



WORLDS of SCIENCE FICTION

APRIL 1954 35 CENTS





CITY IN THE DESERT—With population passing the 200,000,000 count, people will be pushed onto desert land or into the wildernesses. Here is an independent, city-containing building housing 25,000 people, along with all shopping centers, gardens, recreation and entertainment facilities required by a city of that size. Design of the structure is such that the building itself provides needed shade over the entire desert area which it occupies. (Now see inside back cover.)

WORLDS of SCIENCE FICTION

APRIL 1954

All Stories New and Complete

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Cover by Ken Fagg: *A Space Nation Composed of
Independent City Planets*

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COVER PICTORIAL: Homes of the Future
By Ed Valigursky

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A CHAT WITH THE EDITOR

EVERY NOW and then it seems like somebody's gotta put in a good word for Mankind because, judging from some of the manuscripts coming into this office, the poor ole guy is doomed irrevocably and finally to fire and brimstone. Maybe certain themes in science fiction run in cycles, and this is one of those cycles, but a flock of writers are certainly booking Mankind as the underdog—with a capital U and no bets taken.

The particular kind of plot we are allergic to portrays Mankind so broken down, degraded and depraved that the only cure is violent extermination. Like, if you come home and find the little wife pretty sick with a bad stomach ache or something—well, you just shove her into the furnace and that cures her stomach ache. Or, if you have a comparatively new house and you discover that the plumbing

leaks. In a case like this you call the Army (the Navy if you live near the seashore) and have them blow it to smithereens with one of their new cannons, and the plumbing leak is fixed forever. Or, in a more science fiction sense something like this:

A super-super intelligent being from Venus or Mars or somewhere lands on Earth and cases the joint. After spending a week on terra he decides—because a certain girl won't let him neck with her, or because a couple of ruffians engage in a beastly fistfight, or because the guy at the soda counter at a corner drugstore insists on getting paid for a chocolate sundae—that the world is no darn good and oughta be destroyed. So the author gives this Martian or Venusian or something an Atom bomb with which he blows up Mankind and the world and that's the end of the story. Or—some wise old bird, way off in space, gets a look at Earth through a telescope and decides he ain't happy with what he sees, so what does he do? You guessed it. He pushes a button and—zzzzzzzzz!—Mankind from pole to pole is cremated.

That's just a couple of examples how Mankind gets its cure from space. Then, there are the authors who figure that the Earth should take care of its own. In this manner we are devoured by animals, or we are eaten up by swarms of insects or we are nibbled happily to extinction by fish. The object here is that when every human being is digested the animals or the fish or the birds or bees would take over and be better rulers of Earth than

Mankind has ever been or can ever hope to be.

Now, let's see. Suppose, for instance, that the animal kingdom took over. Would all be Utopia, peace and quiet and happy hunting? In the pig's eye! The carnivorous ones would snarl and fight and eat each other. The vegetarians (like rabbits) would become so numerous so fast that they'd be fighting over the vegetables. Suppose the birds took over. What do you think would happen to little sparrows and robins with Mr. Hawk and Mr. Eagle running Congress. Or, how about the little bluefish or guppy with Senator Shark heading the foreign affairs committee? Anyhow, you see what we mean?

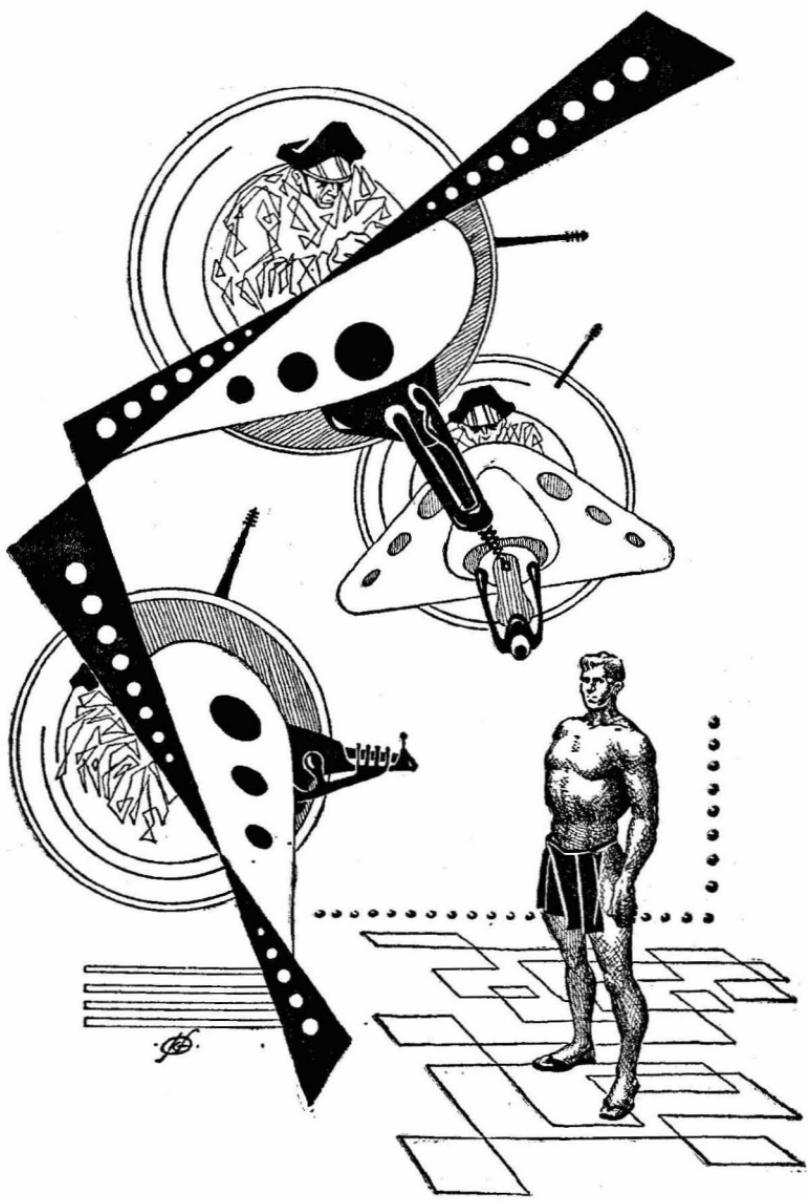
MANKIND has been around a long time and will undoubtedly be around a few more years. So it's kind of natural (don't you think?) that the old guy should be susceptible to quirks and cranks and a belly full of meanness now and then. Fundamentally, Mankind is no worse today than it was a hundred or a thousand or ten thousand years ago. From the very beginning it has been bicker and bungle, fuss and fight, maim and murder—but somehow it has always gone forward. Business, religion, education, economics, science, etc., etc., have all been built and advanced on bloodshed and violence. Just look at your history books and see if you can find one single, solitary phase of the

civilization we know today that hasn't incurred its share of bickering and bloodshed.

SO let's throw out the baggy-kneed theme of improving Mankind by destroying it. You can't improve anything by destroying it. Throw out the bad and there is no good. Throw out the good and there is no bad. If there is no darkness you got no light. If there is no light you got no darkness. Everything in this world is relative; without one thing you can't have another. This old universe is a pot of chemistry and its gotta keep boiling with its conflicting elements or there won't be a pot.

Of course, I'm an optimistic sort of guy myself, and I think most folks are. If they weren't, we'd still be back in the dark ages—or we wouldn't be around at all. Nor would the animals. They gotta be optimistic too, or they would have no scrappin', lovin' or eatin' either!

Fortunately, the doom, doom, doom, that's been reaching this office via Uncle Sam's mail is only a very minute, microscopic particle of the science fiction being written today. In both books and magazines you will find a lot of very fine writing with excellent science fiction themes—stories that are good, substantial, entertaining reading; stories that make you curious, that make you anticipate the future—not scared out of your boots about it. To these writers, whether they appear in this magazine or not, IF doffs its hat. —jlq



The powers of earth had finally exterminated the last of the horrible tribes of mutant freaks spawned by atomic war. Menace to homo sapien supremacy was about ended—but not quite. For out of the countryside came a great golden, godlike youth whose extraordinary mutant powers, combining the world's oldest and newest methods of survival, promised a new and superior type of mankind . . .

The GOLDEN MAN

By Phillip K. Dick

Illustrated by Kelly Freas

IS IT ALWAYS hot like this?" the salesman demanded. He addressed everybody at the lunch counter and in the shabby booths against the wall. A middle-aged fat man with a good-natured smile, rumpled gray suit, sweat-stained white shirt, a drooping bowtie, and a panama hat.

"Only in the summer," the waitress answered.

None of the others stirred. The teen-age boy and girl in one of the booths, eyes fixed intently on each other. Two workmen, sleeves rolled up, arms dark and hairy, eating

bean soup and rolls. A lean, weathered farmer. An elderly businessman in a blue-serge suit, vest and pocket watch. A dark rat-faced cab driver drinking coffee. A tired woman who had come in to get off her feet and put down her bundles.

The salesman got out a package of cigarettes. He glanced curiously around the dingy cafe, lit up, leaned his arms on the counter, and said to the man next to him: "What's the name of this town?"

The man grunted. "Walnut Creek."

The salesman sipped at his coke

for awhile, his cigarette held loosely between his plump white fingers. Presently he reached in his coat and brought out a leather wallet. For a long time he leafed thoughtfully through cards and papers, bits of notes, ticket stubs, endless odds and ends, soiled fragments—and finally a photograph.

He grinned at the photograph, and then began to chuckle, a low moist rasp. "Look at this," he said to the man beside him.

The man went on reading his newspaper.

"Hey, look at this." The salesman nudged him with his elbow and pushed the photograph at him. "How's that strike you?"

Annoyed, the man glanced briefly at the photograph. It showed a nude woman, from the waist up. Perhaps thirty-five years old. Face turned away. Body white and flabby. With eight breasts.

"Ever seen anything like that?" the salesman chuckled, his little red eyes dancing. His face broke into lewd smiles and again he nudged the man.

"I've seen that before." Disgusted, the man resumed reading his newspaper.

The salesman noticed the lean old farmer was looking at the picture. He passed it genially over to him. "How's that strike you, pop? Pretty good stuff, eh?"

The farmer examined the picture solemnly. He turned it over, studied the creased back, took a second look at the front, then tossed it to the salesman. It slid from the counter, turned over a couple of times, and fell to the floor face up.

The salesman picked it up and

brushed it off. Carefully, almost tenderly, he restored it to his wallet. The waitress' eyes flickered as she caught a glimpse of it.

"Damn nice," the salesman observed, with a wink. "Wouldn't you say so?"

The waitress shrugged indifferently. "I don't know. I saw a lot of them around Denver. A whole colony."

"That's where this was taken. Denver DCA Camp."

"Any still alive?" the farmer asked.

The salesman laughed harshly. "You kidding?" He made a short, sharp swipe with his hand. "Not any more."

THEY WERE all listening. Even the high school kids in the booth had stopped holding hands and were sitting up straight, eyes wide with fascination.

"Saw a funny kind down near San Diego," the farmer said. "Last year, some time. Had wings like a bat. Skin, not feathers. Skin and bone wings."

The rat-eyed taxi driver chimed in. "That's nothing. There was a two-headed one in Detroit. I saw it on exhibit."

"Was it alive?" the waitress asked.

"No. They'd already euthed it."

"In sociology," the high school boy spoke up, "we saw tapes of a whole lot of them. The winged kind from down south, the big-headed one they found in Germany, an awful-looking one with sort of cones, like an insect. And—"

"The worst of all," the elderly

businessman stated, "are those English ones. That hid out in the coal mines. The ones they didn't find until last year." He shook his head. "Forty years, down there in the mines, breeding and developing. Almost a hundred of them. Survivors from a group that went underground during the War."

"They just found a new kind in Sweden," the waitress said. "I was reading about it. Controls minds at a distance, they said. Only a couple of them. The DCA got there plenty fast."

"That's a variation of the New Zealand type," one of the workers said. "It reads minds."

"Reading and controlling are two different things," the businessman said. "When I hear something like that I'm plenty glad there's the DCA."

"There was a type they found right after the War," the farmer said. "In Siberia. Had the ability to control objects. Psychokinetic ability. The Soviet DCA got it right away. Nobody remembers that any more."

"I remember that," the businessman said. "I was just a kid, then. I remember because that was the first deeve I ever heard of. My father called me into the living-room and told me and my brothers and sisters. We were still rebuilding the house. That was in the days when the DCA inspected everyone and stamped their arms." He held up his thin, gnarled wrist. "I was stamped there, sixty years ago."

"Now they just have the birth inspection," the waitress said. She shivered. "There was one in San Francisco this month. First in over

a year. They thought it was over, around here."

"It's been dwindling," the taxi driver said. "Frisco wasn't too bad hit. Not like some. Not like Detroit."

"They still get ten or fifteen a year in Detroit," the high school boy said. "All around there. Lots of pools still left. People go into them, in spite of the robot signs."

"What kind was this one?" the salesman asked. "The one they found in San Francisco."

The waitress gestured. "Common type. The kind with no toes. Bent-over. Big eyes."

"The nocturnal type," the salesman said.

"The mother had hid it. They say it was three years old. She got the doctor to forge the DCA chit. Old friend of the family."

The salesman had finished his coke. He sat playing idly with his cigarette, listening to the hum of talk he had set into motion. The high school boy was leaning excitedly toward the girl across from him, impressing her with his fund of knowledge. The lean farmer and the businessman were huddled together, remembering the old days, the last years of the War, before the first Ten-Year Reconstruction Plan. The taxi driver and the two workers were swapping yarns about their own experiences.

The salesman caught the waitress' attention. "I guess," he said thoughtfully, "that one in Frisco caused quite a stir. Something like that happening so close."

"Yeah," the waitress murmured.

"This side of the Bay wasn't really hit," the salesman continued.

"You never get any of them over here."

"No." The waitress moved abruptly. "None in this area. Ever." She scooped up dirty dishes from the counter and headed toward the back.

"Never?" the salesman asked, surprised. "You've never had any deees on this side of the Bay?"

"No. None." She disappeared into the back, where the fry cook stood by his burners, white apron and tattooed wrists. Her voice was a little too loud, a little too harsh and strained. It made the farmer pause suddenly and glance up.

Silence dropped like a curtain. All sound cut off instantly. They were all gazing down at their food, suddenly tense and ominous.

"None around here," the taxi driver said, loudly and clearly, to no one in particular. "None ever."

"Sure," the salesman agreed genially. "I was only—"

"Make sure you get that straight," one of the workmen said.

The salesman blinked. "Sure, buddy. Sure." He fumbled nervously in his pocket. A quarter and a dime jangled to the floor and he hurriedly scooped them up. "No offense."

For a moment there was silence. Then the high school boy spoke up, aware for the first time that nobody was saying anything. "I heard something," he began eagerly, voice full importance. "Somebody said they saw something up by the Johnson farm that looked like it was one of those—"

"Shut up," the businessman said, without turning his head.

SCARLET-FACED, the boy sagged in his seat. His voice wavered and broke off. He peered hastily down at his hands and swallowed unhappily.

The salesman paid the waitress for his coke. "What's the quickest road to Frisco?" he began. But the waitress had already turned her back.

The people at the counter were immersed in their food. None of them looked up. They ate in frozen silence. Hostile, unfriendly faces, intent on their food.

The salesman picked up his bulging briefcase, pushed open the screen door, and stepped out into the blazing sunlight. He moved toward his battered 1978 Buick, parked a few meters up. A blue-shirted traffic cop was standing in the shade of an awning, talking languidly to a young woman in a yellow silk dress that clung moistly to her slim body.

The salesman paused a moment before he got into his car. He waved his hand and hailed the policeman. "Say, you know this town pretty good?"

The policeman eyed the salesman's rumpled gray suit, bowtie, his sweat-stained shirt. The out-of-state license. "What do you want?"

"I'm looking for the Johnson farm," the salesman said. "Here to see him about some litigation." He moved toward the policeman, a small white card between his fingers. "I'm his attorney—from the New York Guild. Can you tell me how to get out there? I haven't been through here in a couple of years."

Nat Johnson gazed up at the noonday sun and saw that it was good. He sat sprawled out on the bottom step of the porch, a pipe between his yellowed teeth, a lithe, wiry man in red-checkered shirt and canvas jeans, powerful hands, iron-gray hair that was still thick despite sixty-five years of active life.

He was watching the children play. Jean rushed laughing in front of him, bosom heaving under her sweat shirt, black hair streaming behind her. She was sixteen, bright-eyed, legs strong and straight, slim young body bent slightly forward with the weight of the two horseshoes. After her scampered Dave, fourteen, white teeth and black hair, a handsome boy, a son to be proud of. Dave caught up with his sister, passed her, and reached the far peg. He stood waiting, legs apart, hands on his hips, his two horseshoes gripped easily. Gasping, Jean hurried toward him.

"Go ahead!" Dave shouted. "You shoot first. I'm waiting for you."

"So you can knock them away?"

"So I can knock them closer."

Jean tossed down one horseshoe and gripped the other with both hands, eyes on the distant peg. Her lithe body bent, one leg slid back, her spine arched. She took careful aim, closed one eye, and then expertly tossed the shoe. With a clang the shoe struck the distant peg, circled briefly around it, then bounced off again and rolled to one side. A cloud of dust rolled up.

"Not bad," Nat Johnson admitted, from his step. "Too hard, though. Take it easy." His chest

swelled with pride as the girl's glistening, healthy body took aim and again threw. Two powerful, handsome children, almost ripe, on the verge of adulthood. Playing together in the hot sun.

And there was Cris.

Cris stood by the porch, arms folded. He wasn't playing. He was watching. He had stood there since Dave and Jean had begun playing, the same half-intent, half-remote expression on his finely-cut face. As if he were seeing past them, beyond the two of them. Beyond the field, the barn, the creek bed, the rows of cedars.

"Come on, Cris!" Jean called, as she and Dave moved across the field to collect their horseshoes. "Don't you want to play?"

No, Cris didn't want to play. He never played. He was off in a world of his own, a world into which none of them could come. He never joined in anything, games or chores or family activities. He was by himself always. Remote, detached, aloof. Seeing past everyone and everything—that is, until all at once something clicked and he momentarily rephased, reentered their world briefly.

NAT JOHNSON reached out and knocked his pipe against the step. He refilled it from his leather tobacco pouch, his eyes on his eldest son. Cris was now moving into life. Heading out onto the field. He walked slowly, arms folded calmly, as if he had, for the moment descended from his own world into theirs. Jean didn't see him; she had turned her back and

was getting ready to pitch.

"Hey," Dave said, startled.
"Here's Cris."

Cris reached his sister, stopped, and held out his hand. A great dignified figure, calm and impulsive. Uncertainly, Jean gave him one of the horseshoes. "You want this? You want to play?"

Cris said nothing. He bent slightly, a supple arc of his incredibly graceful body, then moved his arm in a blur of speed. The shoe sailed, struck the far peg, and dizzily spun around it. Ringer.

The corners of Dave's mouth turned down. "What a lousy darn thing."

"Cris," Jean reproved. "You don't play fair."

No, Cris didn't play fair. He had watched half an hour—then come out and thrown once. One perfect toss, one dead ringer.

"He never makes a mistake," Dave complained.

Cris stood, face blank. A golden statue in the mid-day sun. Golden hair, skin, a light down of gold fuzz on his bare arms and legs—

Abruptly he stiffened. Nat sat up, startled. "What is it?" he barked.

Cris turned in a quick circle, magnificent body alert. "Cris!" Jean demanded. "What—"

Cris shot forward. Like a released energy beam he bounded across the field, over the fence, into the barn and out the other side. His flying figure seemed to skim over the dry grass as he descended into the barren creek-bed, between the cedars. A momentary flash of gold—and he was gone. Vanished. There was no sound. No motion. He had utterly melted into the

scenery.

"What was it this time?" Jean asked wearily. She came over to her father and threw herself down in the shade. Sweat glowed on her smooth neck and upperlip; her sweat shirt was streaked and damp. "What did he see?"

"He was after something," Dave stated, coming up.

Nat grunted. "Maybe. There's no telling."

"I guess I better tell mom not set a place for him," Jean said. "He probably won't be back."

Anger and futility descended over Nat Johnson. No, he wouldn't be back. Not for dinner and probably not the next day—or the one after that. He'd be gone God only knew how long. Or where. Or why. Off by himself, alone some place. "If I thought there was any use," Nat began, "I'd send you two after him. But there's no—"

He broke off. A car was coming up the dirt road toward the farmhouse. A dusty, battered old Buick. Behind the wheel sat a plump red-faced man in a gray suit, who waved cheerfully at them as the car sputtered to a stop and the motor died into silence.

AFTERNOON," the man nodded, as he climbed out of the car. He tipped his hat pleasantly. He was middle-aged, genial-looking, perspiring freely as he crossed the dry ground toward the porch. "Maybe you folks can help me."

"What do you want?" Nat Johnson demanded hoarsely. He was frightened. He watched the creek bed out of the corner of his eye,

praying silently. God, if only he stayed away. Jean was breathing quickly, sharp little gasps. She was terrified. Dave's face was expressionless, but all color had drained from it. "Who are you?" Nat demanded.

"Name's Baines. George Baines." The man held out his hand but Johnson ignored it. "Maybe you've heard of me. I own the Pacifica Development Corporation. We built all those little bomb-proof houses just outside town. Those little round ones you see as you come up the main highway from Lafayette."

"What do you want?" Johnson held his hands steady with an effort. He'd never heard of the man, although he'd noticed the housing tract. It couldn't be missed—a great ant-heap of ugly pill-boxes straddling the highway. Baines looked like the kind of man who'd own them. But what did he want here?

"I've bought some land up this way," Baines was explaining. He rattled a sheaf of crisp papers. "This is the deed, but I'll be damned if I can find it." He grinned good-naturedly. "I know it's around this way, someplace, this side of the State road. According to the clerk at the County Recorder's Office, a mile or so this side of that hill over there. But I'm no damn good at reading maps."

"It isn't around here," Dave broke in. "There's only farms around here. Nothing for sale."

"This is a farm, son," Baines said genially. "I bought it for myself and my missus. So we could settle down." He wrinkled his pug

nose. "Don't get the wrong idea—I'm not putting up any tracts around here. This is strictly for myself. An old farm house, twenty acres, a pump and a few oak trees—"

"Let me see the deed." Johnson grabbed the sheaf of papers, and while Baines blinked in astonishment, he leafed rapidly through them. His face hardened and he handed them back. "What are you up to? This deed is for a parcel fifty miles from here."

"Fifty miles!" Baines was dumbfounded. "No kidding? But the clerk told me—"

Johnson was on his feet. He towered over the fat man. He was in top-notch physical shape—and he was plenty damn suspicious. "Clerk, hell. You get back into your car and drive out of here. I don't know what you're after, or what you're here for, but I want you off my land."

In Johnson's massive fist something sparkled. A metal tube that gleamed ominously in the mid-day sunlight. Baines saw it—and gulped. "No offense, mister." He backed nervously away. "You folks sure are touchy. Take it easy, will you?"

Johnson said nothing. He gripped the lash-tube tighter and waited for the fat man to leave.

But Baines lingered. "Look, budgy. I've been driving around this furnace five hours, looking for my damn place. Any objection to my using your—facilities?"

Johnson eyed him with suspicion. Gradually the suspicion turned to disgust. He shrugged. "Dave, show him where the bathroom is."

"Thanks." Baines grinned thankfully. "And if it wouldn't be too much trouble, maybe a glass of water. I'd be glad to pay you for it." He chuckled knowingly. "Never let the city people get away with anything, eh?"

"Christ." Johnson turned away in revulsion as the fat man lumbered after his son, into the house.

"Dad," Jean whispered. As soon as Baines was inside she hurried up onto the porch, eyes wide with fear. "Dad, do you think he—"

Johnson put his arm around her. "Just hold on tight. He'll be gone, soon."

The girl's dark eyes flashed with mute terror. "Every time the man from the water company, or the tax collector, some tramp, children, anybody come around, I get a terrible stab of pain—here." She clutched at her heart, hand against her breasts. "It's been that way thirteen years. How much longer can we keep it going? *How long?*"

THE MAN named Baines emerged gratefully from the bathroom. Dave Johnson stood silently by the door, body rigid, youthful face stony.

