat. He was rocking her in his arms and half crying and half laughing as Sal rowed the boat upstream.

"Yes, yes, honey," Sal heard Cartley say over and over. "I'm your granpa, honey. Don't cry. Go to sleep now. I'm your granpa and I've been looking for you, honey, and now everything's going to be all right."

It's funny, Sal thought, as he kept on rowing upstream. It's a funny thing how one little girl remembered her granpa, and how maybe that was the beginning of the bridge across the chasm. • • •

When helping people to die is required medical ethics

——what can an unethical doctor who cures *them do?*

Illustrated by Paul Orban

BY HARRY WARNER, JR.

But the patient lived

THE RECEPTIONIST ushered the patient into Dr. Walter Needzak's office. She punched her glasses higher onto the bridge of her nose, patted the bun of hair at the back of her head, and said:

"This is Mr. Stallings, doctor."

Dr. Needzak motioned the patient to a chair. Stallings sat down, slowly but limberly. He still held his hat, and placed it in the precise center of his lap. The receptionist handed a form to Dr. Needzak and returned to the waiting room, after looking once over her shoulder.

"You're only 125, Mr. Stallings?" Dr. Needzak asked. The patient nodded sadly. "Well, you should be hale and hearty for another 50 years, judging by the report on your preliminary exam. Are you sure that it's any use for you to consult me?"

"I wouldn't bother you," Stallings said, age showing only in the high pitch of his voice, "except for the funny feeling in my chest the other day. I had to visit an office on the twelfth story. The elevator wasn't running, so I walked up. Just as an experiment, I went as fast as I could. The way my chest felt got me so interested and excited that I forgot what I wanted at the office, once I was there. So I thought that that was a hopeful enough sign for me to come around and see you."

Dr. Needzak, a young man at 50 and who looked even younger, hoisted the stethoscope amplifier onto his desk, turned it on, and signalled for Stallings to unbutton his shirt. He placed the stethoscope against the bony chest. The bumping of the heart filled the room, drew a wild pattern on the unfolding strip of paper in the visual section of the amplifier, and created magnetic patterns on the tape.

Dr. Needzak listened for two minutes, then thumbed through a reference listing of visual heart patterns. Finally he switched off the amplifier, and said:

"You have no history of heart trouble."

"I'm afraid not."

"Well, I don't want to raise false hopes. The only thing that I can suggest is more physical exertion. Really vigorous exertion, the kind that makes you pant and tremble and get a bit dizzy. Try that every

day for a month and come back to see me. There's just a trace of a flutter now, and we might be able to speed up its development."

The old man smiled for the first time, at something that his eyes saw behind the white plaster of the far wall. Finally, Stallings rose to leave. Buttoning himself up, he said: "You'll send the bill?"

Dr. Needzak laughed genially. "I can see that you aren't accustomed to visiting doctors, young man. The better the doctor, the more risky it is to send the bill. My policy is to request full payment before the patient leaves the office, just in case I've given the right sort of advice. In cases where I prescribe medicine, of course, you may pay for the prescription and the consultation fee simultaneously. Before taking the medicine, you understand." Again he laughed.

"I understand. I should have guessed. I work in a bank myself. I hate the work. I'm tired of everything, in fact. But I know how important it is to pay promptly."

The doctor had just filed away Stallings' physical record when the receptionist ushered in an extremely elderly woman. Dr. Needzak smiled broadly, and said:

"Mrs. Watkins! I didn't expect to see you again so soon." He waved in annoyance at the receptionist, who hovered behind the new patient. She left, reluctantly.

Mrs. Watkins groped her way to the chair, wincing when the receptionist slammed the door. The old woman rubbed her bony forehead with a mottled hand that trembled and said:

"I know that I wasn't supposed to come back for another three months. But did you realize that I'll have my 190th birthday before those three months are up? When a person gets to be that old, she looks forward to seeing the doctor more than she used to look forward for Santa to arrive back in the old days."

"No symptoms since your last visit?" Dr. Needzak spoke more loudly than usual in deference to her failing hearing, and turned up the light to aid weak, old eyes.

"None." She spat out the word. "I'm going to change doctors, if this keeps up. I've heard of a couple of doctors who aren't as scrupulous as you are. After living all this time, I think that I could be permitted one little crime, lying to them about a symptom. Then I know that I'd be made happy. What's the use being moral when you're too frail and tottery to enjoy life?"

Dr. Needzak shook his head, disapprovingly. "I don't think you're quite as miserable as you think you are. Don't go to those quack doctors. Suppose you're caught, halfway through a crime? You might linger for decades, half-well, half-sick, from the effects of what they'd give you. Even the quacks won't supply you with strychnine, you know."

"I know. I shouldn't have suggested it. But I get so tired of living."

"Well, I can't see any physical trouble that could have developed enough to warrant a complete exam since your last one. Maybe those arteries will start hardening by the

time you have that 190th birthday. Or you could take up chemistry as a hobby. Just think what a fine explosion you might get mixed up in!"

"I thought of that." A couple of tears trickled down the wrinkled cheeks of Mrs. Watkins. "But the thrice-great-grandchildren watch me like a hawk. They don't let me do anything that might hurt me. I suppose I'll just have to wait, and hope, and wait, and pray."