"Thanks, son," Baines sighed. "Now where can I get a glass of cold water?" He smacked his thick lips in anticipation. "After you've been driving around the sticks looking for a dump some red-hot real estate agent stuck you with—"

Dave headed into the kitchen. "Mom, this man wants a drink of water. Dad said he could have it."

Dave had turned his back. Baines caught a brief glimpse of

the mother, gray-haired, small, moving toward the sink with a glass, face withered and drawn, without expression.

Then Baines hurried from the room, down a hall. He passed through a bedroom, pulled a door open, found himself facing a closet. He turned and raced back, through the living room, into a dining room, then another bedroom. In a brief instant he had gone through the whole house.

He peered out a window. The back yard. Remains of a rusting truck. Entrance of an underground bomb shelter. Tin cans. Chickens scratching around. A dog, asleep under a shed. A couple of old auto tires.

He found a door leading out. Soundlessly, he tore the door open and stepped outside. No one was in sight. There was a barn, a leaning, ancient wood structure. Cedar trees beyond, a creek of some kind. What had once been an outhouse.

BAINES moved cautiously around the side of the house. He had perhaps thirty seconds. He had left the door of the bathroom closed; the boy would think he had gone back in there. Baines looked into the house through a window. A large closet, filled with old clothing, boxes and bundles of magazines.

He turned and started back. He reached the corner of the house and started around it.

Nat Johnson's gaunt shape loomed up and blocked his way. "All right, Baines. You asked for it."

A pink flash blossomed. It shut out the sunlight in a single blinding burst. Baines leaped back and clawed at his coat pocket. The edge of the flash caught him and he half-fell, stunned by the force. His suit-shield sucked in the energy and discharged it, but the power rattled his teeth and for a moment he jerked like a puppet on a string. Darkness ebbed around him. He could feel the mesh of the shield glow white, as it absorbed the energy and fought to control it.

His own tube came out—and Johnson had no shield. "You're under arrest," Baines muttered grimly. "Put down your tube and your hands up. And call your family." He made a motion with the tube. "Come on, Johnson. Make it snappy."

The lash-tube wavered and then slipped from Johnson's fingers. "You're still alive." Dawning horror crept across his face. "Then you must be—"

Dave and Jean appeared. "Dad!"

"Come over here," Baines ordered. "Where's your mother?"

Dave jerked his head numbly. "Inside."

"Get her and bring her here."

"You're DCA," Nat Johnson whispered.

Baines didn't answer. He was doing something with his neck, pulling at the flabby flesh. The wiring of a contact mike glittered as he slipped it from a fold between two chins and into his pocket. From the dirt road came the sound of motors, sleek purrs that rapidly grew louder. Two teardrops of black metal came gliding up and parked beside the house. Men

swarmed out, in the dark gray-green of the Government Civil Police. In the sky swarms of black dots were descending, clouds of ugly flies that darkened the sun as they spilled out men and equipment. The men drifted slowly down.

"He's not here," Baines said, as the first man reached him. "He got away. Inform Wisdom back at the lab."

"We've got this section blocked off."

Baines turned to Nat Johnson, who stood in dazed silence, uncomprehending, his son and daughter beside him. "How did he know we were coming?" Baines demanded.

"I don't know," Johnson muttered. "He just—knew."

"A telepath?"

"I don't know."

Baines shrugged. "We'll know, soon. A clamp is out, all around here. He can't get past, no matter what the hell he can do. Unless he can dematerialize himself."

"What'll you do with him when you—if you catch him?" Jean asked huskily.

"Study him."

"And then kill him?"

"That depends on the lab evaluation. If you could give me more to work on, I could predict better."

"We can't tell you anything. We don't know anything more." The girl's voice rose with desperation. "He doesn't talk."

Baines jumped. "What?"

"He doesn't talk. He never talked to us. Ever."

"How old is he?"

"Eighteen."

"No communication." Baines was sweating. "In eighteen years there hasn't been any semantic bridge between you? Does he have any contact? Signs? Codes?"

"He—ignores us. He eats here, stays with us. Sometimes he plays when we play. Or sits with us. He's gone days on end. We've never been able to find out what he's doing—or where. He sleeps in the barn—by himself."

"Is he really gold-colored?"

"Yes."

"Skin, as well as hair?"

"Skin, eyes, hair, nails. Everything."

"And he's large? Well-formed?"

It was a moment before the girl answered. A strange emotion stirred her drawn features, a momentary glow. "He's incredibly beautiful. A god. A god come down to earth." Her lips twisted. "You won't find him. He can do things. Things you have no comprehension of. Powers so far beyond your limited—"

"You don't think we'll get him?" Baines frowned. "More teams are landing all the time. You've never seen an Agency clamp in operation. We've had sixty years to work out all the bugs. If he gets away it'll be the first time—"

Baines broke off abruptly. Three men were quickly approaching the porch. Two green-clad Civil Police. And a third man between them. A man who moved silently, lithely, a faintly luminous shape that towered above them.

"Cris!" Jean screamed.

"We got him," one of the police said.

Baines fingered his lash-tube uneasily. "Where? How?"

"He gave himself up," the policeman answered, voice full of awe. "He came to us voluntarily. Look at him. He's like a metal statue. Like some sort of—god."

The golden figure halted for a moment beside Jean. Then it turned slowly, calmly, to face Baines.

"Cris!" Jean shrieked. "*Why did you come back?*"

The same thought was eating at Baines, too. He shoved it aside—for the time being. "Is the jet out front?" he demanded quickly.

"Ready to go," one of the CP answered.

"Fine." Baines strode past them, down the steps and onto the dirt field. "Let's go. I want him taken directly to the lab." For a moment he studied the massive figure who stood calmly between the two Civil Policemen. Beside him, they seemed to have shrunk, become ungainly and repellent. Like dwarves. . . What had Jean said? *A god come to earth.* Baines broke angrily away. "Come on," he muttered brusquely. "This one may be tough; we've never run up against one like it before. We don't know what the hell it can do."

THE CHAMBER was empty, except for the seated figure. Four bare walls, floor and ceiling. A steady glare of white light relentlessly etched every corner of the chamber. Near the top of the far wall ran a narrow slot, the view windows through which the interior of the chamber was scanned.

The seated figure was quiet. He

hadn't moved since the chamber locks had slid into place, since the heavy bolts had fallen from outside and the rows of bright-faced technicians had taken their places at the view windows. He gazed down at the floor, bent forward, hands clasped together, face calm, almost expressionless. In four hours he hadn't moved a muscle.

"Well?" Baines said. "What have you learned?"

Wisdom grunted sourly. "Not much. If we don't have him doped out in forty-eight hours we'll go ahead with the euth. We can't take any chances."

"You're thinking about the Tunis type," Baines said. He was, too. They had found ten of them, living in the ruins of the abandoned North African town. Their survival method was simple. They killed and absorbed other life forms, then imitated them and took their places. *Chameleons*, they were called. It had cost sixty lives, before the last one was destroyed. Sixty top-level experts, highly trained DCA men.

"Any clues?" Baines asked.

"He's different as hell. This is going to be tough." Wisdom thumbed a pile of tape-spoils. "This is the complete report, all the material we got from Johnson and his family. We pumped them with the psych-wash, then let them go home. Eighteen years—and no semantic bridge. Yet, he looks fully developed. Mature at thirteen—a shorter, faster life-cycle than ours. But why the mane? All the gold fuzz? Like a Roman monument that's been gilded."

"Has the report come in from

the analysis room? You had a wave-shot taken, of course."

"His brain pattern has been fully scanned. But it takes time for them to plot it out. We're all running around like lunatics while he just sits there!" Wisdom poked a stubby finger at the window. "We caught him easily enough. He can't have *much*, can he? But I'd like to know what it is. Before we euth him."

"Maybe we should keep him alive until we know."

"Euth in forty-eight hours," Wisdom repeated stubbornly. "Whether we know or not. I don't like him. He gives me the creeps."

Wisdom stood chewing nervously on his cigar, a red-haired, beefy-faced man, thick and heavy-set, with a barrel chest and cold, shrewd eyes deep-set in his hard face. Ed Wisdom was Director of DCA's North American Branch. But right now he was worried. His tiny eyes darted back and forth, alarmed flickers of gray in his brutal, massive face.

"You think," Baines said slowly, "this is *it*?"

"I always think so," Wisdom snapped. "I have to think so."

"I mean—"

"I know what you mean." Wisdom paced back and forth, among the study tables, technicians at their benches, equipment and humming computers. Buzzing tape-slots and research hookups. "This thing lived eighteen years with his family and *they* don't understand it. *They* don't know what it has. They know what it does, but not how."

"What does it do?"

"It knows things."

"What kind of things?"

Wisdom grabbed his lash-tube from his belt and tossed it on a table. "Here."

"What?"

"Here." Wisdom signalled, and a view window was slid back an inch. "Shoot him."

Baines blinked. "You said forty-eight hours."

With a curse, Wisdom snatched up the tube, aimed it through the window directly at the seated figure's back, and squeezed the trigger.

A blinding flash of pink. A cloud of energy blossomed in the center of the chamber. It sparkled, then died into dark ash.

"Good God!" Baines gasped. You—"

He broke off. The figure was no longer sitting. As Wisdom fired, it had moved in a blur of speed, away from the blast, to the corner of the chamber. Now it was slowly coming back, face blank, still absorbed in thought.

"Fifth time," Wisdom said, as he put his tube away. "Last time Jamison and I fired together. Missed. He knew exactly when the bolts would hit. And where."

Baines and Wisdom looked at each other. Both of them were thinking the same thing. "But even reading minds wouldn't tell him where they were going to hit," Baines said. "When, maybe. But not where. Could you have called your own shots?"

"Not mine," Wisdom answered flatly. "I fired fast, damn near at random." He frowned. "Random. We'll have to make a test of this." He waved a group of technicians

over. "Get a construction team up here. On the double." He grabbed paper and pen and began sketching.

WHILE construction was going on, Baines met his fiancee in the lobby outside the lab, the great central lounge of the DCA Building.

"How's it coming?" she asked. Anita Ferris was tall and blonde, blue eyes and a mature, carefully cultivated figure. An attractive, competent-looking woman in her late twenties. She wore a metal foil dress and cape—with a red and black stripe on the sleeve, the emblem of the A-Class. Anita was Director of the Semantics Agency, a top-level Government Coordinator. "Anything of interest, this time?"

"Plenty." Baines guided her from the lobby, into the dim recess of the bar. Music played softly in the background, a shifting variety of patterns formed mathematically. Dim shapes moved expertly through the gloom, from table to table. Silent, efficient robot waiters.

As Anita sipped her Tom Collins, Baines outlined what they had found.

"What are the chances," Anita asked slowly, "that he's built up some kind of deflection-cone? There was one kind that warped their environment by direct mental effort. No tools. Direct mind to matter."

"Psychokinetics?" Baines drummed restlessly on the table top. "I doubt it. The thing has ability to predict, not to control. He can't

stop the beams, but he can sure as hell get out of the way."

"Does he jump between the molecules?"

Baines wasn't amused. "This is serious. We've handled these things sixty years—longer than you and I have been around added together. Eighty-seven types of deviants have shown up, real mutants that could reproduce themselves, not mere freaks. This is the eighty-eighth. We've been able to handle each of them in turn. But this—"

"Why are you so worried about this one?"

"First, it's eighteen years old. That in itself is incredible. Its family managed to hide it that long."

"Those women around Denver were older than that. Those ones with—"

"They were in a Government camp. Somebody high up was toying with the idea of allowing them to breed. Some sort of industrial use. We withheld euth for years. But Cris Johnson stayed alive *outside our control*. Those things at Denver were under constant scrutiny."

"Maybe he's harmless. You always assume a deeve is a menace. He might even be beneficial. Somebody thought those women might work in. Maybe this thing has something that would advance the race."

"Which race? Not the human race. It's the old 'the operation was a success but the patient died' routine. If we introduce a mutant to keep us going it'll be mutants, not us, who'll inherit the earth. It'll be mutants surviving for their own

sake. Don't think for a moment we can put padlocks on them and expect them to serve us. If they're really superior to homo sapiens, they'll win out in even competition. To survive, we've got to cold-deck them right from the start."

"In other words, we'll know homo superior when he comes—by definition. He'll be the one we won't be able to euth."

"That's about it," Baines answered. "Assuming there *is* a homo superior. Maybe there's just homo peculiar. Homo with an improved line."

"The Neanderthal probably thought the Cro-Magnon man had merely an improved line. A little more advanced ability to conjure up symbols and shape flint. From your description, this thing is more radical than a mere improvement."

"This thing," Baines said slowly, "has an ability to predict. So far, it's been able to stay alive. It's been able to cope with situations better than you or I could. How long do you think we'd stay alive in that chamber, with energy beams blazing down at us? In a sense it's got the ultimate survival ability. If it can always be accurate—"

A wall-speaker sounded. "Baines, you're wanted in the lab. Get the hell out of the bar and upramp."

Baines pushed back his chair and got to his feet. "Come along. You may be interested in seeing what Wisdom has got dreamed up."

A TIGHT GROUP of top-level DCA officials stood around in a circle, middle-aged, gray-haired, listening to a skinny youth

in a white shirt and rolled-up sleeves explaining an elaborate cube of metal and plastic that filled the center of the view-platform. From it jutted an ugly array of tube snouts, gleaming muzzles that disappeared into an intricate maze of wiring.

"This," the youth was saying briskly, "is the first real test. It fires at random—as nearly random as we can make it, at least. Weighted balls are thrown up in an air stream, then dropped free to fall back and cut relays. They can fall in almost any pattern. The thing fires according to their pattern. Each drop produces a new configuration of timing and position. Ten tubes, in all. Each will be in constant motion."

"And *nobody* knows how they'll fire?" Anita asked.

"Nobody." Wisdom rubbed his thick hands together. "Mind-reading won't help him, not with this thing."

Anita moved over to the view windows, as the cube was rolled into place. She gasped. "Is that him?"

"What's wrong?" Baines asked.

Anita's cheeks were flushed. "Why, I expected a—a *thing*. My God, he's beautiful! Like a golden statue. Like a deity!"

Baines laughed. "He's eighteen years old, Anita. Too young for you."

The woman was still peering through the view window. "Look at him. Eighteen? I don't believe it."

Cris Johnson sat in the center of the chamber, on the floor. A posture of contemplation, head

bowed, arms folded, legs tucked under him. In the stark glare of the overhead lights his powerful body glowed and rippled, a shimmering figure of downy gold.

"Pretty, isn't he?" Wisdom muttered. "All right. Start it going."

"You're going to *kill* him?" Anita demanded.

"We're going to try."

"But he's—" She broke off uncertainly. "He's not a monster. He's not like those others, those hideous things with two heads, or those insects. Or those awful things from Tunis."

"What is he, then?" Baines asked.

"I don't know. But you can't just *kill* him. It's terrible!"

The cube clicked into life. The muzzles jerked, silently altered position. Three retracted, disappeared into the body of the cube. Others came out. Quickly, efficiently, they moved into position—and abruptly, without warning, opened fire.

A staggering burst of energy fanned out, a complex pattern that altered each moment, different angles, different velocities, a bewildering blur that cracked from the windows down into the chamber.

The golden figure moved. He dodged back and forth, expertly avoiding the bursts of energy that seared around him on all sides. Rolling clouds of ash obscured him; he was lost in a mist of crackling fire and ash.

"Stop it!" Anita shouted. "For God's sake, you'll destroy him!"

The chamber was an inferno of energy. The figure had completely disappeared. Wisdom waited a mo-

ment, then nodded to the technicians operating the cube. They touched guide buttons and the muzzles slowed and died. Some sank back into the cube. All became silent. The works of the cube ceased humming.

Cris Johnson was still alive. He emerged from the settling clouds of ash, blackened and singed. But unhurt. He had avoided each beam. He had weaved between them and among them as they came, a dancer leaping over glittering sword-points of pink fire. He had survived.

"No," Wisdom murmured, shaken and grim. "Not a telepath. Those were at random. No prearranged pattern."

THE THREE of them looked at each other, dazed and frightened. Anita was trembling. Her face was pale and her blue eyes were wide. "What, then?" She whispered. "What is it? What does he have?"

"He's a good guesser," Wisdom suggested.

"He's not guessing," Baines answered. "Don't kid yourself. That's the whole point."

"No, he's not guessing." Wisdom nodded slowly. "He *knew*. He predicted each strike. I wonder. . . Can he err? Can he make a mistake?"

"We caught him," Baines pointed out.

"You said he came back voluntarily." There was a strange look on Wisdom's face. "Did he come back *after* the clamp was up?"

Baines jumped. "Yes, after."

"He couldn't have got through the clamp. So he came back." Wisdom grinned wryly. "The clamp must actually have been perfect. It was supposed to be."

"If there had been a single hole," Baines murmured, "he would have known it—gone through."

Wisdom ordered a group of armed guards over. "Get him out of there. To the euth stage."

Anita shrieked. "Wisdom, you can't—"

"He's too far ahead of us. We can't compete with him." Wisdom's eyes were bleak. "We can only guess what's going to happen. He *knows*. For him, it's a sure thing. I don't think it'll help him at euth, though. The whole stage is flooded simultaneously. Instantaneous gas, released throughout." He signalled impatiently to the guards. "Get going. Take him down right away. Don't waste any time."

"Can we?" Baines murmured thoughtfully.

The guards took up positions by one of the chamber locks. Cautiously, the tower control slid the lock back. The first two guards stepped cautiously in, lash-tubes ready.

Cris stood in the center of the chamber. His back was to them as they crept toward him. For a moment he was silent, utterly unmoving. The guards fanned out, as more of them entered the chamber. Then—

Anita screamed. Wisdom cursed. The golden figure spun and leaped forward, in a flashing blur of speed. Past the triple line of guards, through the lock and into the corridor.

"Get him!" Baines shouted. Guards milled everywhere. Flashes of energy lit up the corridor, as the figure raced among them, up the ramp.

"No use," Wisdom said calmly. "We can't hit him." He touched a button, then another. "But maybe this will help."

"What—" Baines began. But the leaping figure shot abruptly at him, straight at him, and he dropped to one side. The figure flashed past. It ran effortlessly, face without expression, dodging and jumping as the energy beams seared around it.

For an instant the golden face loomed up before Baines. It passed and disappeared down a side corridor. Guards rushed after it, kneeling and firing, shouting orders excitedly. In the bowels of the building, heavy guns were rumbling up. Locks slid into place as escape corridors were systematically sealed off.

"Good God," Baines gasped, as he got to his feet. "Can't he do anything but run?"

"I gave orders," Wisdom said, "to have the building isolated. There's no way out. Nobody comes and nobody goes. He's loose here in the building—but he won't get out."

"If there's one exit overlooked, he'll know it," Anita pointed out shakily.

"We won't overlook any exit. We got him once; we'll get him again."

A messenger robot had come in. Now it presented its message respectfully to Wisdom. "From analysis, sir."

Wisdom tore the tape open. "Now we'll know how it thinks."

His hands were shaking. "Maybe we can figure out its blind spot. It may be able to out think us, but that doesn't mean it's invulnerable. It only predicts the future—it can't change it. If there's only death ahead, its ability won't . . ."

Wisdom's voice faded into silence. After a moment he passed the tape to Baines.

"I'll be down in the bar," Wisdom said. "Getting a good stiff drink." His face had turned lead-gray. "All I can say is *I hope to hell this isn't the race to come.*"

"What's the analysis?" Anita demanded impatiently, peering over Baines' shoulder. "How does it think?"

"It doesn't," Baines said, as he handed the tape back to his boss. "It doesn't think at all. Virtually no frontal lobe. It's not a human being—it doesn't use symbols. It's nothing but an animal."

"An animal," Wisdom said. "With a single highly-developed faculty. Not a superior man. Not a man at all."

UP AND DOWN the corridors of the DCA Building, guards and equipment clanged. Loads of Civil Police were pouring into the building and taking up positions beside the guards. One by one, the corridors and rooms were being inspected and sealed off. Sooner or later the golden figure of Cris Johnson would be located and cornered.

"We were always afraid a mutant with superior intellectual powers would come along," Baines said reflectively. "A deeve who

would be to us what we are to the great apes. Something with a bulging cranium, telepathic ability, a perfect semantic system, ultimate powers of symbolization and calculation. A development along our own path. A better human being."

"He acts by reflex," Anita said wonderingly. She had the analysis and was sitting at one of the desks studying it intently. "Reflex—like a lion. A golden lion." She pushed the tape aside, a strange expression on her face. "The lion god."

"Beast," Wisdom corrected tartly. "Blond beast, you mean."

"He runs fast," Baines said, "and that's all. No tools. He doesn't build anything or utilize anything outside himself. He just stands and waits for the right opportunity and then he runs like hell."

"This is worse than anything we've anticipated," Wisdom said. His beefy face was lead-gray. He sagged like an old man, his blunt hands trembling and uncertain. "To be replaced by an animal! Something that runs and hides. Something without a language!" He spat savagely. "That's why they weren't able to communicate with it. We wondered what kind of semantic system it had. It hasn't got any! No more ability to talk and think than a—dog."

"That means intelligence has failed," Baines went on huskily. "We're the last of our line—like the dinosaur. We've carried intelligence as far as it'll go. Too far, maybe. We've already got to the point where we know so much—think so much—we can't act."

"Men of thought," Anita said. "Not men of action. It's begun to

have a paralyzing effect. But this thing—"

"This thing's faculty works better than ours ever did. We can recall past experiences, keep them in mind, learn from them. At best, we can make shrewd guesses about the future, from our memory of what's happened in the past. But we can't be certain. We have to speak of probabilities. Grays. Not blacks and whites. We're only guessing."

"Cris Johnson isn't guessing," Anita added.

"He can look ahead. See what's coming. He can—prethink. Let's call it that. He can see into the future. Probably he doesn't perceive it as the future."

"No," Anita said thoughtfully. "It would seem like the present. He has a broader present. But his present lies ahead, not back. Our present is related to the past. Only the past is certain, to us. To him, the future is certain. And he probably doesn't remember the past, any more than any animal remembers what's happened."

"As he develops," Baines said, "as his race evolves, it'll probably expand its ability to prethink. Instead of ten minutes, thirty minutes. Then an hour. A day. A year. Eventually they'll be able to keep ahead a whole lifetime. Each one of them will live in a solid, unchanging world. There'll be no variables, no uncertainty. No motion! They won't have anything to fear. Their world will be perfectly static, a solid block of matter."

"And when death comes," Anita said, "they'll accept it. There won't be any struggle; to them, it'll al-

ready have happened."

"*Already have happened,*" Baines repeated. "To Cris, our shots had already been fired." He laughed harshly. "Superior survival doesn't mean superior man. If there were another world-wide flood, only fish would survive. If there were another ice age, maybe nothing but polar bears would be left. When we opened the lock, he had already seen the men, seen exactly where they were standing and what they'd do. A neat faculty—but not a development of mind. A pure physical sense."

"But if every exit is covered," Wisdom repeated, "he'll see he can't get out. He gave himself up before—he'll give himself up again." He shook his head. "An animal. Without language. Without tools."

"With his new sense," Baines said, "he doesn't need anything else." He examined his watch. "It's after two. Is the building completely sealed off?"

"You can't leave," Wisdom stated. "You'll have to stay here all night—or until we catch the bastard."

"I meant her." Baines indicated Anita. "She's supposed to be back at Semantics by seven in the morning."

Wisdom shrugged. "I have no control over her. If she wants, she can check out."

"I'll stay," Anita decided. "I want to be here when he—when he's destroyed. I'll sleep here." She hesitated. "Wisdom, isn't there some other way? If he's just an animal couldn't we—"

"A zoo?" Wisdom's voice rose in

a frenzy of hysteria. "Keep it penned up in the zoo? Christ no! It's got to be killed!"

FOR A LONG time the great gleaming shape crouched in the darkness. He was in a store room. Boxes and cartons stretched out on all sides, heaped up in orderly rows, all neatly counted and marked. Silent and deserted.