She rose, very suddenly. Then she shook her head disgustedly. "I don't even get dizzy when I do that, like most people my age. Thank you, anyway, doctor." Mrs. Watkins walked out with dignity.

Dr. Needzak noticed that his waiting room was filling rapidly, during the two seconds that Mrs. Watkins opened the door to leave. He fumed inwardly at his patience in dealing at length with cases like the last two, whom he couldn't possibly be sure of helping.

But his ill-humor was replaced by astonishment. The receptionist introduced a woman even younger than he. She was very pale, but Dr. Needzak guessed that that pallor derived from tension, not some rare organic disturbance.

"Are you sure that you haven't made a mistake, Miss Tillet?" He asked the question quietly, trying to catch her eyes. She kept them resolutely on her hands, which were folding and unfolding in her lap.

"I talked with several good friends before coming to you, doctor," the girl said. Her voice was very low. "You had been a good doctor for their grandparents or great-grandparents. They told me that you could help me, if anybody could."

"But your preliminary examination shows nothing whatsoever wrong with you," the doctor said. "It'll be another century before you would normally develop the slightest symptom on which I'd be allowed to work. And people of your age just don't go to doctors. It's only when you're past the century mark, and know that decade after decade stretches out ahead of you, that you start feeling that a doctor might—"

"Please," she interrupted, almost inaudibly. "I don't think that a physician should allow the consideration of a patient's age to enter into his course of action. For personal reasons, I may need a doctor more than the average person six times my age."

"Will you tell me something about yourself? I'm not curious, except as far as knowledge might affect my recommendations."

"I don't care to discuss personal problems. Now, doctor, your assistant who gave the preliminary examination overlooked the reason for my coming to you. Right here," and she carefully touched a spot on the well-tailored dress. "I think that it might be a tumor."

"What good does it do to come to a doctor for that?" Dr. Needzak said. "Tumors are so rare that there's very little chance that it's more than your imagination. And the best physician can't speed up the growth of a tumor, or change it from benign to malign."

"A physician can diagnose," she

answered. "If it's malign, I'll be able to have patience. I won't need to break the law." Unexpectedly, grotesquely, she drew one finger across her throat in a cutting gesture, and looked squarely at him for the first time.

Dr. Needzak walked softly to the door that led to the reception room. He drew noiselessly a bolt across the jamb, locking it. Then he pointed to another door, telling the girl: "Go in there and undress. I'll be ready for you in a moment."

He whistled softly under his breath, as he pulled instruments and jars of colored substances from the deepest recesses of a cupboard.

The girl already lay calmly on a metal table in the inner room when Dr. Needzak entered. He staggered a trifle under a precariously balanced pile of equipment in his arms. He explained:

"I should let the receptionist do the hard work like this. But I don't let her snoop around in this private room."

"Will you really need all those things?" the girl asked, uncertainly. "I thought that you just snip out a tiny specimen with a little gadget, to make a diagnosis."

"I could probably get along with just that one gadget," the doctor said. He pulled a mask from a drawer and snapped on the sterilite. "But I'm an old boy scout at heart. Always prepared." Unexpectedly, he plopped the mask squarely over the girl's face. Her cry was almost inaudible, as the thick gauze clamped itself over her mouth, clung tightly beneath the jaw.

Dr. Needzak pinioned her shoulders to the table, while her legs kicked wildly for a few seconds. The anesthetic stopped the kicking within five seconds. He waited for a count of ten, before he wrenched the mask free. Turning up the sterilite to full strength, Dr. Needzak began to line up surgical instruments in a neat row, humming under his breath.

Fifteen minutes later, the physician made a pair of injections into the girl's upper arm. Then he swished oxygen into her face until she recovered consciousness.

"Wonderful stuff, this new anesthetic," he told her placidly. "It works fast, wears off just as fast, doesn't leave the patient retching. Now, you can sit up slowly. If you don't try anything strenuous for the next day or two, you'll never know that you've had an operation."

Miss Tillett's eyes widened. "Operation! I came here for a diagnosis. I didn't authorize—"

"I'm sorry. I operated without your consent. But I had a good reason. It wasn't even a benign tumor that you had. It was only a cyst. If I had merely diagnosed, and told you the truth, you would have kept clinging to the hope that it might be a malign tumor. You wouldn't have let me take it out. It would have grown big enough to disfigure you, not big enough to cause you any physical damage. You would have gone through the years with a new trouble, that of deformity, and you might have been mentally warped in the delusion that you had a fatal disease. You're as sound as a rock."

Something inside the girl seemed to turn into liquid. She sat with slumped shoulders, arms dangling limply at her side, and head sunk so far that her chin rested against her chest.

After a moment, she rose and walked slowly into the dressing cubicle. When she emerged, she ignored the doctor, unlocked the door with her own hands, and walked into the reception room, sobbing softly.

Dr. Needzak cleaned up rapidly, and hustled into his main office to see his next patient. No one was there. He grumbled to himself and opened the door into the reception room. Blinking, he saw that it was empty. It had been filling rapidly, not a half-hour earlier.