But in a few moments people burst in and search the room. He could see this. He saw them in all parts of the room, clear and distinct, men with lash-tubes, grim-faced, stalking with murder in their eyes.

The sight was one of many. One of a multitude of clearly-etched scenes lying tangent to his own. And to each was attached a further multitude of interlocking scenes, that finally grew hazier and dwindled away. A progressive vagueness, each syndrome less distinct.

But the immediate one, the scene that lay closest to him, was clearly visible. He could easily make out the sight of the armed men. Therefore it was necessary to be out of the room before they appeared.

The golden figure got calmly to its feet and moved to the door. The corridor was empty; he could see himself already outside, in the vacant, drumming hall of metal and recessed lights. He pushed the door boldly open and stepped out.

A lift blinked across the hall. He walked to the lift and entered it. In five minutes a group of guards would come running along and leap into the lift. By that time he

would have left it and sent it back down. Now he pressed a button and rose to the next floor.

He stepped out into a deserted passage. No one was in sight. That didn't surprise him. He couldn't be surprised. The element didn't exist for him. The positions of things, the space relationships of all matter in the immediate future, were as certain for him as his own body. The only thing that was unknown was that which had already passed out of being. In a vague, dim fashion, he had occasionally wondered where things went after he had passed them.

He came to a small supply closet. It had just been searched. It would be a half an hour before anyone opened it again. He had that long; he could see that far ahead. And then—

And then he would be able to see another area, a region farther beyond. He was always moving, advancing into new regions he had never seen before. A constantly unfolding panorama of sights and scenes, frozen landscapes spread out ahead. All objects were fixed. Pieces on a vast chess board through which he moved, arms folded, face calm. A detached observer who saw objects that lay ahead of him as clearly as those under foot.

Right now, as he crouched in the small supply closet, he saw an unusually varied multitude of scenes for the next half hour. Much lay ahead. The half hour was divided into an incredibly complex pattern of separate configurations. He had reached a critical region; he was about to move through worlds of

intricate complexity.

He concentrated on a scene ten minutes away. It showed, like a three dimensional still, a heavy gun at the end of the corridor, trained all the way to the far end. Men moved cautiously from door to door, checking each room again, as they had done repeatedly. At the end of the half hour they had reached the supply closet. A scene showed them looking inside. By that time he was gone, of course. He wasn't in that scene. He had passed on to another.

The next scene showed an exit. Guards stood in a solid line. No way out. He was in that scene. Off to one side, in a niche just inside the door. The street outside was visible, stars, lights, outlines of passing cars and people.

In the next tableau he had gone back, away from the exit. There was no way out. In another tableau he saw himself at other exits, a legion of golden figures, duplicated again and again, as he explored regions ahead, one after another. But each exit was covered.

In one dim scene he saw himself lying charred and dead; he had tried to run through the line, out the exit.

But that scene was vague. One wavering, indistinct still out of many. The inflexible path along which he moved would not deviate in that direction. It would not turn him that way. The golden figure in that scene, the miniature doll in that room, was only distantly related to him. It was himself, but a far-away self. A self he would never meet. He forgot it and went on to examine the other tableau.

The myriad of tableaux that surrounded him were an elaborate maze, a web which he now considered bit by bit. He was looking down into a doll's house of infinite rooms, rooms without number, each with its furniture, its dolls, all rigid and unmoving. The same dolls and furniture were repeated in many. He, himself, appeared often. The two men on the platform. The woman. Again and again the same combinations turned up; the play was redone frequently, the same actors and props moved around in all possible ways.

Before it was time to leave the supply closet, Cris Johnson had examined each of the rooms tangent to the one he now occupied. He had consulted each, considered its contents thoroughly.

He pushed the door open and stepped calmly out into the hall. He knew exactly where he was going. And what he had to do. Crouched in the stuffy closet, he had quietly and expertly examined each miniature of himself, observed which clearly-etched configuration lay along his inflexible path, the one room of the doll house, the one set out of legions, toward which he was moving.

ANITA slipped out of her metal-foil dress, hung it over a hanger, then unfastened her shoes and kicked them under the bed. She was just starting to unclip her bra when the door opened.

She gasped. Soundlessly, calmly, the great golden shape closed the door and bolted it after him.

Anita snatched up her lash-tube from the dressing table. Her hand shook; her whole body was trembling. "What do you want?" she demanded. Her fingers tightened convulsively around the tube. "I'll kill you."

The figure regarded her silently, arms folded. It was the first time she had seen Cris Johnson closely. The great dignified face, handsome and impassive. Broad shoulders. The golden mane of hair, golden skin, pelt of radiant fuzz— "Why?" she demanded breathlessly. Her heart was pounding wildly. "What do you want?"

She could kill him easily. But the lash-tube wavered. Cris Johnson stood without fear; he wasn't at all afraid. Why not? Didn't he understand what it was? What the small metal tube could do to him?

"Of course," she said suddenly, in a choked whisper. "You can see ahead. You know I'm not going to kill you. Or you wouldn't have come here."

She flushed, terrified—and embarrassed. He knew exactly what she was going to do; he could see it as easily as she saw the walls of the room, the wall-bed with its covers folded neatly back, her clothes hanging in the closet, her purse and small things on the dressing table.

"All right." Anita backed away, then abruptly put the tube down on the dressing table. "I won't kill you. Why should I?" she fumbled in her purse and got out her cigarettes. Shakily, she lit up, her pulse racing. She was scared. And strangely fascinated. "Do you expect to stay here? It won't do any

good. They've come through the dorm twice, already. They'll be back."

Could he understand her? She saw nothing on his face, only blank dignity. God, he was huge! It wasn't possible he was only eighteen, a boy, a child. He looked more like some great golden god, come down to earth.

She shook the thought off savagely. He wasn't a god. He was a beast. *The blond beast*, come to take the place of man. To drive man from the earth.

Anita snatched up the lash-tube. "Get out of here! You're an animal! A big stupid animal! You can't even understand what I'm saying—you don't even have a language. You're not human."

Cris Johnson remained silent. As if he were waiting. Waiting for what? He showed no sign of fear or impatience, even though the corridor outside rang with the sound of men searching, metal against metal, guns and energy tubes being dragged around, shouts and dim rumbles as section after section of the building was searched and sealed off.

"They'll get you," Anita said. "You'll be trapped here. They'll be searching this wing any moment." She savagely stubbed out her cigarette out. "For God's sake, what do you expect *me* to do?"

Cris moved toward her. Anita shrank back. His powerful hands caught hold of her and she gasped in sudden terror. For a moment she struggled blindly, desperately.

"Let go!" She broke away and leaped back from him. His face was expressionless. Calmly, he came

toward her, an impassive god advancing to take her. "Get away!" She groped for the lash-tube, trying to get it up. But the tube slipped from her fingers and rolled onto the floor.

Cris bent down and picked it up. He held it out to her, in the open palm of his hand.

"Good God," Anita whispered. Shakily, she accepted the tube, gripped it hesitantly, then put it down again on the dressing table.

In the half-light of the room, the great golden figure seemed to glow and shimmer, outlined against the darkness. A god—no, not a god. An animal. A great golden beast, without a soul. She was confused. Which was he—or was he both? She shook her head, bewildered. It was late, almost four. She was exhausted and confused.

Cris took her in his arms. Gently, kindly, he lifted her face and kissed her. His powerful hands held her tight. She couldn't breathe. Darkness, mixed with the shimmering golden haze, swept around her. Around and around it spiralled, carrying her senses away. She sank down into it gratefully. The darkness covered her and dissolved her in a swelling torrent of sheer force that mounted in intensity each moment, until the roar of it beat against her and at last blotted out everything.

ANITA blinked. She sat up and automatically pushed her hair into place. Cris was standing before the closet. He was reaching up, getting something down.

He turned toward her and tossed

something on the bed. Her heavy metal foil traveling cape.

Anita gazed down at the cape without comprehension. "What do you want?"

Cris stood by the bed, waiting.

She picked up the cape uncertainly. Cold creepers of fear plucked at her. "You want me to get you out of here," she said softly. "Past the guards and the CP."

Cris said nothing.

"They'll kill you instantly." She got unsteadily to her feet. "You can't run past them. Good God, don't you do anything but run? There must be a better way. Maybe I can appeal to Wisdom. I'm Class A—Director Class. I can go directly to the Full Directorate. I ought to be able to hold them off, keep back the euth indefinitely. The odds are a billion to one against us if we try to break past—"

She broke off.

"But you don't gamble," she continued slowly. "You don't go by odds. You *know* what's coming. You've seen the cards already." She studied his face intently. "No, you can't be cold-decked. It wouldn't be possible."

For a moment she stood deep in thought. Then with a quick, decisive motion, she snatched up the cloak and slipped it around her bare shoulders. She fastened the heavy belt, bent down and got her shoes from under the bed, snatched up her purse, and hurried to the door.

"Come on," she said. She was breathing quickly, cheeks flushed. "Let's go. While there are still a

number of exits to choose from. My car is parked outside, in the lot at the side of the building. We can get to my place in an hour. I have a winter home in Argentina. If worst comes to worst we can fly there. It's in the back country, away from the cities. Jungle and swamps. Cut-off from almost everything." Eagerly, she started to open the door.

Cris reached out and stopped her. Gently, patiently, he moved in front of her.

He waited a long time, body rigid. Then he turned the knob and stepped boldly out into the corridor.

The corridor was empty. No one was in sight. Anita caught a faint glimpse, the back of a guard hurrying off. If they had come out a second earlier—

Cris started down the corridor. She ran after him. He moved rapidly, effortlessly. The girl had trouble keeping up with him. He seemed to know exactly where to go. Off to the right, down a side hall, a supply passage. Onto an ascent freight-lift. They rose, then abruptly halted.

Cris waited again. Presently he slid the door back and moved out of the lift. Anita followed nervously. She could hear sounds: guns and men, very close.

They were near an exit. A double line of guards stood directly ahead. Twenty men, a solid wall—and a massive heavy-duty robot gun in the center. The men were alert, faces strained and tense. Watching wide-eyed, guns gripped tight. A Civil Police officer was in charge.

"We'll never get past," Anita

gasped. "We wouldn't get ten feet." She pulled back. "They'll—"

Cris took her by the arm and continued calmly forward. Blind terror leaped inside her. She fought wildly to get away, but his fingers were like steel. She couldn't pry them loose. Quietly, irresistibly, the great golden creature drew her along beside him, toward the double line of guards.

"*There he is!*" Guns went up. Men leaped into action. The barrel of the robot cannon swung around. "Get him!"

Anita was paralyzed. She sagged against the powerful body beside her, tugged along helplessly by his inflexible grasp. The lines of guards came nearer, a sheer wall of guns. Anita fought to control her terror. She stumbled, half-fell. Cris supported her effortlessly. She scratched, fought at him, struggled to get loose—

"Don't shoot!" she screamed.

Guns wavered uncertainly. "Who is she?" The guards were moving around, trying to get a sight on Cris without including her. "Who's he got there?"

One of them saw the stripe on her sleeve. Red and black. Director Class. Top-level.

"She's Class A." Shocked, the guards retreated. "Miss, get out of the way!"

Anita found her voice. "Don't shoot. He's—in my custody. You understand? I'm taking him out."

The wall of guards moved back nervously. "No one's supposed to pass. Director Wisdom gave orders—"

"I'm not subject to Wisdom's authority." She managed to edge

her voice with a harsh crispness. "Get out of the way. I'm taking him to the Semantics Agency."

For a moment nothing happened. There was no reaction. Then slowly, uncertainly, one guard stepped aside.

Cris moved. A blur of speed, away from Anita, past the confused guards, through the breach in the line, out the exit, and onto the street. Bursts of energy flashed wildly after him. Shouting guards milled out. Anita was left behind, forgotten. The guards, the heavy-duty gun, were pouring out into the early morning darkness. Sirens wailed. Patrol cars roared into life.

Anita stood dazed, confused, leaning against the wall, trying to get her breath.

He was gone. He had left her. Good God—what had she done? She shook her head, bewildered, her face buried in her hands. She had been hypnotized. She had lost her will, her common sense. Her reason! The animal, the great golden beast, had tricked her. Taken advantage of her. And now he was gone, escaped into the night.

Miserable, agonized tears trickled through her clenched fingers. She rubbed at them futilely; but they kept on coming.

HE'S GONE," Baines said. "We'll never get him, now. He's probably a million miles from here."

Anita sat huddled in the corner, her face to the wall. A little bent heap, broken and wretched.

Wisdom paced back and forth. "But where can he go? Where

can he hide? Nobody'll hide him! Everybody knows the law about decees!"

"He's lived out in the woods most of his life. He'll hunt—that's what he's always done. They wondered what he was up to, off by himself. He was catching game and sleeping under trees." Baines laughed harshly. "And the first woman he meets will be glad to hide him—as *she* was." He indicated Anita with a jerk of his thumb.

"So all that gold, that mane, that god-like stance, was *for* something. Not just ornament." Wisdom's thick lips twisted. "He doesn't have just one faculty—he has two. One is new, the newest thing in survival methods. The other is as old as life." He stopped pacing to glare at the huddled shape in the corner. "Plumage. Bright feathers, combs for the roosters swans, birds, bright scales for the fish. Gleaming pelts and manes for the animals. An animal isn't necessarily *bestial*. Lions aren't *bestial*. Or tigers. Or any of the big cats. They're anything but *bestial*."

"He'll never have to worry," Baines said. "He'll get by—as long as human women exist to take care of him. And since he can see ahead, into the future, he already knows he's sexually irresistible to human females."

"We'll get him," Wisdom mut-

tered. "I've had the Government declare an emergency. Military and Civil Police will be looking for him. Armies of men—a whole planet of experts, the most advanced machines and equipment. We'll flush him, sooner or later."

"By that time it won't make any difference," Baines said. He put his hand on Anita's shoulder and patted her ironically. "You'll have company, sweetheart. You won't be the only one. You're just the first of a long procession."

"Thanks," Anita grated.

"The oldest survival method and the newest. Combined to form one perfectly adapted animal. How the hell are we going to stop him? We can put *you* through a sterilization tank—but we can't pick them all up, all the women he meets along the way. And if we miss one we're finished."

"We'll have to keep trying," Wisdom said. "Round up as many as we can. Before they can spawn." Faint hope glinted in his tired, sagging face. "Maybe his characteristics are recessive. Maybe ours will cancel his out."

"I wouldn't lay any money on that," Baines said. "I think I know already which of the two strains is going to turn up dominant." He grinned wryly. "I mean, I'm making a good guess. It won't be us."

• • • THE END

DON'T FORGET! IF IS NOW MONTHLY! . . . Don't miss *The Ties That Bind*, by Walter Miller, Jr.—a stirring, penetrating new novelette about Man's oldest heritage—in the May issue on sale March 10th!

The remarkable thing about Atummymc Afterbath Dusting Powder was that it gave you that lovely, radiant, atomic look—just the way the advertisements said it would. In fact, it also gave you a little something more!

Breeder Reaction

By Winston Marks

Illustrated by Kelly Freas

THE ADVERTISING game is not as cut and dried as many people think. Sometimes you spend a million dollars and get no results, and then some little low-budget campaign will catch the public's fancy and walk away with merchandising honors of the year.

Let me sound a warning, however. When this happens, watch out! There's always a reason for it, and it isn't always just a matter of bright slogans and semantic genius. Sometimes the product itself does the trick. And when this happens people in the industry lose their heads trying to capitalize on the "freak" good fortune.

This can lead to disaster. May I cite one example?

I was on loan to Elaine Templeton, Inc., the big cosmetics firm,

when one of these "prairie fires" took off and, as product engineer from the firm of Bailey Hazlitt & Persons, Advertising Agency, I figured I had struck pure gold. My assay was wrong. It was fool's gold on a pool of quicksand.

Madame "Elaine", herself, had called me in for consultation on a huge lipstick campaign she was planning—you know, NOW AT LAST, A TRULY KISS-PROOF LIPSTICK!—the sort of thing they pull every so often to get the ladies to chuck their old lip-goo and invest in the current dream of non-smearability. It's an old gimmick, and the new product is never actually kiss-proof, but they come closer each year, and the gals tumble for it every time.

Well, they wanted my advice on

a lot of details such as optimum shades, a new name, size, shape and design of container. And they were ready to spend a hunk of moolah on the build-up. You see, when they give a product a first-class advertising ride they don't figure on necessarily showing a profit on that particular item. If they break even they figure they are ahead of the game, because the true purpose is to build up the brand name. You get enough women raving over the new Elaine Templeton lipstick, and first thing you know sales start climbing on the whole line of assorted aids to seduction.

Since E. T., Inc., was one of our better accounts, the old man told me to take as long as was needed, so I moved in to my assigned office, in the twelve-story E. T. building, secretary, Scotch supply, ice-bags, ulcer pills and all, and went to work setting up my survey staff. This product engineering is a matter of "cut and try" in some fields. You get some ideas, knock together some samples, try them on the public with a staff of interviewers, tabulate the results, draw your conclusions and hand them over to Production with a prayer. If your ad budget is large enough your prayer is usually answered, because the American Public buys principally on the "we know what we like, and we like what we know" principle. Make them "know it" and they'll buy it. Maybe in love, absence makes the heart grow fonder, but in this business, familiarity breeds nothing but sales.

Madame Elaine had a fair staff of idea boys, herself. In fact, every

other department head had some gimmick he was trying to push to get personal recognition. The Old Hag liked this spirit of initiative and made it plain to me I was to give everyone a thorough hearing.

This is one of the crosses you have to bear. Everyone but the janitor was swarming into my office with suggestions, and more than half of them had nothing to do with the lipstick campaign at all. So I dutifully listened to each one, had my girl take impressive notes and then lifted my left or my right eyebrow at her. My left eyebrow meant file them in the wastebasket. This is how the Atummeyc Afterbath Dusting Powder got lost in the shuffle, and later I was credited with launching a new item on which I didn't even have a record.

It came about this way:

JUST BEFORE lunch one day, one of the Old Hag's promotion-minded pixies flounced her fanny into my interview chair, crossed her knees up to her navel and began selling me her pet project. She was a relative of the Madame as well as a department head, so I had to listen.

Her idea was corny—a new dusting powder with "Atummion" added, to be called, "Atummeyc Afterbath Dusting Powder"—"Atummeyc", of course, being a far-fetched play on the word "atomic". What delighted her especially was that the intimate, meaningful word "tummy" occurred in her coined trade name, and this was supposed to do won-



ders in stimulating the imaginations of the young females of man-catching-age.

As I said, the idea was corny. But the little hazel-eyed pixie was not. She was about 24, black-haired, small-waisted and bubbling with hormones. With her shapely knees and low-cut neckline she was a pleasant change of scenery from the procession of self-seeking middle-agers I had been interviewing—not that her motive was any different.

I stalled a little to feast my eyes. "This *Atummion Added* item," I said, "just what is *Atummion*?"

"That's my secret," she said, squinching her eyes at me like a fun-loving little cobra. "My brother is assistant head chemist, and he's worked up a formula of fission products we got from the Atomic Energy Commission for experimentation."

"Fission products!" I said. "That stuff's dangerous!"

"Not this formula," she assured me. "Bob says there's hardly any radiation to it at all. Perfectly harmless."

"Then what's it supposed to do?" I inquired naively.

She stood up, placed one hand on her stomach and the other behind her head, wiggled and stretched. "Atummeyc Bath Powder will give milady that wonderful, vibrant, *atomic* feeling," she announced in a voice dripping with innuendo.

"All right," I said, "that's what it's supposed to do. Now what does it really do?"

"Smells good and makes her

slippery-dry, like any other talcum," she admitted quite honestly. "It's the name and the idea that will put it across."

"And half a million dollars," I reminded her. "I'm afraid the whole thing is a little too far off the track to consider at this time. I'm here to make a new lipstick go. Maybe later—"

"I appreciate that, but honestly, don't you think it's a terrific idea?"

"I think you're terrific," I told her, raising my left eyebrow at my secretary, "and we'll get around to you one of these days."

"Oh, Mr. Sanders!" she said, exploding those big eyes at me and shoving a half-folded sheet of paper at me. "Would you please sign my interview voucher?"

In Madame Elaine's organization you had to have a written "excuse" for absenting yourself from your department during working hours. I supposed that the paper I signed was no different from the others. Anyway, I was still blinded by the atomic blast of those hazel eyes.

After she left I got to thinking it was strange that she had me sign the interview receipt. I couldn't remember having done that for any other department heads.

I didn't tumble to the pixie's gimmick for a whole month, then I picked up the phone one day and the old man spilled the news. "I thought you were making lipstick over there. What's this call for ad copy on a new bath powder?"

The incident flashed back in my mind, and rather than admit I had been by-passed I lied, "You know the Madame. She always gets all

she can for her money."

The old man muttered, "I don't see taking funds from the lipstick campaign and splitting them off into little projects like this," he said. "Twenty-five thousand bucks would get you one nice spread in the Post, but what kind of a one-shot campaign would that be?"

I mumbled excuses, hung up and screamed for the pixie. My secretary said, "Who?"

"Little sexy-eyes. The Atomic Bath Powder girl."

Without her name it took an hour to dig her up, but she finally popped in, plumped down and began giggling. "You found out."

"How," I demanded, "did you arrange it?"

"Easy. Madame Elaine's in Paris. She gave you a free hand, didn't she?"

I nodded.

"Well, when you signed your okay on the Atummeyc—"

"That was an interview voucher!"

"Not—exactly," she said ducking her head.

The damage was done. You don't get ahead in this game by admitting mistakes, and the production department was already packaging and labelling samples of Atummeyc Bath Powder to send out to the distributors.

IHAD TO carve the \$25,000 out of my lipstick budget and keep my mouth shut. When the ad copy came over from my firm I looked it over, shuddered at the quickie treatment they had given it and turned it loose. Things were

beginning to develop fast in my lipstick department, and I didn't have time to chase the powder thing like I should have—since it was my name on the whole damned project.

So I wrote off the money and turned to other things.

We were just hitting the market with Madame Elaine Templeton's "Kissmet" when the first smell of smoke came my way. The pixie came into my office one morning and congratulated me.

"You're a genius!" she said.

"Like the Kissmet campaign, do you?" I said pleased.

"It stinks," she said holding her nose. "But Atummeyc Bath Powder will pull you out of the hole."

"Oh, that," I said. "When does it go to market?"

"Done went—a month ago."

"What? Why you haven't had time to get it out of the lab yet. Using a foreign substance, you should have had an exhaustive series of allergy skin tests on a thousand women before—"

"I've been using it for two months myself," she said. "And look at me! See any rashes?"

I focussed my eyes for the first time, and what I saw made me wonder if I were losing my memory. The pixie had been a pretty little French pastry from the first, but now she positively glowed. Her skin even had that "radiant atomic look", right out of our corny, low-budget ad copy.

"What—have you done to yourself, fallen in love?"

"With Atummeyc After Bath Powder," she said smugly. "And so have the ladies. The distributors

are all reordering."

Well, these drug sundries houses have some sharp salesmen out, and I figured the bath powder must have caught them needing something to promote. It was a break. If we got the \$25,000 back it wouldn't hurt my alibi a bit, in case the Kissmet production failed to click.

Three days later the old man called me from the New York branch of our agency. "Big distributor here is hollering about the low budget we've given to this Atummion Bath Powder thing," he said. "He tells me his men have punched it hard and he thinks it's catching on pretty big. Maybe you better talk the Madame out of a few extra dollars."

"The Old Hag's in Europe," I told him, "and I'm damned if I'll rob the Kissmet Lipstick deal any more. It's mostly spent anyway."

The old man didn't like it. When you get the distributors on your side it pays to back them up, but I was too nervous about the wobbly first returns we were getting on the Kissmet campaign to consider taking away any of the unspent budget and throwing it into the bath powder deal.

The next day I stared at an order from a west coast wholesaler and began to sweat. The pixie fluttered it under my nose. "Two more carloads of Atummion Bath Powder," she gloated.

"Two more carloads?"

"Certainly. All the orders are reading carloads," she said. "This thing has busted wide open."

And it had. Everybody, like I said earlier, lost their head. The

bath-powder plant was running three shifts and had back-orders chin high. The general manager, a joker name of Jennings, got excited, cabled Madame Elaine to get back here pronto, which she did, and then the panic was on.

The miracle ingredient was this Atummion, and if Atummion sold bath powder why wouldn't it sell face-cream, rouge, mud-packs, shampoos, finger-nail polish and eye-shadow?

For that matter, the Old Hag wanted to know, why wouldn't it sell Kissmet Lipstick?

The answer was, of course, that the magic legend "Contains the Exclusive New Beauty Aid, Atummion" *did* sell these other products. Everything began going out in carload lots as soon as we had the new labels printed, and to be truthful, I breathed a wondrous sigh of relief, because up to that moment my Kissmet campaign had promised to fall flat on its lying, crimson face.

THE STAGGERING truth about Atummion seeped in slowly. Item one: Although we put only a pinch of it in a whole barrel of talcum powder, *it did give the female users a terrific complexion!* Pimples, black-heads, warts, freckles and even minor scars disappeared after a few weeks, and from the very first application users mailed us testimonials swearing to that "atomic feeling of loveliness".

Item two: About one grain of Atummion to the pound of lipstick brought out the natural

color of a woman's lips and maintained it there *even after the lipstick was removed.*

Item three: There never was such a shampoo. For once the ad copywriters failed to exceed the merits of their product. Atummion-tinted hair took on a sparkling look, a soft texture and *a natural-appearing wave* that set beauty-operators screaming for protection.

These beauticians timed their complaint nicely. It got results on the morning that the whole thing began to fall to pieces.

About ten A. M. Jennings called a meeting of all people concerned in the Atummeyc Powder project, and they included me as well as the pixie and her brother, the assistant chemist.

Everyone was too flushed with success to take Jennings' opening remark too seriously. "It looks like we've got a winner that's about to lose us our shirts," he said.

He shuffled some papers and found the one he wanted to hit us with first. "The beauticians claim we are dispensing a dangerous drug without prescription. They have brought suits to restrain our use."

Madame Elaine in her mannishly tailored suit was standing by a window staring out. She said, "The beauticians never gave us any break, anyway. Hell with them! What's next?"

Jennings lifted another paper. "I agree, but they sicked the Pure Food and Drug people on us. They tend to concur."

"Let them prove it first," the Old Hag said turning to the pixie's brother. "Eh, Bob!"

"It's harmless!" he protested, but

I noticed that the pixie herself, for all her radiance, had a troubled look on her face.

The general manager lifted another paper. "Well, there seems to be enough doubt to have caused trouble. The Pure Food and Drug labs have by-passed the courts and put in a word to the Atomic Energy Commission. The AEC has cut off our supply of the fission salts that go into Atummion, pending tests."

That brought us all to our feet. Madame Elaine stalked back to the huge conference table and stared at Bob, the chemist. "How much of the gunk do we have on hand?"

"About a week's supply at present production rates." He was pale, and he swallowed his adam's apple three times.

The worst was yet to come. The pixie looked around the table peculiarly unchanged by the news. She had trouble in her face but it had been there from the start of the conference. "I wasn't going to bring this up just yet," she said, "but since we're here to have a good cry I might as well let you kick this one around at the same time. Maybe you won't mind shutting down production after all."

The way she said it froze all of us except the Madame.

The Madame said, "Well, speak up! What is it?"

"I've been to twelve different doctors, including eight specialists. I've thought and thought until I'm half crazy, and there just isn't any other answer," the pixie said.

She stared at us and clenched her fists and beat on the shiny table. "You've got to believe me! There

just isn't *any* other answer. Atummion is responsible for my condition, and all twelve doctors agreed on my condition."

Still standing, Madame Elaine Templeton grabbed the back of her chair until her knuckles turned white. "Don't tell me the stuff brings on hives or something!"

The pixie threw back her head and a near-hysterical laugh throbbed from her lovely throat. "Hives, hell. I'm pregnant!"

WELL, we were all very sorry for her, because she was unmarried, and that sort of thing is always clumsy. At that moment, however, none of us believed the connection between her condition and Atummion.

Being a distant relative of the Madame, she was humored to the extent that we had the lab get some guinea pigs and douse them with Elaine Templeton's After Bath Powder, and they even professed to make a daily check on them.

Meanwhile, production ground to a halt on all Atummion-labelled products, which was everything, I think, but the eyebrow pencils.

With every drug-store and department store in the country screaming to have their orders filled, it was a delicate matter and took a lot of string-pulling to keep the thing off the front-pages. It wasn't the beautician's open charges that bothered us, because everyone knew they were just disgruntled. But if it leaked out that the AEC was disturbed enough to cut off our fission products, every radio, newspaper and TV com-

mentator in the business would soon make mince-meat of us over the fact that Atummion had not been adequately tested before marketing. And this was so right!

We took our chances and submitted honest samples to the Bureau of Weights and Measures and the Pure Food and Drug labs. And held our breath.

The morning the first report came back in our favor there was great rejoicing, but that afternoon our own testing lab sent up a man to see Jennings, and he called me instantly.

"Sanford, get up here at once. The guinea pigs just threw five litters of babies!"

"Congratulations," I told him. "That happens with guinea pigs, I understand."

"You *don't* understand," he thundered at me. "This was test group F-six, all females, and every one has reached maturity since we bought and segregated them."

"There must be some mistake," I said.

"There better be," he told me.

I went to his office and together we picked up the Madame from her penthouse suite. She followed us into the elevator reluctantly. "Absurd, absurd!" was all she could say.

We watched the lab man check the ten adult pigs one by one. Even as inexpert as I am in such matters, it was evident that all ten were females, and the five which had not yet participated in blessed events were but hours from becoming mothers.

We went our separate ways stunned. Back in my office I pulled

out a list of our big wholesale accounts where the Atummion products had been shipped by the car-loads. The warehouses were distributed in every state of the union.

Then I ran my eye down the list of products which contained the devilish Atummion. There were thirty-eight, in all, including a complete line of men's toiletries, shaving lotion, shampoo, deodorant and body-dusting powder. I thanked God that men didn't have ovaries.

Dolores Donet—that was the pixie's name—opened my door and deposited herself gingerly in a chair opposite me.

I said, "You look radiant."

She said, "Don't rub it in, and I'll have a shot of that." I shared my Haig and Haig with her, and we drank to the newly departed bottom of the world.

MY SECRETARY tried to give me a list of people who had phoned and a stack of angry telegrams about back-orders, but I waved her away. "Dolores," I said, "there must have been a boy guinea pig loose in that pen. It's just too fantastic!"

"Are you accusing me of turning one loose just to get off the hook myself?" she snapped.

"What you've got, excuses won't cure," I told her, "but we've got to get facts. My God, if you're right—"

"We've sworn everyone to secrecy," she said. "There's a \$10,000 bonus posted for each employee who knows about this. Payable when the statute of limitations runs out on possible litigation."

"You can't swear the public to secrecy," I said.

"Think a minute," she said, coldly. "The married women don't need excuses, and the single girls—who'll believe them? Half of them or better, have guilty consciences anyway. The rest? They're in the same boat I was—with a labful of guinea pigs to back them up."

"But—how did it happen in the first place?"

"Bob has been consulting the biologist we retained. He keeps asking the same question. He says parthenogenesis in higher life-forms is virtually impossible. Bob keeps pointing at the little pigs, and they're going round and round. They're examining the other eleven test pens now, but there's no question in my mind. I have a personal stake in this experiment, and I was very careful to supervise the segregation of males and females."

My sanity returned in one glorious rush. *There was the bugger factor! Dolores, herself.*

In her eagerness to clear her own skirts, Dolores had tampered with the integrity of the experiment. Probably, she had arranged for artificial insemination, just to be sure. The tip-off was the hundred percent pregnancy of one whole test-batch. Ten out of ten. Even if one buck had slipped in inadvertently, and someone was covering up the mistake, why you wouldn't expect anything like a 100% "take".

"Dolores," I said, "you are a naughty girl in more ways than one."

She got up and refilled her glass shaking her head. "The ever-sus-

picious male," she said. "Don't you understand? I'm not trying to dodge my responsibility for my condition. The whole mess is my fault from beginning to end. But what kind of a heel will I be if we get clearance from the AEC and start shipping out Atummeyc products again—knowing what I do? What's more, if we let the stuff float around indefinitely, someone is going to run comprehensive tests on it, not just allergy test patches like they're doing at the government labs right now."

"Yeah," I said, "so we all bury the hottest promotion that ever hit the cosmetics industry and live happily ever after."

She hit the deck and threw her whiskey glass at me, which did nothing to convince me that she wasn't telling the tallest tale of the century—to be conservative.

We sat and glared at each other for a few minutes. Finally she said, "You're going to get proof, and damned good proof any minute now."

"How so?" Nothing this experiment revealed would be valid to me, I figured, now that I was convinced she had deliberately fouled it up.

"Bob and the biologist should be up here any minute. I told them I'd wait in your office. I know something you don't. I'm just waiting for them to verify it."

She was much too confident, and I began to get worried again. We waited for ten minutes, fifteen, twenty. I picked up the phone and dialed the lab.

The woman assistant answered

and said that the two men were on the way up right now. I asked, "What have they been doing down there?"

She said, "They've been doing Caesarian sections on the animals in test-pen M-four."

"Caesarian sections?" I repeated. She affirmed it, and Dolores Donet got a tight, little, humorless smile on her face. I hung up and said, "They're on their way up, and what's so funny?"

She said, "You know what I think? I think you've been using Atummeyc products on you."

"So what?" I demanded. "I was responsible for this campaign, too. I've been waiting for a rash to develop almost as long as you have."

She said, "When Bob comes in, look at his complexion. All three of us have been guinea pigs, I guess."

"I still don't see what's so damned amusing."

She said, "You still don't tumble, eh? All right, I'll spell it out. Caesarians performed on test batch M-four."

"So?"

"The 'M' stands for male," she said.

She timed it just right. The hall door opened and Bob trailed in with a dazed look. The biologist was half holding him up. His white lab-smock was freshly blood-stained, and his eyes were blank and unseeing.

But for all his distress, he was still a good looking young fellow. His skin had that lovely, radiant, atomic look—just like mine.

* * * THE END

No one knows the heart of a rebel until his own search for the reason of right or wrong is made. Lieutenant Laskell found the answer to his own personal rebellion deep beneath a turbulent Atlantic, and somehow, when the time came, his decision wasn't too difficult . . .

Way of a Rebel

By Walter Miller, Jr.

Illustrated by Rudolph Palais

LIEUTENANT LASSELL surfaced his one-man submarine fifty miles off the Florida coast where he had been patrolling in search of enemy subs. Darkness had fallen. He tuned his short wave set to the Miami station just in time to hear the eight o'clock news. The grim announcement that he had expected was quick to come:

"In accordance with the provisions of the Twenty-Sixth Amendment, Congress today approved the Manlin Bill, declaring a state of total emergency for the nation. President Williston signed it immediately and tendered his resignation to the Congress and the people. The executive, legislative, and judiciary are now in the hands of the Department of Defense. Secretary

Garson has issued two decrees, one reminding all citizens that they are no longer free to shirk their duties to the nation, the other calling upon the leaders of the Eurasian Soviet to cease air attacks on the American continent or suffer the consequences.

"In Secretary Garson's ultimatum to the enemy, he stated: 'Heretofore we have refrained from employing certain weapons of warfare in the vain hope that you would recognize the futility of further aggression and desist from it. You have not done so. You have persisted in your blood-thirsty folly, despite this nation's efforts to reach an agreement for armistice. Therefore I am forced to command you, in the Name of Almighty God,



to surrender immediately or be destroyed. I shall allow you one day in which to give evidence of submission. If such evidence is not forthcoming, I shall implement this directive by a total attack. . . ”

Mitch Laskell switched off the short wave set and muttered an oath. He squeezed his way up through the narrow conning tower and sat on the small deck, leaning back against the rocket-launcher and dangling his feet in the calm ocean. The night was windless and warm, with the summer stars eyeing the earth benignly. But despite the warmth, he felt clammy; his hands were shaking a little as he lit a cigarette.

The newscast—it came as no surprise. The world had known for weeks that the Manlin Bill would be passed, and that Garson would be given absolute powers to lead the nation through the war. And his ultimatum to the enemy was no surprise. Garson had long favored an all-out radiological attack, employing every nuclear weapon the country could muster. Heretofore both sides had limited themselves to non-rigged atomic explosives, and had refrained from using bacterial weapons. Garson wanted to take off the boxing-gloves in favor of steel gauntlets. And now it would happen—the all-out attack, the masterpiece of homicidal engineering, the final word in destruction.

MITCH, reclining in loneliness against the rocket-launcher, blew a thoughtful cloud of cigarette smoke toward the bright yellow eye

of Arcturus, almost directly overhead, and wondered why the Constellation Boötes suddenly looked like a big club ready to fall on the earth, when it had always reminded him of a fly-swatting about to slap the Corona Borealis. He searched himself for horror, but found only a gloomy uneasiness. It was funny, he thought; five years ago men would have been outraged at the notion of an American absolutism, with one man ruling by decree. But now that it had happened, it was not so hard to accept. He wondered at it.

And he soon decided that almost any fact could be accepted calmly after it had already happened. Men would be just as calm after their cities had been reduced to rubble. The human capacity for calmness was almost unlimited, *ex post facto*, because the routine of daily living had to go on, despite the big business of governments whose leaders invoked the Deity in the cause of slaughter.

A voice, echoing up out of the conning tower, made him jump. The command set was barking his call letters.

“Unit Sugar William Niner Zero, Mother wants you. I say again: Mother wants you. Acknowledge please. Over.”

The message meant: *return to base immediately*. And it implied an urgency in the use of the code-word Mother. He frowned and started up, then fell back with a low grunt.

All of his resentment against the world’s political jackasses suddenly boiled up inside him as a *personal* resentment. There was something

about the metallic rasp of the radio's voice that sparked him to sudden rebelliousness.

"Unit Sugar William Niner Zero, Mother wants you, Mother wants you. Acknowledge immediately. Over."

He had a good idea what it was all about. All subs were probably being called in for rearmament with cobalt-rigged atomic warheads for their guided missiles. The submarine force would probably be used to implement Garson's ultimatum. They would deliver radiological death to Eurasian coastal cities, and cause the Soviets to retaliate.

Why must I participate in the wrecking of mechanical civilization? he thought grimly.

But a counter-thought came to trouble him: *I have a duty to obey; The country gave me birth and brought me up, and now it's got a war to fight.*

He arose and let himself down through the conning tower. He reached for the microphone, but the receiver croaked again.

"Sugar William Niner Zero, you are ordered to answer immediately. Mother's fixing shortening bread. Mother wants you. Over."

Shortening bread—big plans, something special, a radiological death-dish for the world. He hated the voice quietly. His hand touched the microphone but did not lift it.

He stood poised there in the light of a single glow-lamp, feeling his small sub rocking gently in the calm sea, listening to the quiet purr of the atomics beneath him. He had come to love the little sub, despite the loneliness of long weeks at sea.

His only companion was the sub's small computer which was used for navigation and for calculations pertaining to the firing of the rocket-missiles. It also handled the probability mathematics of random search, and automatically radioed periodic position reports to the home-base computer.

He glanced suddenly at his watch. It was nearly time for a report. Abruptly he reached out and jerked open the knife-switch in the computer's antenna circuit. Immediately the machine began clicking and clattering and chomping. A bit of paper tape suddenly licked out of its answer-slot. He tore it off and read the neatly printed words: MALFUNCTION, OPEN CIRCUIT, COMMUNICATIONS OUTPUT; INSERT DATA.

Mitch "inserted data" by punching a button labelled NO REPAIR and another labelled RADIO OUT. One bank of tubes immediately lost its filament-glow, and the computer shot out another bit of tape inscribed DATA ROGERED. He patted it affectionately and grinned. The computer was just a machine, but he found it easy to personalize the thing. . .

The command-set was crackling again. "Sugar William Niner Zero, this is Commsubron Killer. Two messages. Mother wants you. Daddy has a razor strap. Get on the ball out there, boy! Acknowledge. Over."

Mitch whitened and picked up the microphone. He keyed the transmitter's carrier and spoke in a quiet hiss. "Commsubron Killer from Sugar William Niner Zero.

Message for Daddy. Sonnyboy just resigned from the Navy. Go to hell, all of you! Over and out!"

He shut off the receiver just as it started to stutter a shocked reply. He dropped the mike and let it dangle. He stood touching his fingertips to his temples and breathing in shallow gasps. Had he gone completely insane?

He sat down on the floor of the tiny compartment and tried to think. But he could only feel a bitter resentment welling up out of nowhere. Why? He had always gotten along in the Navy. He was the under-sea equivalent of a fighter pilot, and he had always liked his job. They had even said that "he had the killer instinct"—or whatever it was that made him grin maliciously when he spotted an enemy sub and streaked in for the kill.

NOW SUDDENLY he didn't want to go back. He wanted to quit the whole damn war and run away. Because of Garson maybe? But no, hadn't he anticipated that before it happened? Why should he kick now, when he hadn't kicked before? And who was *he* to decide whether Garson was right or wrong?

Go back, he thought. There's the microphone. Pick it up and tell Commsubron that you went stir-crazy for a little while. Tell him wilco on his message. They won't do anything to you except send you to a nut doctor. Maybe you need one. Go on back like a sane man.

But he drew his hand back from the microphone. He wiped his face

nervously. Mitch had never spent much time worrying about ethics and creeds and political philosophies. He'd had a job to do, and he did it, and he sometimes sneered at people who could wax starry-eyed about patriotism and such. It didn't make sense. The old school spirit was okay for football games, and even for small-time wars, but he had never felt much of it. He hadn't needed it in order to be a good fighter. He fought because it was considered the "thing to do," because he liked the people he had to live with, and because those people wouldn't have a good opinion of him if he didn't fight. People never needed much of a philosophic motive to make them do the socially approved things.

He moistened his lips nervously and stared at the microphone. He was scared. Scared to run away. He had never been afraid of a *fight*, frightened maybe, but not afraid. Why now? *It takes a lot of courage to be a coward*, he thought, but the word *coward* made him wince. He groped blindly for a reasonable explanation of his desire to desert. He wanted to talk to somebody about it, because he was the kind of man who could think best in an argument. But there was no one to talk to except the radio.

The computer's keyboard was almost at his elbow. He stared at it for a moment, then slowly typed:

DATA: WIND OUT OF THE NORTH, WAVE FACTOR 0.50 ROUGHNESS SCALE.

INSTRUCTIONS: SUGGEST ACTION.

The machine chewed on the entry noisily for a few seconds, then

answered: INSUFFICIENT DATA.

He nodded thoughtfully. That was his predicament too: insufficient data about his own motives. How could a man trust himself to judge wisely, when his judgement went completely against that of his society? He typed again.

DATA FOR HYPOTHETICAL PROBLEM: YOU HAVE JUST SOLVED A NAVIGATIONAL PROBLEM WHOSE SOLUTION REQUIRES COURSE DUE WEST. THREE OTHER COMPUTERS SOLVE SAME PROBLEM AND GET COURSE DUE SOUTH. MALFUNCTION NOT EVIDENT IN ANY OF FOUR COMPUTERS.

INSTRUCTIONS: FURNISH A COURSE.

The computer clattered for awhile, then typed: SUGGESTION: MALFUNCTION INDICATORS ARE POSSIBLY MALFUNCTIONING. IS DATA AVAILABLE?

He stared at it, then laughed grimly. His *own* malfunction-indicator wasn't telling him much either. With masochistic fatalism he touched the keyboard again.

DATA NOT AVAILABLE. FURNISH A COURSE.

The computer replied almost immediately this time: COURSE: DUE WEST.

Mitch stared at it and bit his lip. The machine would follow its own solution, even if the other three contradicted it. Naturally — it would *have* to follow its own solution, if there was no indication of malfunction. But could a human being make such a decision? Could

a man decide, "I am right, and everyone else is wrong?"

No evidence of malfunction, he thought. I am not a coward. Neither am I insane.

His heart cried: "I am disgusted with this purposeless war. I shall quit fighting it."

He sighed deeply, then arose. There was nothing else to do. The atomic engines could go six months without refueling. There were enough undersea rations to last nearly that long.

He switched on the radio again, goosed the engines to full speed, and after a moment's thought, swung around on a northeasterly heading. His first impulse had been to head south, aiming for Yucatan or the Guianas—but that impulse would also be the first to strike his pursuers who were sure to come.

A new voice was growling on the radio, and he recognized it as Captain Barkley, his usually jovial, slightly cynical commanding officer. "Listen, Mitch—if you can hear me, better answer. What's wrong with you anyhow? I can't hold off much longer. If you don't reply, I'll have to hunt you down. You're ordered to proceed immediately to the nearest base. Over."

Mitch wanted to answer, wanted to argue and fume and curse, hoping that he could explain his behaviour to his own satisfaction. But they might not be certain of his exact location, and if he used the radio, half-a-dozen direction-finders would swing around to aim along his signal, and Barkley would plot the half-a-dozen lines on the map in his office before speaking crisply into his telephone: *all right,*

boys—get him! 29° 10' North, 79° 50' West. Use a P-charge if you can't spot him by radar or sonar.

Mitch left the controls in the hands of the computer and went up to stand in the conning tower with the churning spray washing his face. Surfaced, the sub could make sixty knots, and he meant to stay surfaced until there were hints of pursuit.

A THREE-QUARTER moon was rising in gloomy orange majesty out of the quiet sea. It made a river of syrupy light across the water to the east, and it heightened his sense of unreality, his feeling of detachment from danger.

Is it always like this, he wondered? Can a man toss aside his society so easily, become a traitor with so little logical reason? A day ago, he would not have dreamed it possible. A day ago, he would have proclaimed with the cynical Barkley, "A sailor's got no politics. What the hell's it to me if Garson is Big Boss? I'm just a little tooth in a big gear. Uncle pays my keep. I ask no questions."

And now he was running like hell and stealing several million bucks worth of Uncle's Navy, all because Garson's pomposity and a radio operator's voice got under his skin. How could a man be so crazy?

But no, that *couldn't* be it, he thought. Jeezil! He must have some better reason. Sort of a last straw, maybe. But he had been conscious of no great resentment against the war or the Navy or the government. Historically speaking, wars had never done a great deal of

harm—no more harm than industrial or traffic accidents.

Why was this war any different? It promised to be more destructive than the others, but that was drawing a rather narrow line. Who was he to draw his bayonet across the road and say, "Stop here. This is the limit."

Mitch turned his back toward the whipping spray and stared aft along the phosphorescent, moon-swept wake of his mechanical shark. The radio was still barking at him with Barkley's clipped tones.

"Last warning, Laskell! Get on that microphone or suffer the consequences! We know where you are. I'll give you fifteen minutes, then we'll come get you. Over and out."

Thanks for the warning, Mitch thought. In a few minutes, he would have to submerge. His eyes swept the moon-washed heavens for signs of aircraft, and he watched the dark horizon for hints of pursuit.

He meant to keep the northeasterly course for perhaps ten hours, then turn off and cruise southeast, passing below Bermuda and on out into the central Atlantic. Then south—perhaps to Africa or Brazil. A fugitive for the rest of his days.

"Sugar William Niner Zero," barked the radio. "This is Comm-subfleet Jaybird. Over."

Mitch moistened his lips nervously. The voice was no longer Barkley's. Commsubfleet Jaybird was Admiral Harrinore. He chuckled bitterly then, realizing that he was still automatically startled by rank. He remained in the conning tower, listening.

"Sugar William Niner Zero, this is Commsubfleet Jaybird. If you will obey orders immediately, I guarantee that you will be allowed to accept summary discipline. No court martial if you comply. You are to return to base at once. Otherwise, we shall be forced to blast you out of the ocean as a deserter to the enemy. Over."

So that was it, he thought. They were worried about the sub falling into Soviet paws. Some of its equipment was still classified "secret", although the Reds probably already had it.

No, he wasn't deserting to the enemy. Neither side was right in the struggle, although he preferred the West's brand of wrongness to the bloodier wrongness of the Reds. But a man in choosing the lesser of two evils must first decide whether the choice really *has to be made*, and if there is not a third and more desirable way. Before picking a weapon for self-destruction, it might help to reason whether or not suicide is really necessary.