The doctor had heard no noises indicating a commotion on the street outside; and that was the only reason he could think of for the sudden disappearance of his patients. To make sure, he strode through the reception room, walked briskly down the short hall, and stuck his head through the door leading into the street. Everything appeared normal in the bustling business district, until a large, black sedan ground to a stop at the curb in a no parking zone. The receptionist climbed from the vehicle, two men behind her.

"Miss Waters!" Dr. Needzak exploded, when she reached the building's entrance. "What do you mean by leaving without my permission? All my patients have left. They must have thought that office hours were over."

The receptionist gave him one baleful look, and shoved past him into the building. And Dr. Needzak suddenly recognized the two men.

"Bill Carson! And Pop Manville! What brings you big doctors down here to see a small-time pill-dealer like me?"

"Let's go into your office," Pop said, softly. He was old, tall and gaunt with a perpetual look of worry. Dr. Carson, younger and bustling, evaded Dr. Needzak's eyes.

Miss Waters was shoveling personal belongings from her desk into a giant handbag, when they reached the reception room. Dr. Needzak felt her eyes upon him, as the other two physicians kept him moving by the sheer impetus of their bodies into his consultation room.

"Where is it, Walt?" Dr. Manville asked, looking gloomily around the consultation room.

"Where's what, Pop? The drinks? I keep them—"

"The door to your operating room," Dr. Carson interrupted, hurriedly. "Let's not drag this thing out. It's going to be painful enough, among old friends. Your private office has been wired for sight and sound for the past three weeks. You shouldn't have tried to get away with that kind of practice in a big city."

Dr. Needzak felt the blood draining from his face. He reached for a drawer. Dr. Manville grabbed his arm with a tight, claw-like grasp, before it could touch the handle.

"It's all right, Pop," he said. "Nothing but gin in there. I'm not the violent type."

Dr. Carson pulled open the

drawer toward which he had reached. He pulled out the tall bottle, slipped off the patent top, and sniffled. Handing it to Dr. Needzak, he said:

"Okay. You need some. Then save the rest for us. We'll feel like it, too, when we're done."

Dr. Needzak coughed after three large swallows. He looked at the other two doctors. "Who ratted?"

Dr. Carson nodded toward the reception room. Dr. Needzak instinctively clenched his fists. He half-rose from his chair, then sank back slowly. "I thought you guys were my friends," he said.

"We are, Walt," Dr. Manville said thoughtfully. "But this is business. When someone charges violation of medical ethics, we're the investigation committee. It looks like a simple investigation this time, with those tapes on file."

"What does she have against you, anyway?" Dr. Carson asked. "Usually a receptionist will go through hell to cover up little flubs for her boss. Were you mixed up with her in a personal way?"

"Mixed up with her?" Dr. Needzak laughed mirthlessly. "She's worked for me fifteen years. I've never made a pass at her."

Dr. Manville nodded sadly. "That was your mistake, Walt. Frustration. Disappointment. Worse than jealousy. Now, why not tell us everything?"

"There's nothing to tell. Those tapes give a false impression, sometimes. I just take difficult cases back there where I'm sure there won't be any disturbance."

"No use," Dr. Carson interrupted. "Things will be harder for you, if we lose patience with you. We know you've been curing illness against the patient's wishes, time after time. We just saw you take out a tumor. The poor kid will probably drag through another hundred years before she develops anything else serious. You prescribed anticoagulants to a man with an obvious blood clot. You even talked a couple with weak lungs into moving to Denver."

"All right, it was a tumor," Dr. Needzak admitted. "It was malign and it would have killed her in two or three years. But she's too young to make a decision for herself. Five years from now, she may have a different outlook on her personal problems. I have ethics, and I can't help it if they don't correspond in some details with the association's ethics."

"You were given your medical license under an oath to respect the ethics of the profession," Dr. Manville said slowly, emphatically. "The license did not give you the right to practice under ethics of your own invention."

"Ethics!" Dr. Needzak looked as if he wanted to spit. "Ethics is just a word. There was a time when physicians spent their time curing diseases and preventing them. They called that ethics. Now that there aren't enough illnesses left to give us work, now that people live long past the time when they want to go on living, now that we make our money helping people commit suicide the legal way, we call that ethics."

"You can't annihilate a concept

simply by thinking it's only a word," Dr. Manville said. "There was a time when physicians used leeches for almost every patient. They fitted that nasty habit into their ethics. You wouldn't want to introduce leeches into this century would you? But you should, if you're so consistently opposed to anything that sounds like changes in ethics."

"But I've done my part to get rid of human miseries," Dr. Needzak said, nodding toward a filing cabinet. "I can show you the data on hundreds of my patients. Old folks, who just got tired of living; I helped them die legally. Even younger people, who had a genuine reason for being tired of life. I couldn't have my fine home or pay rent in this building, if I went around curing every patient. There's no money in that."

"You wouldn't keep a filing cabinet for the times you disobeyed the medical code," Dr. Carson broke in. "But we have some of those cases on tape. You didn't refuse to handle the cases. You went ahead and played God, going directly against the direct will of your patients. Did you follow up all of the patients who aren't in your file cabinets? We traced the later records of some of them. Several suicided right out in the open. Their families haven't gotten back on their feet from the disgrace yet."