He smiled sardonically into the gray gloom, knowing that his thinking was running backwards, that he had acted before reasoning why, that he was rationalizing in an attempt to soothe himself and absolve himself. But a lot of human thinking occurred beneath the level of consciousness, down in the darker regions of the mind where it was not allowed to become conscious lest it bring shame to the thinker. And perhaps he had reasoned it all out in that mental half-world where thoughts are inner ghosts, haunting the possessed man with vague stirrings of uneasiness,

leading him into inexplicable behaviour.

I am free now, he told himself. I have given them my declaration of independence, and I am an animal struggling to survive. Living in society, a man must submit to its will, but now I am divorced from it, and I shall live apart from it if I live at all, and I shall owe it nothing. The "governed" no longer gives his consent. How many times have men said, "If you don't like the system here, why don't you get out?" Well, he was getting out, and as a freeborn human animal, born as a savage into the world, he had that right, if he had any rights at all.

He grunted moodily and lowered himself down into the belly of the sub. They would be starting the search soon. He sealed the hatches and opened the water intakes after slowing to a crawl. The sub shivered and settled. The indicator crept to ten feet, twenty, thirty. At fifty feet, he jabbed a button on the computer, and the engines growled a harder thrust. He kept the northeasterly heading at maximum underwater speed.

AN HOUR crept by. He listened for code on the sonar equipment, but heard only the weird and nameless sea-sounds. He allowed himself a reading light in the cramped compartment, folded the map-table up from the wall, and studied the coastline of Africa.

He began to feel a frightening loneliness, although scarcely two hours had passed since his rebellious decision, and he was accus-

tomed to long weeks alone at sea. He scoffed at himself. He would get along okay; the sub would take him any place he wanted to go, if he could escape pursuit. Surely there must be some part of the world where men were not concerned with the senseless struggle of the titans. But all such places were primitive, savage, almost unendurable to a man born and tuned to the violin-string pitch of technological culture.

Mitch realized dismally that he loved technological civilization, its giant tools, its roar of mighty engines, its proud structures of concrete and steel. He could sacrifice his love for particular people, for particular places and governments—but it was going to be harder to relinquish mechanical civilization for some stone-age culture lingering in an out-of-the-way place. Changing tribes was easy, for all tribes belonged to Man, but renouncing machinery for jungle tools would be more difficult. A man could change his politics, his friends, his religion, his country, but Man's tools were a part of his body. Having used a high-powered rifle, the man subsumed the weapon, made it a part of himself. Trading it for a stone axe would be like cutting off his arm. Man was a user of tools, a shaper of environments.

That was it, he thought. The reason for his sudden rebellion, the narrow dividing line between tolerable and insufferable wars. A war that killed human beings might be tolerable, if it left most of civilizations' industry intact, or at least restorable, for although men might die, Man lived on, still possessing

his precious tools, still capable of producing greater ones. But a war that wrecked industry, left it a tangled jumble of radioactive concrete and steel—that kind of war was insufferable, as this one threatened to be.

The idea shocked him. Kill a few men, and you scratch the hide of Historical Man. But wreck the industry, drive men out of the cities, leave the factories hissing with beta and gamma radiation, and you amputate the hands of Historical Man the Builder. The machinery of civilization was a living body, with organismic Man as its brain. And the brain had not yet learned to use the body for a constructive purpose. It lacked coordination, and the ability to reason its actions analytically.

Was *he* basing action on analytic reason?

Another hour had passed. And then he heard it. The sound of faint sonar communication. Quickly he nosed upward to twenty feet, throttled back to half speed, and raised the periscope. With his face pressed against the eyepiece, he scanned the moonlit ocean in a slow circle. No lights, no silhouettes against the reflections on the waves.

He started the pumps and prepared to surface. Then the conning tower was snorting through the water like a rolling porpoise. He shut off the engines, leaving the sub in utter silence except for the soft wash of the sea. He adjusted the sonar pickups, turned the amplifier to maximum, and listened intently. Nothing. Had he imagined it?

He jabbed a button, and a motor purred, rolling out the retrac-

tible radar antenna. Carefully he scanned the sky and sea, watching the green-mottled screen for blips. Nothing—no ships or aircraft visible. But he was certain: for a moment he had heard the twitter of undersea communicators.

HE SAT WAITING and listening. Perhaps they had heard his engines, although his own equipment had caught none of their drive-noise.

The computer was able to supervise several tasks at once, and he set it to continue sweeping the horizon with the radar, to listen for sonar code and engine purr while he attended to other matters. He readied two torpedos and raised a rocket into position for launching. He opened the hatch and climbed to stand in the conning tower again, peering grimly around the horizon.

Minutes later, a buzzer sounded beneath him. The computer had something now. He glanced at the parabolic radar antenna, rearing its head a dozen feet above him. It had stopped its aimless scanning and was quivering steadily on the southeast horizon. *Southeast?*

He lowered himself quickly into the ship and stared at the luminous screen. Blips—three blips—barely visible. While he watched, a fourth appeared.

He clamped on his headsets. There it *was!* The faint engine-noise of ships. His trained senses told him they were subs. Subs out of the southeast? He had expected interception from the west—first aircraft, then light surface vessels.

There was but one possible an-

swer: the enemy.

He dived for the radio and waited impatiently for the tubes to warm again. He found himself shouting into the mic.

"Commsubron Killer, this is Sugar William Niner Zero. Urgent message. Over."

He was a long way from the station. He repeated the call three times. At last a faintly audible voice came from the set.

"... this is Commsubron Killer. You are ordered to return immediately..."

The voice faded again.

"Listen!" Mitch bellowed. "Four, no—five enemy submarine—position 31°50' North, 73°10' West, proceeding northwest—roughly, toward Washington. Probably carrying an answer to Garson's ultimatum. Get help out here. Over."

He heard only a brief mutter this time. "... ordered not to proceed toward Washington. Return immediately to—"

"Not me! You fool! Listen! Five—enemy—submarines—" He repeated the message as slowly as he could, repeated it four times.

"... reading you S-1," came the fading answer. "Are you in distress? I say again. Are you in distress? Over."

Angrily Mitch keyed the carrier wave, screwed the button tightly down, and kicked on the four-hundred cycle modulator. Maybe they could get a directional fix on his signal and home on it.

The blips were gone from the radar scope. The subs had spotted him and submerged. In a moment he would be catching a torpedo, unless he moved. He started the

engines quickly, and the surfaced sub lurched ahead. He nosed her toward the enemy craft and opened the throttle. She knifed through the water like a low-running PT boat, throwing a V-shaped fan of spray. When he reached the halfway point between his own former position and the place where the enemy submerged, he began jabbing a release at three second intervals, laying a trail of deadly eggs. He could hear the crash of the exploding depth-charges behind him. He swung around to make another pass.

Then he saw it—the wet metal hulk rearing up like a massive whale dead ahead. They had discovered the insignificance of their lone and pint-sized attacker. They were coming up to take him with deck guns.

Mitch reversed the engines and swung quickly away. The range was too close for a torpedo. The blast would catch them both. He began submerging quickly. A sickening blast shivered his tiny craft, and then another. He dropped to sixty feet, then knifed ahead.

God! Why was he doing this? There was no sense in it, if he meant to run away. But then the thought came: they're returning Old Man Garson's big-winded threat. They're bringing a snootful of radiological hell, and that's the damned bayonet-line across the road.

DEPTH CHARGES were crashing around him as he wove a zig-zag course. The computer was buzzing frantically. Then he saw

why. The rocket launcher hadn't retracted; there was still a rocket in it—with a snootful of Uranium 235. The thing was dragging at the water, slowing him down, causing the sub to shudder and lurch.

Apparently all the subs had surfaced, for the charges were falling on all sides. With the launcher dragging at him, they would get him sooner or later. He tried to nose upward, but the controls refused.

He knew what would happen if he tried to fire the rocket. Hell, he didn't have to fire it. All he had to do was fuse it. It had a water-pressure fuse, and he was beneath exploding depth.

Don't think about it! Do it!

No, you've got to think. That's what's wrong. Too much do, not enough think. They're going to wreck mechanical civilization if they keep it up. They're going to wreck Man's tools, cut off his hands, and make him an ape again!

But what's it to you? What can you do?

Dammit! You can destroy five *wrong* tools that were built to wreck the *right* tools.

Mitch, who wanted to quit an all-out war, reached for the fusing switch. This part was *his* war; destroy the destroyers, but not the producers. Even if it didn't make good military sense—

A close explosion sent him lurching aside. He grabbed at the wall and pushed himself back. The switch—the damn double-toggle *red switch!* He screamed a curse and struck at it with both fists.

There came a beautiful, blinding light. * * * THE END



In a world where men flew, Ecks was landbound; in a world of telepathic contact, he was reduced to clumsy words. Yet, for a psi cripple, he was an incredible adversary for the psi-powerful Health Agents, who pursued him, and a commendable guinea pig for his tormentors. Which is the gist of this fascinating yarn that takes you into a world where men flew and ...

CARRIER

By Robert Sheckley

Illustrated by Ed Emsh

EDWARD ECKS awoke, yawned and stretched. He squinted at the sunlight pouring in through the open east wall of his one-room apartment, and ordered his clothes to come to him.

They didn't obey! He wiped sleep from his eyes and ordered again. But the closet door remained stubbornly shut, and not a garment stirred.

Thoroughly alarmed, Ecks swung out of bed and walked over to the closet. He began to phrase the mental command again, but stopped himself. He must not become panicky. If the clothes didn't obey, it was because he was still half asleep.

Deliberately he turned and walked to the east wall. He had rolled it up during the night and now he stood, bare toes gripping the edge, where the floor met the outside wall of the building, looking out at the city.

It was early. The milkmen were out, soaring up to the terraces to deposit their milk. A man in full evening dress passed, flying like a wounded bird. Drunk, Ecks decided, noting how uncertain the man's levitation sense was. The man banked, narrowly missing a building, dodged a milkman, misjudged the ground and fell the last two feet. Miraculously he held his balance, shook his head and con-

tinued on foot.

Ecks grinned, watching him weave down the street. That was the safest place for him. No one ever used the streets, except the Normal's, or psi's who *wanted* to walk, for some reason. But levitating in his condition, he might get clipped by a teleported bale, or break his neck against a building.

A newsboy floated past the window, goggles dangling from his hip pocket. The boy caught his breath and shot up, straight and true, to a twentieth floor penthouse.

Ecks craned his neck to watch the boy land his paper on the sunny terrace and sweep on. A penthouse, Ecks thought. That was the life. He lived on the third floor of an ancient building—so old that it still had stairway and elevator. But once he had finished his courses at Mycrowski university—once he had his degree—

There was no time for dreaming. Mr. Ollen didn't like him to be late; and his job at Mr. Ollen's store enabled him to attend the University.

Ecks walked back, opened the closet and dressed. Then, thoroughly calm, he ordered the bed to make itself.

A blanket half-lifted, wavered, and fell back on the bed. He ordered again, angrily. The sheets sluggishly straightened, the blankets slowly crawled into place. The pillow wouldn't move.

On the fifth order the pillow dragged itself to the head of the bed. It had taken him almost five minutes to make the bed—a task he usually finished in seconds.

A shocking realization struck

him, and his knees buckled; he sat down on the edge of the bed. He wasn't even able to handle simple motor-response teleportation.

And that, he knew, was how people discovered they had The Disease.

But why? How had it begun? He didn't have any unexplained tensions, any vital, unresolved problems. At twenty-six life was just beginning for him. His studies at the University were going well. He's general psi rating was in the upper tenth, and his sensitivity rating approached the all-time high set by The Sleeper.

Why should it happen to him? Why should he catch the only disease left on Earth?

"I'll be damned, I don't feel sick," he said out loud, wiping perspiration from his face. Quickly he commanded the wall to close, just to see if it would. And it did! He turned on a faucet by mental command, levitated a glass, filled it and brought it to him, without spilling a drop.

"Temporary blockage," he told himself. "A fluke." Perhaps he had been studying too hard. More social life, that was what he needed.

He sent the glass back to the sink, watching the sunlight glint from it as it swooped through the air.

"I'm as good as I ever was," he said.

The glass dropped to the floor, shattering.

"Just a little shaky," he reassured himself. Of course, he should go to Psi-Health for an examination. If there is any impairment of your psi abilities, don't wait. Don't

infect others. Get an examination.

Well, should he? Yes, he probably should.

But the Psi-Health agents were a jumpy bunch. If he showed his face they'd probably isolate him. Give him a few years of solitary rehabilitation, just to play safe.

That would be the end of him. Highly extroverted, Ecks knew himself well enough to realize that he could never stand solitary. His psi abilities would be completely wrecked that way.

Nuts, he said, and walked to the wall. Opening it, he looked out on the three story drop, steeled himself, and jumped.

For a horrible moment, he thought he had forgotten even the basic skill of levitation. Then he caught it, and soared toward Mr. Ollen's store. Weaving slightly, like a wounded bird.

PSY-HEALTH Headquarters on the eighty-second-floor of the Aerilon Building hummed with activity. Messengers levitated in and out the great windows, flying across the room to drop their reports on the Receiving desk. Other reports were teleped in, recorded by Psi-Grade-Three telepathic-sensitive office girls. Samples were teleported through the windows, recorded, and shuttled downstairs by Grade Two Polters. A skinny Grade Four psi girl collected the typed reports and levitated them across the room in a steady stream to the file clerks.

Three messengers swept in through a single window, laughing, barely clearing the jambs, and shot across the room. One, misjudging

his arc, intercepted the path of reports.

"Why don't you look where you're going?" the Grade Four girl asked angrily. Her bridge of papers was scattered across the floor. She levitated them again.

"Sorry, honey," the messenger said, grinning and handing his report to the receiving desk. He winked at her, looped over the white stream, and shot out the window.

"Some nerve," the girl murmured, watching him streak into the sky. Without her attention, the papers began to scatter again.

The end-product of all the activity was funneled to the orderly black desk of Senior Health Officer Paul Marrin.

"Anything wrong, chief?" Marrin looked up and nodded to his assistant, Joe Leffert. Silently he handed him five file cards.

They were breakdown reports. Leffert scanned the first one rapidly.

"Jane Martinelli, waitress, Silver Cow, 4543 Broadway. Subject: Loss of psi ability. Observations: Discoordination of psi motor functions. Diagnosis: Acute loss of confidence. Infectious. Recommended: Quarantine, indefinite period."

The other reports were about the same.

"Quite a few," Leffert said, his tone perfectly even.

Another pile of cards was dropped on the black desk. Marrin leafed through them rapidly, his face impassive. The impassivity was mental as well. Not a thought leaked out of his rigidly held mind.

"Six more." He turned to a large

map behind his desk and pinpointed the new locations. They formed an irregular pattern across almost a third of New York.

Leffert didn't have to speak. Even undirected, his teleped thought was strong enough for Marrin to catch.

Epidemic!

"Keep that to yourself," Marrin said in his normal low voice. He walked slowly back to his desk, considering the implications of eleven cases in a single day, when their average was one a week.

"Get me the full reports on these people," Marrin said, handing Leffert the file cards. "I want a list of everyone they've been in contact with over the past two weeks. And keep quiet about it." Leffert hurried away.

Marrin thought for a moment, then teleped Krandall, chief of The Sleeper project. Normally, teleped messages were handled through a series of telepathic-sensitive girls; there were just too many minds for most people to make contact easily, without auxiliary guidance. But Marrin's psi abilities were of unusual strength. Also, he was strongly attuned to Krandall, having worked with him for many years.

"What's up?" Krandall asked, and the accompanying identity-image had the full, indescribable flavor of the man.

Quickly Marrin outlined the situation.

"I want you to find out if it's a random scattering, or if we've got a carrier to deal with," Marrin finished.

"That'll cost you a supper," Krandall teleped. From the peri-

pheral thoughts, Marrin knew that he was sitting on a pier at Sag Harbor, fishing. "A supper at The Eagles."

"Fine. I'll have all the data. Is five-thirty all right?"

"Please, my boy! Make it six-thirty. A man of my—ah—dimensions—shouldn't levitate too rapidly." The accompanying visual was of an overstuffed sausage.

"At six-thirty, then." They broke contact. Marrin sat back and arranged the papers on his desk into still neater piles. At the moment he wished he were a health officer in some earlier age, with a nice fat germ to hunt down.

The source of The Disease was more subtle.

Diagnosis: Acute Loss of Confidence. Try putting that under your microscope.

He thought momentarily about the waitress, the first case on the files. Perhaps she had been stacking plates on a shelf. A doubt planted in her mind hours before, minutes before, blossomed. The plates fell. And a girl was seriously sick, horribly infected with mankind's last disease. *Loss of motor-coordination.* So she had to go into solitary, in order not to infect anyone else. For how long? A day, a year. A life.

But in the meantime, perhaps some of the customers had caught it from her. And spread it to their wives...

He sat upright and teleped his wife. Her answering thought was quick and warm.

"Hello, Paul!"

He told her he would be working late.

"All right," she said, but her accompanying thoughts were confused with a strong desire to know why, and the knowledge that she couldn't ask.

"Nothing serious," he said in reply to the unspoken question, and regretted it instantly. Lies, untruths, half-truths—even little white lies—didn't telep well. Nevertheless, he didn't retract it.

"All right Paul," his wife said, and they broke contact.

FIVE O'CLOCK, and the office staff put away their papers and headed for the windows flying to their homes in Westchester Long Island and New Jersey.

"Here's the stuff, chief," Leffert said flying up to the desk with a thick briefcase. "Anything else?"

"I'd like you to stand by," Marrin said, taking the briefcase. "Telep a few more agents, also."

"Right. Do you think something might break?"

"I don't know. Better get some supper." Leffert nodded. His eyes grew blank, and Marrin knew he was teleping his wife in Greenwich, telling her he wouldn't be home tonight.

Leffert left, and Marrin was left alone in the room, staring at the sunset. Out of the west window he could see the great red disk of the sun, and flitting across it were the black silhouettes of commuters, levitating home.

Marrin felt very much alone. Just him and a probable epidemic.

At exactly six-twenty, Marrin picked up the briefcase and levitated to The Eagles.

THE EAGLES restaurant was two thousand feet above New York, suspended on the backs of 200 men. The men were Grade One Psi laborers, government-tested for load capacity. As Marrin approached, he saw them under the base of the building. The restaurant floated above them, easily supported by their enormous combined psi strength.

Marrin landed on the main guest deck, and was greeted by the head waiter.

"How's everything, Mr. Marrin?" the waiter asked, leading him to a terrace.

"Fine," Marrin said, as he always did.

"You should try our other place some time, Mr. Marrin. If you're ever near Miami, there's an Eagles there. Same high-quality food."

And high-quality prices, Marrin thought, ordering a martini. The owner of the Eagles was making a fortune. Air-borne restaurants were common now, but Eagles had been the first, and was still the most popular. The owner didn't even have to pay a New York property tax; when he wasn't open, he parked his restaurant in a pasture in Pennsylvania.

The terraces were starting to fill up when Krandall arrived, out of wind and perspiring.

"My God," he gasped, sitting down. "Why aren't there any more airplanes? Bucked a head wind all the way in. Scotch on the rocks."

The waiter hurried away.

"Why do you have your emergencies on my day off?" Krandall asked, teleping the question. "Long distance flights are for the strong

young apes. I am a mental worker. How is your wife?"

"The same," Marrin said. His face, schooled for years into a health officer's blank mask, refused to smile now. He ordered his dinner, and handed Krandall the briefcase.

"Hmmm." Krandall bent over the pages, scanning them rapidly. His broad, good-natured face grew abstracted as he memorized the information.

Marrin looked across the terrace while Krandall absorbed the data. The sun was almost gone, and most of the land was in shadow. Beneath him, the lights of New York were winking on in the shaded areas. Above, the stars snapped on.

Krandall ignored his soup, flipping the pages quickly. Before the soup was cold, he was through.

"That's that," he said. "What shall we talk about?" Krandall was the finest psi calculator in the business. He had to be to head the important Sleeper project. Like all calculators, he let his unconscious do the work. Once the data was committed, he ignored it. Unconsciously, the information was assimilated, examined, compared, synthesized. In a few minutes or hours he would have an answer. Krandall's great talent was compensated for in other ways, though. He couldn't pass a newsboy's test for levitation, and teleportation or telekinetic manifestations were almost out of the question for him.

"Is there anything new with The Sleeper?" Marrin asked.

"Still sleeping. Some of the boys cooked up a subconscious-infiltration technique. They're trying that

in a few days."

"Do you think it will work?"

Krandall laughed. "I give them a one-point-one probability. That's high, compared with some of the stuff they've tried."

Krandall's brook trout was served, teleported fresh from the stream. Marrin's steak followed.

"Do you think anything will work?" Marrin asked.

"No." Krandall's face was serious as he looked at the lean, impassive health officer. "I don't believe the Sleeper will ever awaken."

Marrin frowned. The Sleeper was one of Psi's most important projects, and its least successful. It had started about thirty years ago.

Psi had been standard, but still unpredictable. It had come a long way in two hundred years from Rhine's halting experiments in extra-sensory perception, but it still had a long way to go.

Mycrowski took a lot of the wild-talent aspect from psi. Classified as an extreme sensitive with genius-level psi abilities, Mycrowski was the outstanding man of his age.

With men like Krandall, Myers, Blacenck and others, Mycrowski led the telekinesis projects, explored projection techniques, theorized on instantaneous transfer in teleportation and examined the possibilities of new, undiscovered psi abilities.

In his spare time he worked on his own pet ideas, and founded the School for Parapsychological Research, later changed to Mycrowski University.

What *really* happened to him was argued for years. One day, Krandall and Blacenck found him lying on a couch with a bare whisper of

pulse to show that he was alive. They were unable to revive him.

Mycrowski had always believed that the mind was a separate and distinct entity from the body. It was believed that he had discovered a separation-projection technique for the mind.

But the mind never returned.

Others argued that his mind had simply snapped from too much strain, leaving him in a catatonic state. In any case, periodic attempts were made to awaken him, without success. Krandall, Myers and a few others had kept the project alive, but in a few years they had all the help they needed. The rare quality of Mycrowski's genius was recognized.

The tomb where the living body of Mycrowski, The Sleeper, vegetated, became a tourists' shrine.

"Haven't you any idea what he was looking for?" Marrin asked.

"I don't think he did himself," Krandall said, starting his cherry jubilee. "Oddest damned man in the world. Didn't like to talk about anything until he could throw it in your face as done. None of us had any reason to think anything was going to happen. We were sure that the stars were right around the corner and immortality was following that." He shook his head. "Ah, youth, youth."

Over the coffee Krandall looked up, pursed his lips and frowned. The assimilated data had synthesized. His conscious mind had the answer in a manner once called intuitive, until psi research pinned down the hidden factor as subconscious reasoning.

"You know, Marrin, you've de-

finitely got a growing epidemic on your hands. There's no random scattering of cases."

Marrin felt his chest contract. He teleped the question tightly. "Is there a carrier?"

"There is." Mentally, Krandall checked the names on his list. His subconscious had correlated the frequency factors, tabulated probabilities and sent up a "hunch". "His name is Edward Ecks. He is a student, living at 141 Fourth Avenue."

Marrin teleped Leffert immediately and told him to pick up Ecks.

"Hold it," Krandall said. "I don't believe you'll find him there. Here's a probability-course of his movements." He teleped the information to Leffert.

"Try his apartment first," Marrin told Leffert. "If he's not there, try the next probability. I'll meet you downtown, in case we have to hunt him." He broke contact and turned to Krandall. "For the extent of the emergency you'll work with me?" It was hardly a question.

"Of course," Krandall said. "Health has top priority, and The Sleeper isn't going to be doing much moving. But I doubt if you'll have much trouble picking up Ecks. He should be completely crippled by this time."

UPON LANDING, Ecks lost his balance and fell heavily to his knees. He got up at once, brushed himself off and started walking. A sloppy levitation, he told himself. So even that was going!