Dr. Needzak took two more deep swallows from the bottle. He looked glumly at the low level of the liquid through its dark side, saying:

"You fellows are enjoying this conversation more than old friends should enjoy the job of taking action against a fellow-doctor. And I'll tell you why you aren't too unhappy about it. You're jealous of me. You're jealous of the fact that I've been following a physician's natural instincts and healing people. You're angry with me for doing the things that you'd really love to do yourselves, if you had the guts. You aren't worried about that girl; you're peeved because you'd give your shirts for a chance to take out a genuine tumor yourself."

"Admitted," Dr. Carson said cheerfully. "I haven't seen a live tumor in three or four years. They're scarce. But we can't sit here chatting. We don't want to end up arguing."

Dr. Needzak rose. "What do I do, then?"

"The best action would be to come along with us to the association headquarters," Dr. Manville advised, avoiding Dr. Needzak's eyes. "In a half-hour or so, you can sign enough statements to avoid weeks of hearings. Otherwise, we'll be forced to bother lots of other physicians, hunt up your old patients, endure newspaper publicity, and have a general mess."

"After that, I start pounding the pavements, hunting a job." Dr. Needzak flexed his long, lean fingers. "Is it hard to learn how to operate ditch diggers?"

Dr. Carson stood up and slapped him on the back. "It isn't that bad. You can find a place in any pharmacy in the country, if we get through this disbarment without publicity. You'll never be rich, handing out irritants and hyper-

stimulants, but—"

Dr. Needzak was already striding toward the street. The other two doctors trailed after him, waiting while he locked up carefully. They glanced at one another significantly, noting that he had unconsciously brought along his little black bag. Dr. Needzak explained as they began the two-block walk to association headquarters:

"The kids are married and away from home. I suppose that I can get enough income from sub-leasing the office to keep the wife and me eating until I find—"

A grating crash broke into his sentence. The three doctors whirled simultaneously. Thin wails drifted through the constant rumble of traffic, from somewhere around a corner. People erupted from buildings, running toward the source of the noise. The doctors instinctively trotted after them.

THEY TURNED the corner, coming upon a rare sight. It was a motor vehicle accident, first in the business district for months. A school bus lay on its side, just short of the intersection. Children were clambering cautiously from the emergency door. The uniformed driver was ignoring his passengers, staring in disbelief at the radar controls at the street corner, which had failed a moment earlier.

The other vehicle involved in the crash was wrapped around a power pole. It was an auto of antique vintage, produced before full automatic driving provisions. There weren't more than a dozen such vehicles remaining on the streets of the city. The radar controls almost never went on the blink. Only the combination of the vehicle and the inoperative controls could have created an accident.

Dr. Needzak led the other doctors through the thickening crowd, to the side of the bus. Kids were no longer climbing through the emergency exist, but noises were coming from within the vehicle. His bag under his left arm, he hauled himself atop the overturned bus, and dropped through the emergency exit into its half-dark interior. He saw the other two doctors outlined against the sky, as they perched on the horizontal side of the vehicle, peering down, helpless without their bags.

Dr. Needzak found a small boy sprawled awkwardly around a seat, bleeding rapidly from the leg, face ashen, unconscious. The physician clipped off the trousers leg, bound the leg tightly above the deep gash, and slipped on a bandage. Then he lifted the small boy up to Dr. Carson.

A girl was struggling to raise herself from the next seat, obviously unaware that the leg wouldn't support her because it had suffered a compound fracture. Dr. Needzak forced a grin when he attracted her attention. He persuaded her to lie flat. With one quick motion, he rough-set the leg. Then he boosted her out of the vehicle, and looked down to investigate the source of the plucking at his coat.

It was a small, chubby boy, standing beside him. "I'm hurt real bad," the boy said. Needzak

ran his hands over the boy's body to make sure the bones were sound. "You better take care of me real quick," the child said, looking more worried than ever.

Dr. Needzak made sure that the blood on the boy's cheek came from only a scratch, and found the heartbeat normal. So he pulled a a sugar wafer from his bag and ordered the boy to swallow it.

"Think you can climb out now?" Dr. Needzak asked. The youngster, face brightening, leaped to the door and went out unassisted.

The only child remaining in the vehicle hadn't uttered a sound. But the doctor sensed that her breathing was heavier. He bent over her, and pushed back the lid of her half-closed eye. When he saw the back of her head, he stopped his hasty examination. Her words were barely audible. "Am I hurt bad?"

"Why, there won't even be any pain," Dr. Needzak told her cheerfully. Before he could yell to the other doctors to call for a stretcher, the girl's breathing stopped.

Slowly, as if suddenly tired, Dr. Needzak climbed out of the vehicle.

Police had already dispersed the crowd. Tow trucks were waiting to haul away the vehicles. The injured children were gone. The three doctors resumed their walk.

Dr. Needzak felt the eyes of the other two men on him, lost patience after a moment, and said irritably:

"Go ahead, start bawling me out. But I've not signed anything yet. I'm still a licensed physician. I had every right to help those kids."

The other two doctors stopped, looking at one another, as if trying to probe each other's thoughts. Simultaneous smiles spread over their faces. Dr. Needzak stopped walking, when he heard them starting to laugh. He pushed between them with a frown, asking:

"Look, if you—"

Dr. Carson slapped him on the back, hard. Dr. Manville grasped Dr. Needzak's hand and squeezed it with unexpected strength.

"The same thing hit us both at the same time, I'll bet," the older doctor said. "It would be the ideal thing for you."

Dr. Carson was pumping Dr. Needzak's other hand up and down. "Sure. Emergency physician! I don't know why we didn't think of that in the first place. Accidents still happen now and then. It isn't easy to find doctors who are willing to specialize in them, because it isn't steady income and it doesn't pay a whole lot. But you have those screwball ideas about helping people to get well. And that's just what an emergency physician must do."

"I'll talk to a couple of the men on the association board as soon as I can get to a telephone," Dr. Manville said. "I think I can persuade them to assign you to accidents without going through a disbarring procedure, as long as you agree to stay away from general practice. You're willing, I assume?"

Dr. Needzak pulled his hands free and looked at the spots of dried blood that remained on the fingers and palms. He hadn't been able

to wash up after the accident. He saw surgeon's hands, healing hands, hands that would never be satisfied to wrap up syrups or count pills.

"I suppose that it's the best thing in a bad deal. But I'm wondering about accidents. Just the other day, I read an insurance company statement. The insurance statisticians said that accidents have become so scarce in the past decade that they'll be virtually non-existent, in another half-century. I'll be 100 by that time, just in the prime of life. If there aren't any more accident victims, what will I do for a living? I couldn't find a job at that age, you know."

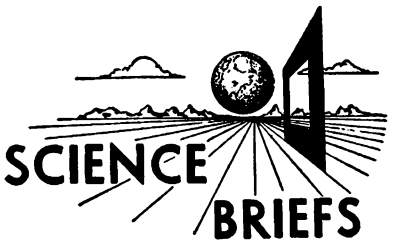
The other two doctors shrugged their shoulders, in unison. With the wisdom of age, Dr. Manville said:

"Well, if you find yourself in that situation, you can always go to see a doctor. • • •

What Is Your Science I. Q.?

TRY answering this "baker's dozen" of science-wise questions and see where you wind up. Score 10 points for each correct answer. Anything over 100 is very good. Answers on page 115.

1. What is the critical temperature of hydrogen?
2. A nodule of stone having a cavity lined with crystals or mineral matter is called a ———.
3. Mohs' scale refers to the hardness of ———.
4. What temperature is absolute zero on the Centigrade scale?
5. The point at which a nervous impulse passes from one neuron to another is called a ———.
6. What is the C.G.S. unit of magnomotive force called?
7. The mathematical "rule of three" states that the product of the means equals the product of the ———.
8. What color is evoked on the spectrum by light waves 760 millicrons in length?
9. According to biology, two X chromosomes in a fertilized egg will produce a ——— offspring.
10. What do we call an ion that is both positively and negatively charged?
11. North latitude 71°, west longitude 96° pinpoints what spot on the globe?
12. Brinell number refers to the resistance to pressure of ———.
13. The relation of two celestial bodies when 90° distant from each other is called a ———.



A new type of bus will be built as soon as countries of the world have roads to take it. The new coach is to be built entirely of plastic and will be roofed with polarized glass, so that passengers will have an uninterrupted view without having to worry about the glare of the strongest sun. Passengers will be seated in individual armchairs that can be inclined or swiveled at will. The plastic construction will make for extreme lightness, but give the same strength now associated only with metal construction. The coach is to be air-conditioned, and the design includes arrangements for radio-telephone and television. Other equipment includes refrigerator, coffee-machine and buffet. Suspension of the coach will be independent on all four wheels, incorporating a balancing system for expected high speeds. It will also have special tubeless tires and the gas turbine motor, which is being built by Fiat, will be mounted under the floorboards.

The boss of the future may dictate letters directly to a phonetic typewriter or speech writer that will type out his words. A model of such a voice-operated typewriter has already been constructed and has a vocabulary of ten common English words, including "Are, see, a." It types from dictation with 80% accuracy which, researchers comment, "is probably as good as the average secretary." The first step toward the speech writer was to analyse speech in terms of "formants". Next problem was conversion of the energy of speech sounds into a series of visual tokens whose number of types is on the same order as the number of different symbols in a written language. Development also includes such factors as the particular form in which the word is typed, the means for analyzing the sounds of speech, identification of sounds, translating sounds into impulses for actuating the machine, and finally design of mechanism for operating the typewriter.

Next step in keeping the atomic peace may be internationalization of the radar and other warning nets. Scientists in the know have privately been suggesting that it might be effective for both the U.S. and the Russians to admit that their warning networks are in great danger of clashing and getting mixed up with each other. They suggest that the two countries get together and man a jointly consolidated warning line pointed both ways. Each side would, of course, reserve the right to have their own air intelligence. With United Nations the logical agency to perform the function, World peace may be bought more cheaply and more safely with such a joint operation.