The crumbling streets of the lower New York slums were scattered

with Normals, people who had never mastered the basic psi power. This mass of land-borne people was a sight never seen in the more respectable uptown areas. Ecks moved into the crowd, feeling safer.

He discovered, suddenly, that he was hungry. He went into a lunch-eonette, sat down at the empty counter and ordered a hamburger. The cook had one all ready. Expertly he teleported it to a plate and, without watching, made the plate loop in the air and drop lightly in front of Ecks.

Ecks cursed the man's casual ability and reached for the ketchup. He expected the bottle to slide toward him, but it didn't. He looked at it for a moment, blankly, then stretched his arm. He'd have to watch his step, making a mistake like that.

Ecks was beginning to discover what it was like to be a cripple.

Finished, he held out his hand, palm up, expecting the change in his pocket to come. But of course, it didn't. He cursed silently. He was so used to it—it didn't seem possible that he could have lost all his faculties at once.

But he had, he knew. His unconscious had decided, and no amount of surface assurance would help.

The cook was looking at him oddly, so he reached quickly in his pocket, found the change and paid. He tried to smile at the cook, then hurried out the door.

"Queer guy," the cook thought. He dismissed it, but down deep in his mind an appraisal was going on. Inability to command a bottle . . . Inability to command coins . . .

Ecks walked down the crowded,

grimy streets. His legs began to ache. He had never walked so much in his life. Around him were mixed groups of Normals and psi's. The Normals walked naturally, as they had all their lives. The psi's were awkward, unaccustomed to long stretches on foot. With relief they soared into their natural element, the air. People landed and took off, and the air was filled with teleported objects.

Looking back, Ecks saw a well-dressed man drop out of the air and stop one of the walking psi's. He talked to him for a moment, then moved on.

A health-agent! Ecks knew he had been traced.

He twisted around a corner and started to run.

The street lights became fewer as Ecks moved on, pushing his aching legs. He tried to levitate, but couldn't get off the ground.

In panic he tried to telep his friends. Useless. His telepathic sense had no power.

The shock broke over him like an ocean wave, and he stumbled against a lamp post and hung on. The full realization came.

In a world where men flew, he was landbound.

In a world of telepathic contact, he was reduced to clumsy words at face-to-face distance.

In a world where artificial light was unnecessary, he could see only when his eyes were stimulated.

Crippled. Blind, deaf and dumb.

He walked on, into narrower streets, dingy, damp alleys. His numbed mind started working again. He had one advantage. His blunted mind could no longer

broadcast a strong identity-pattern. That would make him more difficult to find.

What he needed, he decided, was a sanctuary. Some place where he wouldn't infect anyone, and where the health officers couldn't find him. Perhaps he could find a Normal boarding house. He could stay there and study, find out what was wrong with him; treat himself. And he wouldn't be alone. Normals were better than no people at all.

He came to the end of an alley, where the streets branched off. Automatically he pushed out his location sense, to find out what was ahead.

Useless. It was paralyzed, as dead as the rest of him. But the right-hand turn seemed the safest. He started for it.

"Don't!"

Ecks whirled, alarmed at the spoken word. A girl had come out of a doorway. She ran to him.

"They're waiting for you in there. Don't go!"

"Who's waiting for me?" Ecks asked, his heart pounding like a triphammer.

"The health officers. They figured you'd take the right turn. Something about your right-hand tropism, I couldn't hear it all. Take the street on your left."

Ecks looked at her closely. At first he thought she was about fifteen years old, but he revised his estimate to twenty. She was small, slender with large dark eyes in a bony face.

"Why are you helping me?" he asked.

"My uncle told me to," the girl

said. "Hurry!"

There was no time to argue. Ecks walked in the alley, following the girl. She ran ahead, and Ecks had trouble keeping up with her.

She was a Normal, to judge by her sure stride. But how had she overheard the health-officer's conversation? Almost certainly they had teleped on a tight beam.

Her uncle, perhaps?

The alley opened into a courtyard. Ecks raced in, and stopped. From the tops of the buildings men floated down. They dropped quickly, surrounding him.

The health officers!

He looked around, but the girl had darted back into the alley. The way was blocked for him. He backed against a building, wondering how he could have been so stupid. Of course! This was how they liked to take people. Quietly, so no one else would become infected.

That damned girl! He tightened his aching legs, to run for it . . .

JUST AS Krandall predicted, Marrin thought. "Take his arms and legs." Hovering fifty feet in the air, he supervised the operation.

Without pity he watched. The agents moved in cautiously. They didn't want to use the force of their minds against him if they could help it.

After all, the man was a cripple.

They had almost reached him, when—

Ecks started to fade. Marrin dropped closer, unable to believe

his eyes. Ecks was dissolving into the wall, becoming a part of it, disappearing.

Then he was gone.

"Look for a door!" Marrin teleped. "Examine the pavement!"

While his agents were looking, Marrin considered what he had seen. After the initial surprise, he didn't doubt it. The search for a door was an excuse for his agents. If they thought the man had disappeared through a hidden door, good. It wouldn't help their confidence—their sanity—to believe what had actually happened.

The cripple, Ecks, merging with the wall.

Marrin ordered a search of the building. But there wasn't a trace of Ecks' thought pattern. He was gone, as though he had never been.

But how, Marrin asked himself. Did someone help him? Who?

Who would help a carrier?

THE FIRST thing Ecks saw when he returned to consciousness was the cracked, stained plaster wall in front of him. He stared at it for a long time, watching dust motes floating in the sunlight, across the bed's torn brown blanket.

The bed! Ecks sat up and looked around. He was in a dingy little room. Long cracks ran across the ceiling. Aside from the bed, the only other piece of furniture was a plain wooden chair, set near the half-open door.

But what was he doing here? He remembered the events of last night; it must have been last night, he decided. The blank wall, the health officers. He must have been

rescued. But how?

"How do you feel?" A girl's voice asked from the door. Ecks turned, and recognized the pale, sensitive face. It was the girl who had warned him last night.

"I feel all right," Ecks said. "How did I get here?"

"My uncle brought you," the girl said, coming into the room. "You must be hungry."

"Not especially," Ecks said.

"You should eat," she told him. "My uncle tells me that dematerialization is quite a strain on the nervous system. That's how he rescued you from the psi's, you know." She paused. "I can give you some very nice broth."

"He *dematerialized* me?" Ecks asked.

"He can do things like that," the girl said serenely. "The power came to him afterwards." She walked over and opened the window. "Shall I get the broth?"

Ecks frowned at her. The situation was becoming unreal, at a time when he needed his fullest grasp on reality. This girl seemed to consider it perfectly normal to have an uncle with the power of dematerialization—although psi science had never discovered it.

"Shall I get the broth?" she asked again.

"No," Ecks said. He wondered what the repeated emphasis on food might mean. There was nothing in the girl's face to tell him. She was handsome enough, even in a cheap, unbecoming dress. She had unusually dark eyes, and an unusually calm expression. Or lack of expression, really.

He filed his suspicions for the

moment, and asked, "Is your uncle a psi?"

"No," the girl said. "My uncle doesn't hold with psi powers. His strength is spiritual."

"I see," Ecks said, and he thought he had the answer. Throughout history, people had preferred to believe that their natural psi gifts were the product of demon intervention. Strange powers were the devil's gift until psi regularized and formalized them. And even in this day there were gullible Normals, people who preferred to believe that their occasional flashes of supernormal power were spirit-guided. Evidently the uncle fell into this category.

"Has your uncle been able to do this sort of thing long?" Ecks asked.

"Only for about five years," she said. "Only since he died."

"Perfectly correct," a voice said. Ecks looked around quickly. The voice seemed to come from behind his shoulder.

"Don't look for me," the voice said. "All that there is of me in this room is a voice. I am the spirit of Cari's Uncle John."

Ecks had a quick moment of panic before he realized the trick. It was a teleped voice, of course; cleverly focused and masked to give the effect of speech. A teleped voice meant only one thing; this was a psi passing himself off as a spirit.

"Mr. Ecks," the voice said, cleverly simulating the effects of spoken words, "I have rescued you by the intervention of my powers. You are a crippled psi, a carrier. Capture and isolation are, I believe, distasteful to you. Is that not true?"

"Perfectly," Ecks said. He probed

with his blunted senses for the source of the voice. The imitation was perfect; not a single image leaked, to show the telepathic-human source.

"You feel, perhaps, a certain gratitude toward me?" the voice asked.

Ecks looked at the girl. Her face was still expressionless. "Of course I do," he said.

"I know your desires," Uncle John told him. "You wish sanctuary for a sufficient time to restore your powers. And you shall have it, Edward Ecks. You shall have it."

"I'm very grateful," Ecks said. His mind was working quickly, trying to decide upon a course of action. Was he expected to keep up the pretense of believing in this spirit? Surely the teleped psi knew that no university-trained person was going to accept something like that. On the other hand, he might be dealing with a neurotic, playing spirit for his own reasons. He decided to play along. After all, he wasn't interested in the man's pretensions. What mattered was the sanctuary.

"You would not, I am certain, object to doing me a small favor," Uncle John said.

"What do you want me to do?" Ecks asked, immediately on his guard.

"I sense your thought," the voice said. "You think there may be danger involved. I assure you, such is not the case. Although I am not omnipotent, I have certain powers unknown to you—or to psi science. Accept that fact. Surely your rescue proves it. And accept

that I have your best interests at heart."

"When do I find out about this errand?" Ecks asked.

"When the time is right. For now, goodbye, Edward Ecks." The voice was gone.

Ecks sat down in the chair. He had had two possible explanations before; that the "uncle" was a psychotic, or a psi. Now he had another.

What if the uncle was a mutant psi? The next evolution in the procession. What then?

Cari left and returned with a bowl of soup.

"What was your uncle like?" Ecks asked the girl. "What sort of man was he—when he was alive?"

"Oh, he was a very nice man," she said, holding the steaming soup

carefully. "He was a shoemaker. He raised me when my father died."

"Did he ever show any signs of psi power? Or supernatural power?"

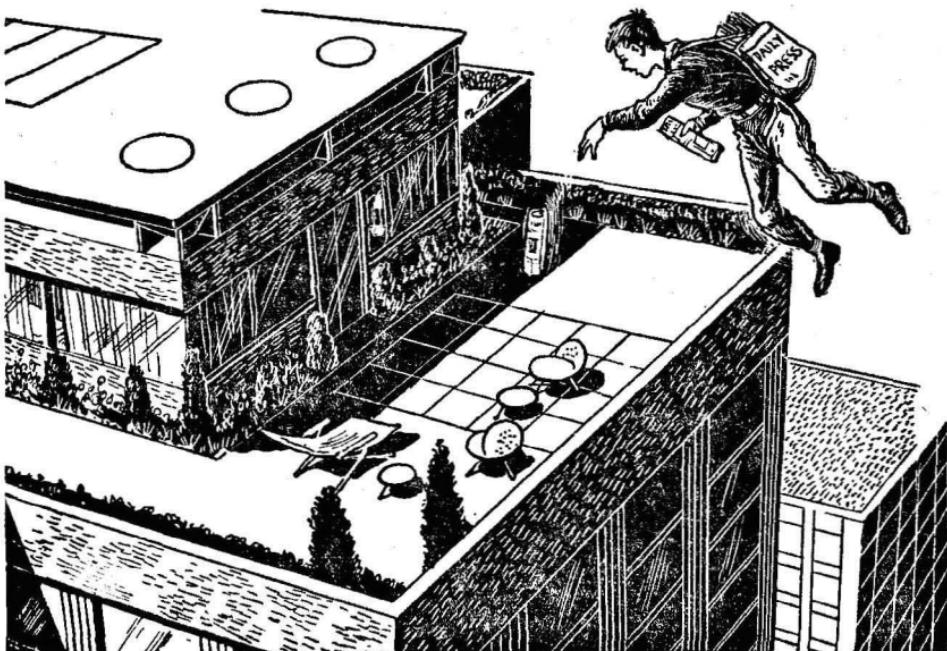
"No," Cari said. "He led a quiet life. It was only after he died—"

Ecks looked at the girl with pity. She was the saddest part of the whole thing. The psi had undoubtedly read her mind, found the dead uncle—and the gullibility. And used her as his pawn. A cruel game.

"Please eat the soup," she said. He reached for it automatically, glancing at her face. Then he pulled back his hand.

"You eat it," he said. The first tinge of color came into her cheeks.

With an apology, she started on the soup, spilling some in her eagerness.



THE SAILBOAT heeled sharply, and Marrin let out a foot of mainsail to steady it. His wife, seated on the bow, waved to him, enjoying the plunging motion.

Below, he could see a bank of thunderheads, a storm in the making.

"Let's have our picnic on those clouds over there," Myra said, pointing to a wispy cirrus formation, bright and sunny above the thunderheads. Marrin changed course. Myra lay back on the bow, her feet propped against the mast.

Marrin was holding the entire weight of the boat himself, but he scarcely noticed it. The light rig weighed less than two hundred pounds, sail and all. His and Myra's combined weight added about two hundred and sixty pounds more, but Marrin's tested levitation capacity was over two tons.

And the wind did most of the work. All the operator of the boat did was to supply enough power to keep it in the air. The wind drove it, a twisting white feather.

Marrin couldn't get his mind off the carrier. How in hell had Ecks disappeared? Dematerialization—impossible! And yet there it was.

Ecks, into the wall. And gone, without a thought-trace.

"Stop thinking," Myra said. "Your doctor told you not to think about anything but me today." He knew that his thoughts hadn't leaked; nor had his face changed. But Myra was sensitive to his moods. He didn't have to grimace for her to know he was happy, or cry to demonstrate sadness.

Marrin brought the light, flat boat to a stop in the clouds, and,

heading into the wind, dropped the sail. They spread their picnic on the bow of the boat. Marrin did most of the levitating, although Myra was trying . . . gallantly.

As she had been trying for seven years, since her partial infection by a carrier. Although her psi faculties never left her completely, they were spasmodic.

Another reason for hunting down Ecks.

The sandwiches Myra made were very like herself; small and decorative. And tasty, Marrin thought, teleping the thought.

"Beast," Myra said out loud. The warm sun beat down on them, and Marrin felt wonderfully lazy. The two of them stretched out on the deck of the boat, Marrin holding it up by reflex. He was more relaxed than he had been in weeks.

"Marrin!"

Marrin started, awakened out of near-sleep by the teleped voice.

"Look, I'm awfully sorry, boy." It was Krandall, embarrassed and apologetic.

"I hate breaking in on your day, but I've got a lead, and a pretty damned good one. Evidently someone doesn't like our carrier. I've just been told where he'll be in about four hours. Of course, it may be a crank, but I knew you'd want to know—"

"I'm coming," Marrin said. "We can't afford to pass up anything." He broke contact and turned to his wife. "I'm terribly sorry, dear."

She smiled, and her eyes were clear with understanding. She hadn't been included in Krandall's tight-beam message, but she knew what it meant.

"Can you take it down yourself?" Marrin asked.

"Of course. Good hunting." Marrin kissed her and jumped off the boat. He watched for a few seconds, to see that she had it under control; then he teleped the rental service.

"My wife's bringing it in," he told them. "I wish you'd keep an eye on her." They promised. Now, even if she went out of control there'd be no danger.

Marrin hurled himself down. He was so busy calculating the rate of disease increase that he barely saw the dagger in time.

It flashed past him, then turned, twenty feet away, and came again. Marrin reached out for it mentally, but the telekineticized knife broke free. He barely deflected it, grappled, and had it in his hand. Quickly he tried to trace the wielder, but he was gone without a trace.

Not quite without a trace. Marrin was able to catch the tail end of an identity thought, the hardest kind to control. He puzzled over it, trying to place the image. Then he had it.

Ecks!

Ecks, the cripple. Blind Ecks, the carrier, who vanished into walls. And who, evidently, could polter a dagger.

Or had someone do it for him.

Grimly, with the growing awareness that it was turning into a personal affair, Marrin levitated into the Psi-Health Offices.

IN THE darkened room, Edward Ecks lay on the tattered brown blanket. His eyes were lightly

closed, his body passive. Little muscles in his legs jumped. He willed them to relax.

"Relaxation is one of the keys to psi power. Complete relaxation calls forth confidence; fears disappear, tensions evaporate. Relaxation is vital to psi," Ecks told himself this, breathing deeply.

Don't think about the disease. There is no disease. There is only rest, and relaxation.

The leg muscles slackened. Ecks concentrated on his heart, ordering it to pump more easily. He sent orders to his lungs, to breathe deeply and slowly.

Uncle John? He hadn't heard from him for almost two days now. But he mustn't think of him. Not now. An unexplained factor, Uncle John would be resolved in time. The awareness of deception, Ecks told himself, is the first step in finding out what the deception is.

And what about the pale, hungry, attractive niece? Don't think about her, either.

The unsettling memories sponged away as his breathing deepened. Next, the eyes. It was hard to relax the eyes. After-images danced across his retina. Sunlight. Darkness, a building, a disappearance.

No. Don't think.

"My eyes are so heavy," he told himself. "My eyes are made of lead. They want to sink—to sink—"

Then his eye-muscles relaxed. His thoughts seemed calm, but just under the surface was a crazy welter of images and impressions.

A cripple, through dim streets. A ghost that wasn't. A hungry niece. Hungry for what? A turmoil of sense-impressions, flashes

of red and purple, memories of classes in Mycrowsky University, tele-wrestling at the Palladium, a date at Skytop.

All had to be smoothed down. "Relaxation is the first step toward reintegration," Ecks told himself that everything was blue. All thoughts were swallowed in a vast blue abyss.

Slowly, he succeeded in calming his mind. A deep peace started to seep into him, slowly, soothingly—

"*Edward Ecks.*"

"Yes?" Ecks opened his eyes at once; the relaxation had been that superficial. He looked around and realized that it was the uncle's voice.

"Take this." A small sphere darted into the room, and came to rest in front of Ecks. He picked it up and examined it. The sphere seemed to be made of some shiny, solid plastic.

"What is it?" he asked.

"You will place this sphere inside the Cordeer Building," the voice of Uncle John told him, ignoring the question. "Leave it on a desk, behind a door, in an ashtray, anywhere. Then return directly here."

"What will the sphere do?" Ecks asked.

"That is not your concern," the voice told him. "The sphere is the apex of a psychic triangle of forces which you do not understand. Suffice it to say that it will harm no one and will greatly aid me."

"Every officer in the city is looking for me," Ecks said. "I'll be picked up if I go back to the main part of the city."

"You have forgotten my powers, Ecks. You will be safe, if you keep to the route I map out for you."

Ecks hesitated. He wanted to know more about the uncle, and his game. Above all, why was he masquerading as a spirit?

Or was he?

After all, what would a spirit have to do with Earth? The classic yarns of demons seeking temporal power were just so much muggy anthropomorphizing.

"Will I be left alone after I get back?" Ecks wanted to know.

"You have my word. Do this to my satisfaction and you will receive all the sanctuary you need. Now go. Cari has the route drawn up for you. She is waiting at the door."

The voice was gone. Even with his blunted senses, Ecks could feel the withdrawn contact.

With the sphere in his hand, he walked to the door. Cari was waiting.

"Here are the instructions," she said.

Ecks looked at her sharply. He wished he had some psi-abilities left. He would have given a good deal to know what was going on behind that quiet, pretty face. Psi's never bothered to read faces; the affective aura surrounding every individual was a far better indicator.

If one had normal psi-sensitivity to read it.

"Have you eaten?" he asked.

"Oh, yes," she said, following him outside. The sunlight was momentarily blinding, after two days in the little room. Ecks blinked and looked around automatically. There was no one in sight.

They walked in silence for a while, following Uncle John's instructions. Ecks glanced right and left, pitifully aware of his vulnerability, on the lookout for detection. The instructions laid out a devious, meaningless pattern for Ecks to walk; doubling back on streets, circling others. They approached West Broadway, moving out of the slums into psi territory.

"Has your uncle ever told you what he wishes to do?" Ecks asked.

"No," Cari said. They walked in silence for a while longer. Ecks tried not to look at the sky, out of which he expected the psi officers to fall, like avenging angels.

"Sometimes I'm afraid of Uncle John," Cari volunteered, after a few moments. "He's so strange, sometimes."

Ecks nodded absently. Then he thought about the girl's position. Actually, she was worse off than he was. He knew the score. She was being used for some unknown purpose. She might well be in danger, although he didn't know why that should concern him.

"Look," he said, "if anything happens, do you know the Angler's Bar on Sixth and Bleeker?"

"No, but I could find it."

"Meet me there, if anything goes wrong."

"All right," she said. "Thank you."

Ecks smiled wryly. How idiotic of him to offer her protection! When he couldn't even protect himself. At least, he told himself, it was an understandable urge. Even if he didn't quite understand it himself.

They walked several more blocks.

Then the girl looked at Ecks nervously.

"There's one thing I don't understand," she said.

"What's that?"

"Well," she began, "I sometimes can see things that are going to be. I never know when, but just sometimes I have a picture of something. Then in a little while it happens."

"That's interesting," Ecks said. "You're probably an undeveloped clairvoyant. You should go to Mycrowski University. They're always looking for people like you."

"So far, everything I've seen has turned out right," she said.

"That's a nice record," Ecks told her. He wondered what the girl was driving at. Did she want praise? She couldn't be naive enough to believe that she was the only person in the world with latent clairvoyance.

"So far my uncle has been right in everything he's said, too," she told him.

"Very commendable," Ecks said acidly. He was in no mood for a family pangyric. They were approaching Fourteenth Street, and the air was thick with psi's. A few people were walking—but very few.

The Cordeer Building was three blocks ahead.

"What I'm wondering is," she said, "if I see something happening one way, and my uncle sees it happening the other way, which of us will be right?"

"What do you mean?" Ecks said, taking her arm as they crossed a street filled with jagged rocks.

"My uncle said you'd be safe," she said, "and I just don't understand."

"What?" He stopped.

"I think they're going to try to capture you."

"When?"

"Now," she said. Ecks stared at her, then stiffened. He didn't need psi power to know that the trap was sprung.

The health men weren't being gentle this time. Telekinetic force jerked him off his feet. He looked for Cari, but the girl was gone. Then his head was forced painfully down, his hands and feet seized.

Physically, not a hand had touched him yet.

Ecks fought wildly, in blind panic. *Capture* seemed to touch off some ultimate instability in his personality. He tried desperately to snap the telekinetic bonds.

He almost did. Power came. He freed an arm and managed to throw himself into the air. Frantically he tried for height.

He was smashed to the pavement.

Again he tried, a supreme effort—

And passed out.

His last conscious thought was a realization that he had been tricked. The uncle—he determined to kill him, if the opportunity ever presented itself.

And then there was blackness.

A MEETING of World-Health was called at once. Marrin, in Psi headquarters in New York, opened the special channel. Chiefs in Rio, London, Paris, Canton, came into emergency circuit.

Marrin's tightly organized in-

formation was flashed around the world in less than a minute. At once he received a question.

"I would like to know," the Health Chief from Barcelona asked, "how this Ecks person escaped you *twice*." The thought carried its inevitable identity pattern. The Barcelona chief's face was dimly apparent; long, sad, mustached. Not his true face, of course. Identity patterns were always idealized in the manner the particular mind viewed itself. Actually, the Barcelonian might be short, fat and clean shaven.

"The second escape was in broad daylight, was it not?" the Berlin chief asked, and the other chiefs glimpsed his broad, powerful, idealized face.

"It was," Marrin replied. "I cannot explain it." Marrin was seated at his black desk in Psi-Health. Around him hummed the normal activity of the day. He was unaware of it.

"Here is the complete sequence." It took longer to telep the scene-by-scene breakdown of the attempted rescue.

After the attack by the poltered dagger, Marrin had assembled his men around the point where Krandall's informant said Ecks would appear.

"This informant. Who—"

"Later. Let him complete the sequence."

Fifty agents covered the area. Ecks appeared on time, and in the indicated place. He was restrained with little difficulty, at first. Fighting, he showed a slight surge of latent strength; then he collapsed.

At that moment his energy po-

tential took an explosive, exponential jump. Ecks vanished.

With Marrin's permission, his recollection of the moment was broken down and scrutinized more closely. The picture remained clear. One moment Ecks was there, the next, he was gone.