Paper made from sugar cane may soon help solve the shortage of pulpwood for papermaking. A fibrous residue of sugar cane stalks, known as bagasse, is already being made into newsprint. Now agriculture scientists have found an economical method for making other grades of paper from the waste product. The new process separates bagasse fibers from the pith, which gives greater strength to fibers for use in making fine bleached papers and packaging materials. Bagasse papers are stronger than softwood papers in all but tearing resistance. They are particularly suited for blending with wood pulps to make different kinds of paper products. The pith remaining after bagasse fibers are extracted is useful as a carrier for blackstrap molasses used as feed.

An atomic arsenal on rails designed to fight the nation's destructive agricultural pests may soon be crisscrossing the nation's farmlands. As a mobile railway irradiation station, the proposed "Atomic Flyer" could be used to treat potatoes to keep them from sprouting; process citrus fruits, curtail fruit fly infestation, increase the shelf-life of seafoods and sterilize the insects in grain and cereal that annually eat their way through $3,000,000,000 worth of food. Preliminary design is already completed and it is hoped that the 73-ton unit can be built by government or industry and placed in operation within two years. Engineers estimate the radiation train will cost $93,400 to build and $114,000 a year to operate. The rolling station could handle from one-half to 11 tons of food an hour, depending on the dosage required. The cost of treatment per ton would range from $2.25 to $40.80.

Earth is now between two Ice Ages and another glacial advance can be expected within a few centuries, according to proposals made by scientists recently. Some hundreds of years from now, temperature decreases will mark the start of a new glacial period. At the time, the Arctic Ocean, which seems to have been warming up recently, will be entirely ice free. For the last few thousand years, researchers point out, temperatures have remained about as high as the highest value reached during any previous interglacial stages. These temperatures are regulated by the surface layers of the Atlantic and Arctic Oceans, not external conditions. An ice-free Arctic Ocean would result in a marked increase in the exchange of water between the Arctic and the Atlantic, warming the former and cooling the latter. An open Arctic would provide moisture for glacier growth but would eventually reduce sea level, resulting in a sharp decrease of the inflow of warm Atlantic water into the Arctic Ocean. The cooling effect would eventually produce a new Arctic ice sheet.

A "made to order" super alloy, representing a major step forward in metallurgy, was shown in New York recently by its developers. The alloy, called Nivco, was hailed by scientists as the forerunner of a new class of metals that can be "tailor-

made" to do a specific job. Important as is the alloy itself, research technique used to develope the alloy is perhaps more important. The process permits "predesign" of needed properties in an alloy before it is ever prepared, thereby eliminating the time-and-money-consuming "cut and try" methods now being used. The new material, five times stronger than 12% chrome steel, resists breakdown when subjected to temperatures as high as 1,200 degrees Fahrenheit and mechanical vibration. Although exact ingredients of the new alloy were not disclosed, metallurgists said it contained cobalt and nickel and smaller amounts of five additional elements. An immediate application for the alloy will be for high-temperature steam turbine blades.

The day when television antennas can pick up any station within range without need of rotation is foreseen. Physicists have found that, at least in theory, pick-up can be altered by feeding power to points other than the center of the antenna as is now done. Changing the power feed point should set up reception waves simultaneously in from two to several directions. The study was initiated because when the artificial satellite is launched communication between it and Earth is important and very little is yet known about the mathematical equations which govern the operation of antennas. Since a rocket or satellite couldn't use an outside antenna, scientists are investigating the possibility of cigar shaped antennas and find that it is possible to treat the rocket itself as an antenna by applying electrical charges to various parts of the rocket.

Radiation forecasts may soon be appearing in the daily newspapers along with the weather summaries. Since such information is more vital potentially, to human health and welfare than temperature or rainfall figures, the National Academy of Sciences has suggested it as one way to keep people posted for their personal safety and the prevention of defective children in future generations. In the atomic industry each worker carries a radiation badge. In our atomic world everyone may be asked to carry some such radiation record or to be inspected, like one's car, periodically. Or we may have personal X-ray records for medical radiation, and doctors and dentists may be required to go through them periodically to check radiation "debits". Even the prospective bride may ask for such information on the groom along with such prosaic matters as money in the bank.

WHAT IS YOUR SCIENCE I.Q.?

ANSWERS: 1—Minus 242° C. 2—Geode. 3—Minerals. 4—Minus 273.1° C. 5—Synapse. 6—Gilbert. 7—Extremes. 8—Red. 9—Female. 10—Zwitterion. 11—North magnetic pole. 12—Metals. 13—Quadrature.

IT'S COLD OUTSIDE

(Continued from page 35)

my fault. They killed him because he tried to help us."

"No," said Jerry. "It had nothing to do with you. He told us about you, but they never knew of any connection, either way. Mark slipped up somewhere along the line, or they were too clever for him. It's a chance we all take.

"We volunteer to go in. To infiltrate the system and help point up its evils and contradictions to intelligent people—people like you."

"You had me fooled, "Oren said. "But in the end it was that crazy gag line of yours that we remembered—and we went."

"You certainly did," Jerry said. "You went a lot sooner than we expected you to and we had the devil's own time finding you. I come here every Jubilee Day—guiding a tour of drunks from Inside makes fine camouflage. It's a sort of wide-open town anyway and I can report and get new instructions from Outside. The old man told me you were here. He's one of us."