The images were slowed to one a half second. In this running there was a blur of energy around Ecks just before he vanished. The energy was on so high a band that it was almost indetectable.

There was no known explanation for it.

The impressions of the participating agents, as recorded by Marrin, were combed, with no positive result.

"Would the Health-Chief from New York care to give his theories?"

"Since Ecks is a cripple," Marrin said, "I can only assume that someone is helping him."

"There is another possibility," the Warsaw Chief said. His idealized identity came through with the thought; slim, whitehaired, gay. "Ecks may have stumbled on some undiscovered form of psi power."

"That would appear to be beyond the realm of probability," the sad-eyed Barcelonian teleped.

"Not at all. Consider the emergence of the original psi faculties. They began as wild talents. Couldn't the next mutation begin in a wild talent stage?"

"There are tremendous implications in that," the London Chief said. "But if so, why hasn't Ecks utilized it to greater advantage?"

"He is probably unaware of it. But he has an inherent protection

system, perhaps, which shunts him out of danger at stress moments."

"I don't know," Marrin said dubiously. "It is a possibility, of course. We are well aware that there are many untouched secrets of the mind. Still . . ."

"An argument against your theory," the Warsaw Chief broke in, teleping directly to Marrin, "is the fact that anyone helping Ecks would necessarily have this extra-psi power. They would have to, to affect an almost instantaneous disappearance. If they did have it, wouldn't they have more of a plan-less randomness—"

"Or seeming randomness," the Londoner said. "It could be a test of strength. By dangling Ecks in front of Marrin, such a group could determine a good deal about his capabilities and, by extrapolation, the capabilities of all psi's. The repeated inability to capture Ecks would be meaningful."

"It's a possibility," Marrin said cautiously. Academically, he found the discussion interesting. But it didn't seem to be serving any practical good.

"What about Krandall's informant?" the Barcelonian teleped. "Has he been questioned?"

"He has never been found," Marrin said. "The sender was able to block all identity-thoughts and he left no trace to follow."

"What do you plan to do?"

"First," Marrin said, "to alert you. That is the purpose of the meeting, since the carrier might well get out of New York. Also, the disease rate here has passed the minimum epidemic level. It can be expected to spread, even

though I'm closing the city." He paused and wiped his forehead.

"Second, I'm going to trace Ecks myself, working on a new set of probability locations supplied by Krandall. Working alone, I'll be able to avoid all thought haze and deflection. It's just possible one may do what many cannot."

MARRIN DISCUSSED it with them for half an hour longer, then broke contact. He sat for a few moments, moodily sorting papers. Then he shrugged off his mood of despair and went to see Krandall.

Krandall was in his office at the tomb of The Sleeper. He grunted hello when Marrin levitated in and motioned him to a chair.

"I'd like to see those probability locations," Marrin said.

"Right," Krandall said. The end-product was quite simple: a list of streets and times. But to get that information, Krandall had correlated the total amount of data available. The locations of Ecks' disappearances, his reappearances, his psychological index, plus the added correlates of suitable hiding spots in the city where a cripple could stay undetected.

"I think you stand a pretty good chance of finding him," Krandall said. "Of course, holding him is something else again."

"I know," Marrin said. "I've come to a decision about that." He looked away from Krandall. "I'm going to have to kill Ecks."

"I know," Krandall said.

"What?"

"You can't risk having him loose

any more. Your infection rate is still rising."

"That's right. The policy of the Health Board is to quarantine diseased persons. But this is a matter of public safety."

"You don't have to justify it to me," Krandall said.

"What do you mean?" Marrin got halfway to his feet, then sat down again and shook his head. "You're right. Evidently Ecks can't be captured. We'll see if he can be killed."

"Good hunting," Krandall said. "I hope you have better luck on your project."

"The Sleeper?"

"The latest attempt flopped. Not a stir out of him."

Marrin frowned. That was bad news. If they ever needed Mycrowski's intellect, it was now. Mycrowski was the man to resolve these events into a related whole."

"Would you like to see him?" Krandall asked.

Marrin glanced at the probability list and saw that the first time-street fix was almost an hour off. He nodded, and followed Krandall. They went down a dim corridor to an elevator, and then through another corridor.

"You haven't ever been here, have you?" Krandall asked, at the end of the corridor.

"No. But I helped draw up plans for the remodeling ten years ago."

Krandall unlocked and opened the last door.

In the brightly lighted room The Sleeper rested. Tubes ran into his arms, carrying the nutrient solutions that kept him alive. The bed he lay on slowly massaged The

Sleeper's flabby muscles. The Sleeper's face was blank and expressionless, as it had been for thirty years. The face of a dead man, still living.

"That's enough," Marrin said. "I'm depressed enough."

They went back upstairs.

"Those streets I gave you are in the slums," Krandall said. "Watch your step. Asociality is still present in such places."

"I'm feeling pretty asocial myself," Marrin said, and left.

He levitated to the fringe of the slums, and dropped to the street. His sensitive, trained mind was keyed for stimulation. He walked, sorting impressions as he went, searching for the dull, almost obliterated throb of the carrier's mind. Marrin's web extended for blocks, sifting, feeling, sorting.

If Ecks was alive and conscious he would find him.

And kill him.

YOU FOOL! You incompetent! You imbecile!" The disembodied voice roared at Ecks.

Blurrily, Ecks realized that he was back in Cari's house, in the slums.

"I gave you a course to follow," Uncle John screamed, his voice bouncing against the walls. "You took the wrong turn!"

"I did not," Ecks said, getting to his feet. He wondered vaguely how long he had been unconscious.

"Don't contradict me! You did. And you must do it again!"

"Just a minute," Ecks said evenly. "I don't know what your game is, but I followed your instructions

to the letter. I turned down every street you wrote down."

"You didn't!"

"Stop this farce!" Ecks shouted back. "Who in hell are you?"

"Get out!" Uncle John roared. "Get out—or I'll kill you."

"Be reasonable," Ecks said. "Just tell me what you want. Tell me what I'm supposed to do. Explain it. I don't work well in a mystery."

"Get out," the voice said ominously.

"I can't," Ecks said in despair. "Why don't you drop this spirit pose and tell me what it is you want? I'm a normal person. Health officers are everywhere. They will kill me too. I must first regain my abilities. But I can't—"

"Are you going?" the voice asked.

Ecks didn't answer.

Invisible hands were at Ecks' throat. He jerked back. The grip tightened. Force battered him against the wall, chopping down at him. Ecks rolled, trying to escape the merciless beating. The air was alive with energy, hurling itself at him, crushing him, smothering him.

MARRIN SENSED the increase in energy output at once. He traced it, got a fix and levitated toward the location, sifting through the energy manifestations for some identity pattern.

Ecks!

Marrin crashed through a flimsy wooden door, and stopped. He saw Ecks' crumpled body.

Berserk force was alive in the room, undirected now. Suddenly,

Marrin found himself fighting for his life. Shielding, he smashed against the telekinetic power that surged around him.

A chair was swept up and thrown at him. He deflected it, and was struck from behind by a pitcher. A bed tried to crush him against the wall. Avoiding it, he was struck in the back by a poltered table. A lamp shattered on the wall above his head, spraying him with fragments. A broom caught him behind the knees.

Marrin shielded and located the psi power source.

In the basement of the building.

He sent a tremendous wave rippling across it, poltering chairs and tables with it. The attack stopped abruptly. The place was a shambles of broken furniture.

Marrin looked around. Ecks was gone again. He searched for his identity pattern, but couldn't locate it.

The man in the cellar?

Also gone. But a trace was left behind!

Marrin went through a window, following the trace thought. Trained for this work, he held contact with the attenuated, stifled thought as its owner shot into the city. He followed it through a twisting maze of buildings, and out into open air.

One part of his mind was still able to prob for Ecks. No luck.

But he had Ecks' accomplice, if he could hold him.

He shortened the distance by fractions. Ecks' helper—and attacker—shot out of the city, heading West.

Marrin followed.

A GLASS of beer, please," Ecks said, trying hard to catch his breath. It had been a long run. Luckily, the bartender was a Normal, and a phlegmatic one at that. He moved stolidly to the tap.

Ecks saw Cari at the end of the bar, leaning against the wall. Thank God she had remembered. He paid for his beer and carried it to where she was.

"What happened?" she asked, looking at his bruised face.

"Your nice uncle tried to kill me," Ecks said wryly. "A health-officer came bursting in, and I let them fight it out." Ecks had slipped out the door during the fight. He had counted on the insensitivity of his thought pattern to conceal him. Crippled, he was hardly able to broadcast an identity thought. For once, the loss of telepathic power was an asset.

Cari shook her head sadly. "I just don't understand it," she said. "You may not believe this, but Uncle John was always a good man. He was the most harmless person I ever knew. I just don't understand—"

"Simple," Ecks said. "Try to understand this. That was not Uncle John. Some highly developed psi has been masquerading as him."

"But why?" she asked.

"I don't know," Ecks said. "He saves me, tries to get me captured again, then tries to kill me. It doesn't make sense."

"What now?" she asked.

Ecks finished his beer. "Now, the end," he said.

"Isn't there some place we can go?" she asked. "Some place we can hide?"

"I don't know of any," Ecks said. "You'd better go on your own. I'm a risky person to be with."

"I'd rather not," Cari said.

"Why not?" Ecks wanted to know.

She looked away. "I'd just rather not."

Even without telepathy, Ecks had an intimation of what she meant. Mentally, he cursed. He didn't like the idea of having the responsibility of her. Psi Health must be getting desperate. They wouldn't pull any punches this time, and she might get hurt.

"Go away," he said firmly.

"No!"

"Well, come on," he said. "We'll just have to get by as well as we can. The only thing I can think of is getting out of the city. I should have done that at first, instead of playing spirit." Now it was undoubtedly too late. The psi officers would be checking everyone on foot.

"Can you use that clairvoyance of yours?" he asked. "Is there anything you can see?"

"No," she said sadly. "The future's a blank to me."

That was how Ecks saw it, too.

MARRIN SENSED that he had greater inherent strength than the man he was pursuing. He detected the signs of weakening and pushed harder.

The fugitive was visible now, a mile ahead of him doubling back toward the city. As he got closer, Marrin threw his telekinetic strength, pulling the man down.

He clung doggedly. The man was slowing, fighting spasmodically. Marrin overhauled him, brought him down and pinned him to the ground. Coming down himself, he probed for an identity thought.

And found one.

Krandall!

For a moment all he could do was stare.

"Did you get Ecks?" Krandall teleped. The exertion had drained the big man of everything. He lay, face down fighting for breath.

"No. You were his backer all along. Is that right?"

Krandall's thought was affirmative.

"How could you! What were you thinking of? You know what the disease means!"

"I'll explain later," Krandall panted.

"Now!"

"No time. You have to find Ecks."

"I know that," Marrin said. "But why did you help him?"

"I didn't," the fat man said. "Not really. I tried to kill him. You must kill him." He dragged himself to his feet. "He's a far greater menace than you think. Believe me, Marrin. Ecks must be killed!"

"Why did you rescue him?" Marrin asked.

"In order to put him back into danger," Krandall gasped. "I couldn't let you capture and isolate him. He must be killed."

"Go on," Marrin said.

"Not now," Krandall said. "I paltered the dagger at you, to make you consider Ecks a personal menace. I had to goad you to the

point where you would kill him."

"What is he?"

"Not now! Get him!"

"Another thing," Marrin said. "You couldn't handle that amount of telekinetic power. Who was doing it?"

"The girl," Krandall said, swaying on his feet. "The girl Cari. I was posing as her uncle's spirit. She's in back of it all. You must kill her, too." He wiped his streaming face.

"I'm sorry I had to play it this way, Paul. You'll hear the whole story at the right time. Just take my word for it now."

Krandall tightened his hands into fists and shook them at Marrin.

"You must kill those two! Before they kill everything you stand for!"

The teleped thought had the ring of truth. Marrin took to the air again, contacting his agents. Briefly he gave his instructions.

"Kill both of them," he said. "And pick up Krandall and hold him."

ECKS TURNED down streets at random, hoping the lack of a plan would confuse the psi's. Every shadow seemed to have a meaning of its own. He waited for the mental bolt that would drop him.

Why had the uncle tried to kill him? Impossible to answer. Why was he so seemingly important? Another unanswerable question. And the girl?

Ecks watched her out of the corner of his eye. Cari walked silently beside him. Her face had some color now, and some anima-

tion. She seemed almost gay; perhaps freedom from the uncle was the reason for that. What other reason could there be?

Because she was with him?

The air was thick with the usual day's traffic. A load of ore was being brought in, tons of it, expertly shepherded by a dozen workers. Other cargoes were being flown in from Southern ports; fruit and vegetables from Brazil, meat from Argentina.

And psi officers. Ecks wasn't especially surprised. The city was being watched too thoroughly for a fly to escape, much less a crippled man.

The psi officers dropped down, forming a tight mental linkage.

"All right," Ecks called. "The hell with it, I give up." He decided that it was time he bowed to the inevitable. He had the girl to consider also. The psi's were probably tired of playing; this time, if he tried to escape, they might play for keeps.

A bolt of energy sheered him off his feet.

"I said I give up!" he shouted. Beside him, Cari fell also. Energy swept over them, twisting them, across the courtyard, increasing, building.

"Stop it!" Ecks shouted. "You'll hurt—" He had time—an infinitesimal fraction of a second—to realize fully his own feeling about the girl. He couldn't let anything happen to her. Ecks didn't have time to consider how or why; the feeling was there.

A sad, bitter sensation of love.

Ecks tried to get to his feet. The linked mental energy smashed him

down again. Stones and rocks were poltered at him.

Ecks realized that he wasn't going to be allowed to surrender. They were going to kill him.

And Cari.

At first, it seemed as though it were a dream. He had become used to the possibility of death in the last few days. He tried to shield, aware of his nakedness, tried to cover Cari. She doubled up as a poltered rock caught her in the stomach. Rocks hummed around them.

Seeing Cari struck, Ecks could have burst with rage. He struggled to his feet and swayed two steps forward, hands outstretched.

He was knocked down again. A section of wall started to collapse, pushed by psi force. He tried to drag Cari out of the way. Too late. The wall fell—

In that moment Ecks bridged the gap. His tortured, overstrained mind performed the energy leap into the new potential. In that instant, contact and comprehension flooded his mind.

The wall thundered down. But Ecks and Cari weren't under it.

"Marrin!"

Dully, the psi chief raised his head. He was back at his desk in Psi-Health. Again it had happened.

"Marrin!"

"Who is it?" the psi chief asked.
"Ecks."

Nothing could surprise him now. That Ecks was capable of tight-beam telepathy just didn't matter.

"What do you want?" he asked.

"I want to meet you. Name a place."

"Wherever you wish," Marrin

said, with the calmness of despair. Then curiosity overcame him. "How are you able to telep?"

"All psi's can telep," Ecks said mockingly.

"Where did you go?" Marrin asked. He tried to get a location on the message. But Ecks was easily managing the tight beam, allowing only the direct message to go through.

"I want a little quiet," Ecks said. "So I'm in the tomb of The Sleeper. Would you care to meet me there?"

"Coming," Marrin said, and broke contact. "Leffert," he said aloud.

"Yes, Chief?" his assistant said, coming over.

"I want you to take over until I get back. If I get back."

"What is Ecks?" Leffert asked.

"I don't know," Marrin said. "I don't know what powers he has. I don't know why Krandall wanted to kill him, but I concur in the judgement."

"Could we bomb the tomb?" Leffert asked.

"There's nothing faster than thought," Marrin answered. "Ecks has discovered some form of near-instantaneous transportation. He could be away before the bombs were dropped." He paused. "There is a way, but I'm not going to say any more. He might be listening in on this conversation."

"Impossible!" Leffert said. "This is direct-talk. He couldn't—"

"He couldn't escape," Marrin reminded him wearily. "We're through underestimating Mr. Ecks. Hereafter, consider him capable of anything."

"Right," Leffert said dubiously.

"Have you got the latest figures on the contagion rate?" Marrin asked, walking to the window.

"They're way past epidemic. And the disease has jumped as far as the Rockies."

"It can't be checked now," Marrin said. "We've been pushed off the cliff—on the wrong side. In a year we'll be lucky if there are a thousand psi's left in the world." He tightened his hands into fists. "For that alone I could cut Ecks into little pieces."

He levitated out the window.

THE FIRST thing Marrin saw when he entered The Sleeper's chamber was Mycrowski himself, still unconscious. Ecks and the girl were standing beside him.

Marrin walked forward.

"I'd like you to meet Cari," Ecks said, smiling.

Marrin ignored the dazed-looking girl. "I'd like an explanation," he said.

"Of course," Ecks said. "Would you like to know what I am, to begin with?"

"Yes," Marrin said.

"I am the stage after psi. The para-psi."

"I see. And this came—"

"When you tried to kill Cari."

"We'd better start somewhere else," Marrin said. He decided to hear the explanation first before taking the final step. "Why have you removed the nutrient pipes from The Sleeper?"

"Because Mycrowski won't need them any more," Ecks said. He turned to The Sleeper, and the

room suddenly hummed with energy.

"Good work, Ecks." For a moment Marrin thought it was the girl who had teleped. Then he realized that it was Mycrowski!

"He won't be fully conscious for a while," Ecks said. "Let me start at the beginning. As you know, thirty years ago Mycrowski was searching for the extra-psi powers. He split mind and body to find them. Then, having the knowledge, he was unable to get back in his body. It required a leap into a higher energy level to do that and, without a nervous system at his command, he couldn't gather that power. No ordinary psi could help him, either. To attain the new level, all normal channels must be blocked and redirected, and a terrific strain is placed on the whole nervous system.

"That is, essentially, the same method by which the first true psi's got their power."

Marrin looked puzzled for a moment, then asked, "Then you're not a mutation?"

"Mutations have nothing to do with this. Let me go on. Mycrowski couldn't bridge the gap unaided. He had to have a para-psi bridge the gap for him. That's where I come in."

"It is also where *you* come in," Mycrowski, conscious now, teleped to Marrin. "And the girl, and Krandall. I was in telepathic contact with Krandall. Together we chose Ecks for the experiment. It couldn't be Krandall himself, because his nervous system was not suitable. Ecks was picked for his temperament and sensitivity. And,

I might add, for his selfishness and suggestibility. Everything was predicted, including Cari's role."

Marrin listened coldly. Let them explain. He had an answer of his own. A final one.

"First, the rechanneling. Ecks' psi senses were blocked. Then he was put in a position of stress; incipient capture and isolation, both repugnant to his nature. When he failed to bridge the gap, Krandall rescued him, with my help. With Krandall posing as Cari's Uncle John we threatened his life, increasing the stress."

"So that's what Krandall meant," Marrin said.

"Yes. Krandall told you that you had to kill Ecks. That was true. You had to try. He told you that the girl was the key to the whole thing. And that was true also. Because when Ecks' life and the girl's were threatened, it was the greatest stress we could bring to bear. He bridged the gap to the higher potential. Comprehension followed immediately."

"And he gave you back your body," Marrin added.

"And he gave me back my body," Mycrowski agreed.

Marrin knew what he had to do, and he thanked God for the foresight of Psi-Health. Nevertheless, he delayed for a moment.

"Then if I understand correctly, all this—the infection of Ecks, his miraculous rescues, all the deviousness you used, was designed to create a force great enough to get you back in your body?"

"That's a part of it," Mycrowski said. "Another part is the creation, in Ecks, of another para-psi."

"Very well," Marrin said. "It will interest you to know that Psi Health has always considered, as one possibility, the return of The Sleeper—insane. Against that eventuality, this room is wired for atomic explosion. All four walls, ceiling and roof are keyed to me. Atomic explosions are not instantaneous, I realize." He smiled humorlessly. "But then, I doubt if para-psi transit is, either."

"My thought-process are as fast as yours. I am going to explode this place."

"You health men *are* a suspicious lot," Mycrowski said. "But why on earth would you want to do a thing like that?" Marrin noticed that he seemed genuinely surprised.

"*Why?* Do you realize what you have done? You have regained your body. But the disease is uncontrollable now. Psi science and all it stands for is destroyed, because of your selfishness." Mentally, Marrin reached for the key.

"Wait!" Ecks said. "Evidently you don't understand. There'll be a temporary disturbance, true. But it won't affect everyone at once. Diseased persons can be trained."

"Trained? To what?"

"Para-psi, of course," Ecks said. "A complete rechanneling is necessary to reach the next para-psychological step. The disease is the initial point. The present level of psi is unstable, anyhow. If I didn't set it off, someone else would in a few years."

"It'll be easier when we get a few more people to bridge the gap," Mycrowski said. "As in the first development of psi, the rest is

(Continued on page 83)

Don't lose any sleep over it tonight, but your watch is wrong, the days are getting longer (and we don't mean because spring is coming!) and, someday, your calendar is going to be obsolete!

"It's About Time . . ."

By R. S. Richardson

TIME TRAVEL has always been one of the most fascinating as well as probably the most hopeless of the standard subjects of science-fiction. We have robots working for us, we can produce mutations in certain organisms at will, and everybody is agreed that we will soon be on our way to the moon and Mars. But so far as traveling in time is concerned we haven't been able to budge by so much as a single micro-jiffy. You can search the pages of the *Physical Review* in vain for any mention of chronagation.

But although we are still stuck to the present moment as firmly as ever, there is an effect beginning to operate on our method of determining time somewhat analogous to that in H. G. Wells' story "The New Accelerator". It will be recalled that the story dealt with a drug which had the magical effect of speeding up one's sense of duration so that time seemed slowed down to a bare crawl. The effect

operating upon us works in the opposite direction, so that the rest of the universe seems to be speeding up. So far as our daily lives are concerned we are as yet quite untouched. But the effect is becoming painfully apparent in comparing the predicted places of the heavenly bodies with their observed positions. So much so that astronomers are seriously urging that we alter our method of reckoning time, even to the extent of changing our fundamental unit of time itself.

The trouble arises from the fact that all our calculations of the motions of the planets are made using what is called Newtonian time. It is a smooth flowing sort of time that increases at a steady rate through the ages. It is the quantity " t " in the mathematical equations of motion. We feel confident that we can run Newtonian time backward or forward as far as we please without getting into trouble. Newtonian time is invariable—the same NOW as it was in 5000 B.C., or as

it will be in A.D. 5000.

True Newtonian time is an abstraction; an ideal which we shall probably never be able to realize completely in practice. But we do the best we can by taking some body, whose motion seems to correspond closely to Newtonian time, and tying our clocks to it. In doing so, we have to use some body that is fairly accessible to observation even though imperfect in other respects. Obviously we couldn't use the period of revolution of the inner satellite of Mars as a timekeeper because it is too confounded hard to observe.

For centuries the rotation of the earth has served as our fundamental timekeeper. In many respects it is nearly ideal. Its rate of rotation, as evidenced by the motion of the stars across the sky, is readily accessible to observation, affording us with a precise and comparatively easy means of checking on our imperfect man-made time-pieces.

We are all very conscious of time and know in a vague way that it is obtained in some way from the stars. But how? There are people who pride themselves on knowing all about the nucleus of the atom and the curvature of space but who couldn't tell you how we know when to blow the twelve o'clock whistle.

THE STARS appear to be set on the inner surface of a sphere which turns at the same rate that the earth rotates. This turning sphere is our clock. All the way around the sphere are bright stars

which we use in telling the time in the same way that we use the numerals on the dial of a watch. Think of these stars as actually having numerals attached to them in the sky. Then when one of these stars crosses your meridian—an imaginary line passing through your zenith to the north and south—the numeral tells you the time. If the numeral on the star is 8 hours 10 minutes, then your clock should read 8 hours 10 minutes. If the clock says the time is 8 hours 15 minutes, then it is 5 minutes fast. A clock that keeps time this way according to the stars is a sidereal clock.

A sidereal clock is a perpetual source of wonder to the visitors to an observatory. They simply can't figure it out. The first thing they do upon coming into the dome is to compare their watch with the sidereal clock. Generally the two are hours apart. After while they put their watch away and decide that it is one more thing they can't understand about an astronomical observatory.