"I liked him, too," Oren said. "How many of you are there, Inside?"

"Plenty of us. There have to be, because there are a lot of you—people we need Outside."

"You *need* us?" Edith asked. "Honestly? We're not just—refugees?"

"You're a *cause celebre,*" Jerry said. "And in that connection I think I can reassure you about your baby, Mrs. Donn." Edith looked toward the crib where Marty was sleeping. "The new one," Jerry said. "We've had experience with the para-ray and your baby will be all right."

"Thank God," said Edith.

"And of course we need you," Jerry went on. "We're rebuilding from nothing. We've got willing hands and stout hearts but we need a brain or two besides. And a little music to lighten the burden, Mrs. Donn.

"We want to live in peace with the City-States, even though we're the remnants of their defeated enemies. But if we can't live side by side in dignity and if it comes to a struggle, one day there'll be a lightning coup from within and without simultaneously. As I said, there are many of us, and some of us are pretty high up."

"Do you mean in the government itself?" Oren asked.

Jerry smiled. "I've talked too much already. And I have to get back to the roisterers. Now go to sleep. Talk to the old man in the morning and he'll send you to a man who'll show you the way."

As he left them, Jerry Hilarious said softly, smiling and without the gesture:

"G'wan outside!"

As they walked, the next morning, towards sanity and dignity, the sun came out. It was warm and friendly.

Edith felt a slight movement of life inside her.

Maybe she'd never write the fourth movement of her symphony now, but she didn't care. She was beginning to live it. • • •

Dear Mr. Quinn:

In the "Hue and Cry" section (which, by the way, I seldom read) of the August issue of IF, I came across an Ed's note at the very bottom of the last page which ran: "Reader Bellows has grabbed a tiger by the tail. Hope he's got more than personal opinions to back up his stand." . . . After reading the preceding letter, I was inclined to agree that Bellows had indeed grabbed a tiger by the tail.

By the very nature of his (or her) letter, even the most rear-ranked amateur is able to deduce that friend Bellows is a fatalist in his beliefs about Mankind's destiny. And, in the fault-finding way of every fatalist, is living up to his name by BELLOWing about it to the high heavens. In the relatively short time that Man has thrived upon this planet as an intelligent species, he has literally lifted himself by his bootstraps to a position where he is able to look back at what he has achieved with a certain amount of satisfaction; in the same breath, he is able to look forward to the position he desires to attain avoiding the dangerous pitfalls he has come to recognize across the years through a process of trial and error.

I believe I can sum up my whole gripe in the words of Omar Khyyam; fatalist; deceased:

"The Moving Finger writes; and, having writ,
Moves on: nor all your piety nor wit
Shall lure it back to cancel half a line,
Nor all your tears wash out a word of it."
Dwell on that, Sir (Lady) Bellows!!!"

—Wayne L. Simpson
Peoria, Illinois

Dear Editor:

I agree with K.J. Ashton in that a meeting with "aliens" is inevitable, and that science fiction is not helping us prepare for it. What if this meeting is being prevented, or has been prevented by the adverse mental stereotypes created by science fiction?

Science fiction novels, magazines and especially Hollywood films have painted aliens, whether correctly or otherwise, in an unfavorable light. I feel too many people would adopt a "shoot first" attitude because of this overall picture.

It seems thus logical to assume that under such a deluge of unfavorable writing and the mental at-

titudes it is creating, no alien would risk open contact.

—Allan Marcus
Lorain, Ohio

Sirs:

There are two questions I would like to answer. First—concerning the cruelness of characters from outer space—frankly, I believe this portrayal is a mistake. If man is to prepare for the meeting, why isn't it just as plausible to suppose these creatures or beings are the sort that would realize our shortcomings and be willing to help us?

And two: This fellow Bellows—yes, I agree, Man is not ready for other worlds. He has had Utopia at his finger-tips—stripped it bare, upset its natural laws, bickered and destroyed. How can he expect to exact Utopia from another world when he can not even manage his own?

Mankind has not reached his full potential and this would seem to me to be the first step he must take . . . his own perfection. Then and only then will he be ready to look on other horizons, other worlds.

—Meta Vratny
Detroit, Mich.

Dear Editor:

The obvious fallacy of Mr. Ashton's letter was too great for me to let it pass unchallenged. I fear that all he has done is to show his ignorance of science fiction.

So he wants kind aliens, does he? Well what about Ho-Pan Xvin in Tenn's "The Deserter"; Maeth in "The Witness" by Eric Frank Russell; the People in Zenna Henderson's "Ararat"; the alien in "Alien" by Lester del Rey; Nemo in "The Clinic" by Sturgeon and a host of others—in particular lovable Mr. Green in Richard Wilson's heartwarming "Friend of the Family".

I suggest that Mr. Ashton read these and if he isn't forced to eat his words I'll send him some more.

—Kent Meyers
Le Roy, Minn.

Dear Mr. Quinn:

In criticism of Mr. Ryder's letter in the June issue. I would like to comment that his complaint against anti-science "humanists" is too general. We must realize that many scientists are "humanists" in their own way and not a few "humanists" are also scientifically minded, in the material sense.

The morality of scientific discoveries in the physical realm arises in the application of these discoveries; both "humanists" and scientists share the blame for any existing evils stemming from technical progress. It is well known how far afield certain scientists go, even to the extent of dogmatically pronouncing on metaphysical problems such as the existence of God. On the other hand, many humanists have adopted the spirit of science, namely pragmatism, in investigations, in social, religious and philosophical subjects. Paradoxically, this last group breeds anti-intellectual philosophers. Justification for either attitude, I suppose, can be found in the fact that some people regard man as a mere material being. The controversy is not between "smug liberal arts" and "disinterested

physical science", but between pragmatism and classic traditionalism, between expedient morals and necessary morals. If we take the trouble to look, we will find "humanists" and scientists on both sides of the fence, so neither faction alone is to blame for the evils of applied science.

—A. M. King
Ames, Iowa

Dear Mr. Quinn:

I want to compliment you on the June issue of IF, especially "Z". I'll go so far as to say that newspaperman Fontenay's "Z" is the best story I've ever read. It is one of the few times I have ever seen a completely new concept used. However, a couple of things seem to be inadequately explained: 1. Since Summer was regressing, or rather growing backward through time, how can her affection for Thomas the cat, which led her to be caught in the explosion, be explained (unless it was a holdover from her previous existence as Mark)? 2. I can see how, immediately before the explosion, Summer would speak and act in reverse, but why would each separate word be normally spoken?

I've been reading IF for over two years now, and I honestly believe it's the best s-f magazine on the market. Would also like to hear from other sfans in the area.

—Charles Boldrick
Lebanon, Ky.

The affection for Thomas was indeed a holdover . . . we know because we asked the same question. We thought of the other one too; but decided we could take some "poetic license" since both printers and proofreaders would have gone stark staring mad if we tried to spell all the words backwards too—to say nothing of the readers.

Dear Mr. Quinn:

I have recently carried a figure to the fourth dimension and am now working out a formula. It proves that time travel is impossible and that the future doesn't exist until we get there. If you would like to have the formula for your letter column please let me know.

—Wiley Jordan, Jr.
Brookings, Ore.

We definitely do want to see that formula and we're darn sure most of our readers do too.

A LITTLE KNOWLEDGE

(Continued from page 89)

you can teach us something about space flight and your mental powers."

"Oh yes!" said Olbu eagerly. "And if I have by any chance cast reflections on your planet . . ."

"My dear Mr. Olbu, science has never suffered when scientists have dealt frankly with problems at hand."

"I'm afraid our time is up," put in Cecil Burroughs. "Thank you gentlemen, and I hope our viewers will tune in again next week when we will have two interesting personalities, Sam Katchum, who tames rattlesnakes, and Joe Wattles, who stuffs cobras. Glad we could be together."

Ralph Rodkey shook Dr. Bruber's hand as he emerged from the broadcast room. "You saved my life; you saved my job!"

"Think nothing of it, Ralph. It was nothing I wouldn't have done for myself."

"But if you hadn't known about GC1242 becoming a super nova—"

"You don't think the loss of GC1242 was accidental, do you?"

"Good Lord, Bruber. I don't know anything about those things."

"As our friend Olbu said, Man develops along certain patterns . . . first his own planet, then neighboring planets, then star systems."

"You don't think—?"

"I do, Rodkey. I do. Somebody else was just a little more advanced than GC1242 and did to them what they wanted to do to us."

• • •

ROUTINE FOR A HORNET

(Continued from page 59)

unconscious. His face was battered by windblast almost beyond recognition, and his body equally so. When the rescue team pulled him from the water, three hours later, they thought he was an old man. His eyes were a mass of red, from dozens of sub-conjunctival hemorrhages. He would see again, but not until after weeks of near blindness.

But he was alive. When he woke up in the California hospital four days later, he considered ruefully that that was about the best one could expect in his business.

"Cressey, can you hear me?"

"Yes, I can hear you. Who is it?"

"It's Captain Mackley. I've come to see you."

"Well—thanks, Captain."

"You got the Outspacer, Cressey. I thought you'd like to know."

"Frankly, Captain, I couldn't care less. But thanks for telling me, anyway."

"It means a lot, Cressey. There were a lot of people's lives riding with you."

Yeah, I'm a hero. I'm a Hornetman.

"Thanks, Captain."

"Was it pretty rough?"

Rough? Like birth and death and all of life, rolled into minutes.

"No more so than I expected, Captain. Pretty much routine. Routine for a Hornetman." • • •

—Continued from Back Cover

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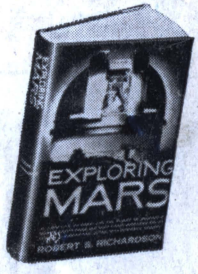

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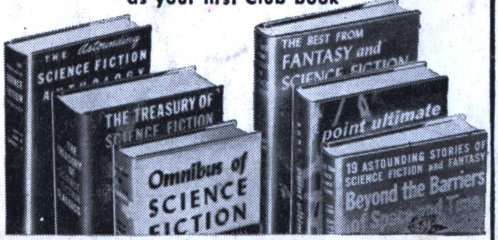

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