The reason the two clocks don't agree is because the watch in your pocket is rated to keep time—not according to the stars—but according to the sun. And a day by the sun is about 4 minutes longer than a day by the stars. The stars are (nearly) fixed in the sky. But the sun is always moving eastward among the stars at the rate of about a degree a day. If the earth had no atmosphere, like the moon, you could easily follow the motion of the sun against the background of the stars. Now it takes the earth about 4 minutes to rotate through

this one degree that the sun moves in a day. Hence the solar days are about 4 minutes longer than the sidereal days. As a result, a sidereal clock is always gaining on the watch in your pocket.

A sidereal clock is also *set* to show time in a different way from your pocket watch. It is "sidereal noon" when an imaginary point in the sky called the vernal equinox is on your meridian. There is nothing in the sky to mark it but you can think of it as being represented by the sign V intended to represent the horns of a ram. When the sun crosses the vernal equinox, about March 21st, that is the time spring begins. Ever wonder why they have a goat or ram on all those bock beer signs? Well, bock beer is made in the spring. And years ago the vernal equinox used to be in the constellation of Aries the Ram. The equinox has slid back into the constellation of Pisces the Fishes, but the horns of a ram are still used to mark its position.

But we regulate our lives by the sun and not the vernal equinox. We want a clock that is tied to the sun. A clock that reads noon when the sun, and not the vernal equinox, is on our meridian.

Regardless of how carefully you rated a clock, however, you never could make it keep in exact time with the sun. The trouble is not with the clock but with the motions of the earth which are reflected in the motion of the sun. The sun moves eastward at such an irregular rate that no two solar days are quite the same length. The difference between them doesn't amount to much. The extreme range dur-

ing the year is only 51 seconds. Yet this is far too much for precision timekeeping. We can't use the sun directly as our standard timekeeper. (Incidentally the longest day of the year happens to come on December 23 which we ordinarily consider to be the shortest day of the year. Here is a good chance to get a bet out of your friends.)

SINCE THE sun doesn't move as we would like it, we proceed to invent one that does. Our clocks are geared to run at the same rate as a purely imaginary sun that moves at the same average or mean rate as the real sun. We call this body the mean sun. All the mean solar days are the same length. We divide a mean solar day into 86,400 equal parts and call them seconds. And this mean solar second is our fundamental legal and scientific unit of time.

How do we know if our watch is running correctly or not? We can't set it by observing the mean sun because there isn't any such body. We could get the correction by observing the real sun, since the two are always a known distance apart. But the sun is a large bright disk that is hard to set on accurately. It is better to get the correction to the sidereal clock from the stars which are nice sharp points. From the sidereal clock we can easily calculate the mean solar time.

Here somebody is going to object that we are reasoning in a circle. How did we get the places for the stars from which sidereal time is obtained in the first place? Well, it is much too long a story to ex-

plain here. But, in the last analysis, we have to get our star positions from the sun. We tie the stars in with the sun until eventually we come to know their positions so accurately that we can use them to set our clocks. But it wasn't done in a day.

Now it would seem as if our troubles are ended at last. As a result of centuries of painstaking toil on the part of a few underpaid individuals we have a nice series of stars whose positions are known to a hundredth of a second. But instead of being able to lean back and relax we find that our troubles in timekeeping are only beginning.

More than two centuries ago Edmund Halley discovered some puzzling discrepancies between his observed positions of the moon and the time of certain ancient eclipses. It looked as if the moon were gradually speeding up in its orbit or undergoing what is termed a secular acceleration. About 1750 Tobias Mayer suggested that this secular acceleration of the moon was due in reality to a slowing down in the rate of rotation of the earth caused by tidal friction. But in 1787 Laplace showed that the gravitational action of the planets on the moon would produce a secular acceleration, of about the amount observed, so that the tidal friction theory went into temporary éclipse. Then in 1853, Adams carried Laplace's calculations out to a greater degree of refinement and showed that the planets could only produce about half of the observed acceleration in the moon's motion. Some forty years ago a chronologist named Fotheringham, who seemed

to have gotten into astronomy largely by accident, made a detailed study of all the old eclipses, occultations, and whatnot, and definitely confirmed the existence of an acceleration in the moon's motion.

The acceleration works in such a way that during the last 2000 years the error in our clocks is about $29 T^2$ seconds, where T is the number of centuries since 1900. A little arithmetic will show that in another 2000 years the error will have mounted up to nearly three hours. This slowing down in the earth's rotation is ascribed to the friction between the water and land in narrow straits and channels such as the English Channel, the Straits of Malacca, and the Bering Sea. In addition to the secular acceleration, there are other irregular changes in rotation, of a rather startling nature, to which Fotheringham gave the name of trepidation. The origin of these is still unknown. The largest changes of this kind occurred in 1900 and 1918. According to G. M. Clemence of the U. S. Naval Observatory, the accumulated error in the measure of time during the past 200 years has amounted to as much as 30 seconds due to this effect, first in one direction and then in the other.

NOW, IF the earth is gradually slowing down, then it will seem to us as if the rest of creation is speeding up at the same rate. The difference will first become apparent in rapidly moving bodies, as they will differ from their predicted positions by the largest amounts. It is like losing a minute

in timing the flight of a jet plane and a man on a mule. The jet plane will be ahead of schedule by many miles while the man on the mule will only be off by a few feet. That is why the secular acceleration first showed up in the moon, which moves much faster than any other body whose motion has been carefully studied.

If we had nothing but the moon to check against the rotation of the earth we might be in doubt as to which one to believe. It would be like taking one man's word against another's. But we have strong corroborative evidence from the motions of the sun, Mercury, Venus, and the four giant Jovian satellites, all of which are ahead of schedule by amounts corresponding to their average motions.

What can we do to bring the observed positions of the heavenly bodies into agreement with their predicted positions?

We could start correcting all the clocks so that they keep Newtonian time instead of mean solar time. Our clocks would no longer be tied to the sun but would run according to the length of the second at some arbitrary epoch such as January 1, 1900. With the second growing longer, but with our clocks kept running on the same schedule, they would gain continually on the sun.

Along about 4000 A.D. the clocks would be so far ahead that they would register three o'clock in the afternoon when the sun is just crossing the meridian.

The other alternative is to go on using mean solar time just as we do now. But whenever we wish to compare the observed position of a planet with its predicted place we would use Newtonian time. This would be done by publishing corrections for converting mean solar time into Newtonian time. Clemence has given a table showing the magnitude of the corrections back to 4000 B.C. He does not say how these corrections were derived.

Inevitably there will come a time, however, when the day will have lengthened to such an extent that our way of life will be radically affected. Writers who lay their stories far in the future would do well to take heed as this is one of the few effects we can extrapolate ahead a billion years with confidence. Let us try to envisage some conditions that will have been forced upon us when the day is about 48 hours long.

ALTHOUGH the day will be twice as long, there will be only about half as many days in the

CORRECTIONS TO MEAN SOLAR TIME

Date	Corr.
4000 B.C.	+ 27 hours
2000 B.C.	+ 12 "
A.D. 1	+ 2.6 "
1000	+ 0.5 "

Date	Corr.
A.D. 1750	0 seconds
1850	+ 2 "
1900	- 3.9 "
1940	+ 24.5 "

year. Our calendar will doubtless have been discarded, or else modified to such a degree as to be unrecognizable. There will have been some adjustment in reckoning wages, since if a man is paid by the hour he would have to work twice as long for the same amount of money. In fact, every sort of a rate that is reckoned in days, hours, minutes, and seconds will have had to be changed. A speed of 100 miles an hour would only be 50 miles an hour as measured today. But if interest is still calculated as so much per annum, then it is possible that these rates might be about the same, since the length of the year will not have altered. A man who is 50 years old would still be 50 years old, although the sun would have risen on him only half as many times as on a man of that age today. Presumably people would have had to adjust themselves to a somewhat greater range in temperature between day and night, as our planet would be heading in the same direction as the one-sided conditions that prevail on Venus. The reader can doubtless think of scores of other effects that would arise under such a regime.

As just mentioned, the length of the year would remain unaltered, even in A.D. 1,000,000,000, unless something wholly unforeseen happens. For this reason, theoretical astronomers have suggested that the mean solar second be dethroned as our fundamental unit of time in favor of the sidereal year. The sidereal year is the true period of revolution of the earth around the sun with respect to the sidereal uni-

verse. The mean length of the sidereal year appears to be a unit nearly in accordance with Newtonian time. At an international conference of astronomers, in 1950, on the fundamental units, it was recommended that the sidereal year be officially adopted as the standard of time where the mean solar second is unsuitable owing to its variability.

It is conceivable that we may ultimately be able to construct clocks that will answer the purpose. Quartz crystal clocks have run a year with a maximum error of 0.02 seconds. At present, however, they are considered as too unreliable to serve as fundamental timekeepers. Also, there is the same objection to quartz crystal clocks that there is to the rotation of the earth: the period of vibration of the crystal changes slowly with aging and, for each crystal, this aging has to be determined from astronomical observations.

Other possibilities are clocks based upon the rate of vibration of ammonia molecules under electrical excitation; the emission of particles from radioactive substances; the frequency of certain monochromatic spectrum lines; and even the period of Cepheid variable stars.

The role of a prophet is always hazardous, but it seems rather doubtful if the heavenly bodies will ever be displaced from their role of fundamental timekeepers. With all their faults, the heavenly bodies can at least be relied upon to keep moving—a feat we have never been able to achieve with any man-made device.

OUT OF THIS WORLD

by Joseph C. Stacey

Listed below (jumbled fashion) are names pertaining to heavenly bodies, phenomena, etc., together with a brief description of each. Can you match up at least 7 of them correctly for a passing score? 8-9 is good; 10 excellent. *Answers on page 98.*

- | | |
|--------------|--|
| 1. CHEVELURE | (a) a long, narrow and generally straight valley on the face of the <i>Moon</i> . |
| 2. ANSA | (b) a small rainbow lying near the horizon. |
| 3. BOLIDE | (c) the tail of a comet. |
| 4. AEROLITE | (d) a star, the most conspicuous in the constellation <i>Canis Minor</i> . |
| 5. BURR | (e) the name of one of planet <i>Mars'</i> two moons. |
| 6. PROCYON | (f) a low, horizontal sheet of cloud. |
| 7. SUN DOG | (g) the apparent ends of <i>Saturn's</i> rings, which seen obliquely, seem to project from the sides of the planet like handles. |
| 8. PHOBOS | (h) a mass falling on the earth from celestial space. |
| 9. RILL | (i) a halo round the moon or a star. |
| 10. STRATUS | (j) a brilliant shooting star. |

CARRIER (*Continued from page 76*)

relatively easy after the initial gain has been made."

Marrin shook his head. "How can I believe you?"

"How? Look!"

Telepathy transmits delicate shades of meaning quite lost in spoken language. A 'true' statement, teleped, reveals immediately how 'true' the sender believes it to be. There are an infinite number of gradations to the 'truth.'

As Ecks had, Marrin read Mycrowski's belief in the para-psi—

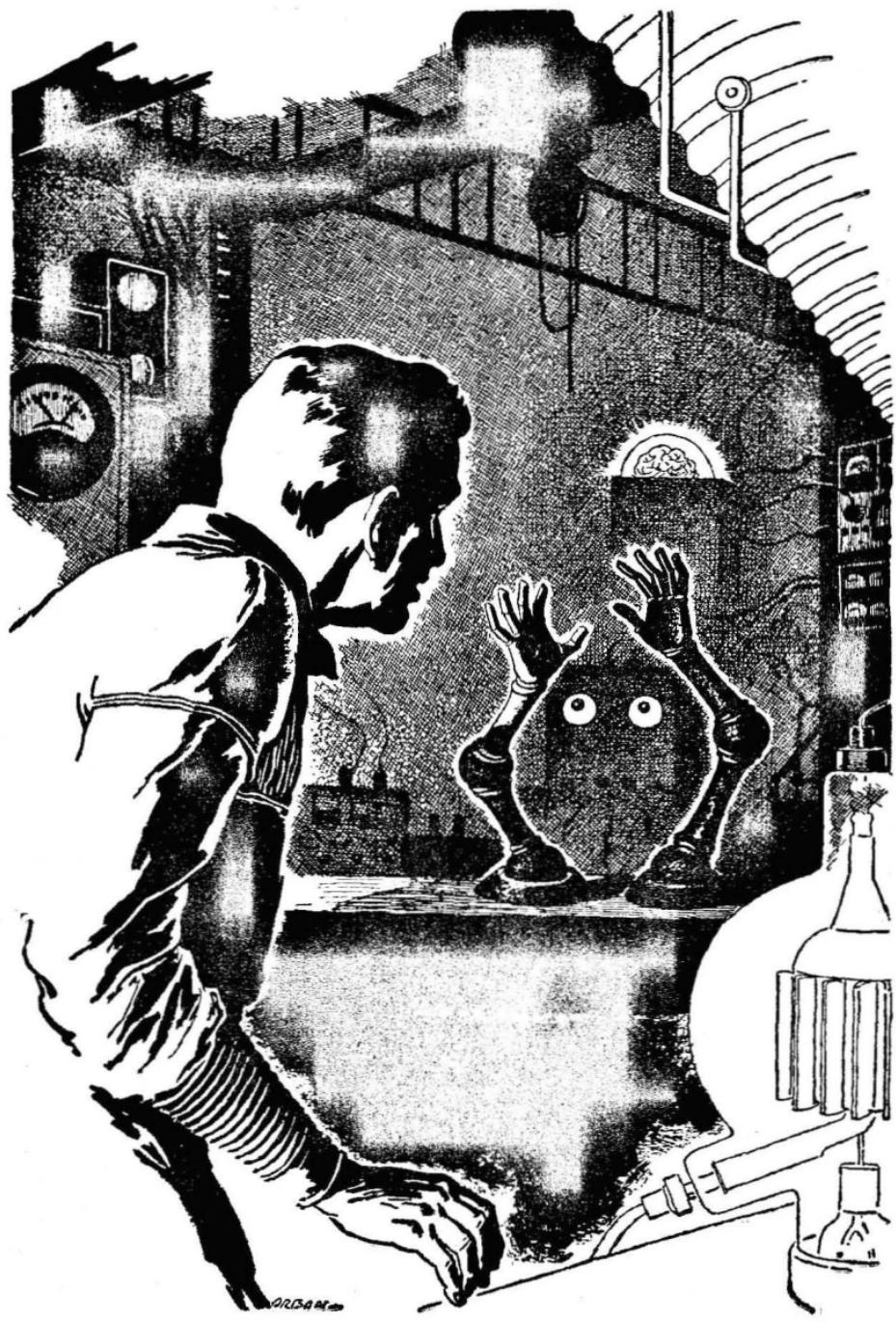
read it clear down to the subconscious level. An unimaginably 'true' truth! There was no possible argument.

Suddenly Cari smiled. She had had one of her flash premonitions —a pleasant one.

"Help me up," Mycrowski said to Marrin. "Let me outline my training program." Marrin walked over to help him.

Then Ecks grinned. He had just read Cari's premonition.

• • • THE END



ORLANO

When does life begin? . . . A well-known book says "forty". A well-known radio program says "eighty". Some folks say it's mental, others say it's physical. But take the strange case of Mel Carlson who gave a lot of thought to the matter.

All in the Mind

By Gene L. Henderson

Illustrated by Paul Orban

MEL FELT as if he were floating on clouds in the deepest, most intense dark he had ever experienced. He tried opening his eyes but nothing happened, only a sharp pain. Little bits of memory flashed back and he tried to figure out what could have happened, where he was.

The last thing he could remember was the little lab hidden back in the mountains in an old mine tunnel. Remote, but only an hour's drive from the city. What had he been doing? Oh yes, arguing with Neil again. He even recalled the exact words.

"Damn it, Mel," his partner had said. "We've gone about as far as possible working with animal brains. We've got to get a human one."

"We can't," Mel had disagreed. "There'd be enough of an uproar if the papers got hold of what we've been doing with animals. If we did get someone in a hospital to agree to let us use his brain on death, they would close us up tighter than a drum."

"But our lab's too well hidden, they'd never know."

"It wouldn't work anyway. The brain might be damaged for lack of oxygen and all of our work would go for nothing. Worse, it might indicate failure where a fresh, healthy brain would mean success."

"We'll never know unless we try," said Neil almost violently, dark eyes glittering. "Our funds aren't going to last forever."

Mel had turned his back and

was leaning over the tank where the latest brain—that from a dog—was lying immersed in the life-giving liquid, a thin flickering line of light on the oscilloscope behind the tank the only indication that the brain was alive.

What had happened then? He thought hard, until a sharp pain and growing headache almost made him lose consciousness. Either he'd passed out or something had happened. Maybe the cave had collapsed the concrete walls of their lab, although he didn't see how that could have happened.

He became aware of voices, faint at first, then growing stronger. He strained to listen and just when it appeared that the words would become distinct enough to understand, they faded away. He waited hopefully until they came back. This time he could understand words and parts of sentences.

"... connect this first and . . ."

"No, be careful. Too much voltage would ruin everything and we'd have to . . ."

"Where does this connection go, here?"

The other voice boomed in then, deep vibrations feeling as if they would shatter his brain. There was a frantic quality in the words.

"No, no, you fool, don't . . ." A penetrating pain knifed through Mel's head and he tried to scream but heard nothing but a loud buzzing. He welcomed the loss of consciousness as it blanketed him.

He struggled back to consciousness once more, a voice calling over and over in a monotone. "Mel, Mel Carlson. Can you hear me, Mel? Mel, Mel Carlson. Can you hear

me, Mel?" he listened intently, recognizing it as one of the first voices he had heard. He tried to move but could feel no response of legs or arms. It was like being buried alive and he tried to call out for help. He must have lost his voice because he could still hear the same call.

"Mel, Mel Carlson, can you . . ." It broke off abruptly, then came back triumphantly. "You do hear me, Mel, I can see."

Again Mel tried to call out, without success. The other warned quickly. "Don't become alarmed. We're still working on your voice. Just try to rest." Mel suddenly realized that he'd been listening to Neil and a wave of thankfulness swept over him. There had been a cave-in then and he'd been injured. Neil was speaking again, a note of professional regret in his voice.

"I'm sorry it had to happen this way but there was too much tied up in the project to lose now." A growing realization and horror began to seep through Mel's mind. Neil continued, after a brief pause. "The sine wave jumped. I see you must realize now. I had to do it, Mel. After all, you aren't dead you know, just your body is gone. Your brain may live for hundreds of years. Why just think, you'll be able . . ." Oblivion again claimed Mel.

ONCE MORE Mel was floating on clouds and this time the sensation was exhilarating. He tried moving his arms and legs to see if he could swim through the velvety

darkness but failed. A faint glow began to appear ahead of him and a low rumble of voices began to echo throughout his mind. Full realization of what had happened swept over him and he struggled to retain his sanity. The voices were louder and he recognized that of Neil, who was saying,

"... is conscious now. Easy on the voltage, remember last time." A brief pause, then louder. "Mel, I see that you hear me. Listen carefully. I've tried out several of my own theories, that's why you can hear. And, in just a moment, I'm going to give you eyesight. We're having trouble with a voice." The light began growing in intensity and hurt his eyeballs. Mel remembered then, depressed, that he had no eyes of his own. Even at the thought, he tried to shut his eyes which only caused his brain to ache more. He tried completely relaxing in an endeavor to capture the floating sensation once more.

"Ah, that's better," approved Neil's voice. "I see that the brain wave has smoothed down. If you'll just accept what's happened, Mel, we should be able to work together." Figures began to form in the white mist. As they became stronger but out of focus, he saw Neil bent over a control panel, carefully making adjustments and glancing frequently at the leaping line of green light across the scope in front of him. He felt a surge of hate sweep through his brain and saw the green line jump violently. Neil's hand jumped instinctively toward a red-covered switch. At the same time, he flashed a glance towards a tank that was barely

within the range of Mel's vision. He realized almost at once that it must be the same one in which his brain was resting. The full, sickening realization of what had happened hit him and he almost went over the black-out line. Then Neil's face loomed square in his direction and hate, the most intense he had ever experienced, brought the green line that represented his brain's output up to full level.

His brain sent impulses out to the nerve ends that had controlled his arms and legs. They felt as if they were still attached to him but paralyzed. His mind felt clearer and sharper now than it ever had before in his life. He determined to analyze his new mental capabilities carefully in the hope he would find a means of striking back.

During the next few weeks, only his hatred for Neil enabled Mel to keep his sanity. The first empty feeling that the future could hold nothing for him but horror gave way to planning and scheming. His mechanical voice was perfected, operated by the nerve ends of his brain, much as his original vocal cords had functioned. It enabled him to now assist in his own rehabilitation by suggesting improvements or solutions to mechanical aids he could control. The steady growth or realization of his mental powers were amazing to Mel. He realized that they must have been inherent and in his subconscious all of the time, only his loss of body brought them out now. That, plus the fact that he required practically no rest if the stimulants pumped into the tank were sufficient.

THIS LAST was the clue to his use by Neil. It became apparent that his erstwhile partner planned on using him to the fullest possible extent. First Neil brought in a problem concerning a new type of paint to absorb the rays of the sun and convert them into electrical energy. Not until he had studied the problem and given Neil the answer did Mel realize the full financial potentiality of his powers.

He immediately brought up the subjects. "What about our partnership agreement on profits?" he asked.

"Profits?" repeated Neil with a nasty smile. "Why? Where did you plan on going?"

For once Mel was glad that his voice was flat and devoid of all inflection. It kept the other from sensing the rage that made him want to do something violent. "You know what I mean," he insisted doggedly. "Unless you want to admit murder, we're still partners."

Neil laughed and said, "That's right. Of course I can draw any and all funds that I need but if the authorities ever check on your disappearance, they'll find that a separate account has been opened in your name in the City. All you have to do is go in and withdraw it any time you want to." He chuckled, then grew serious.

"Don't get any ideas," he warned. "We've been spending most of the time during the past couple of months getting you in shape for your intended function and I'm going to bring more and more problems in to you." He explained further, "I've opened an engineering consultant service in

the city and this paint formula alone will bring us all the business we'll need." He pretended to be busy at one of the computers being installed but Mel could see that he was glancing out of the corners of his eyes at the oscilloscope for indication of a brain reaction. Mel had learned several weeks ago that he could control the output of his brain and had been careful to conceal the fact from Neil.

His partner said, disappointment in his voice. "Doesn't my attitude bother you anymore?"

Mel's mechanical voice rolled out. "When you destroyed my body, you destroyed all emotions. If that's the way you want to do things, that's the way it'll be."

"But the ethics . . ."

"I know what would happen to me if you turned me over to the scientists. I'd be a freak and treated as such. I owe nothing to the world."

"Swell," enthused Neil, this time his face twisted into a grimace of pleasure. "I've got a lot of plans that you'll fit into."

Experiments had been made with muscular control and they discovered that Mel could govern an electrically powered table, controlled by short wave radio. Another "eye" that could swing in a 360 degree circle had been mounted on it and broadcast its information to Mel's optical circuit. A mechanical arm had also been installed on it and Mel spent long night hours when the lab was quiet perfecting his control over it. Before long, he was as much—if not more—proficient with it as he had been with his own arms.

He began laying his plans.

The first thing he needed was a weapon. Getting his control cart out of the cubicle was easy since Jenkins, the only assistant allowed in the entire laboratory, had left his key ring lying on a table one morning. It had been but the work of a moment to wheel over, pick them up and then conceal them. Jenkins had spent a frantic hour in search but finally went into the machine shop to make up a new set. He had first cautioned Mel against letting Neil know, almost fawning in his gratitude when Mel promised.

He searched the entire lab the first two nights but discovered that Neil had taken the revolver he had kept in a drawer of his old desk. It would take too long to try and machine another one, although their machine shop had proven its capability of turning out anything. A knife he discarded as too clumsy for his means of control. He then carefully considered steel darts shot from a tube by compressed air or carbon dioxide but reluctantly abandoned that idea also. Since he had a machine's limitations as well as advantages, he'd have to begin thinking less like a human. So, the first thing to base a weapon on would be the material most plentiful in the lab. That was—electricity.

ONCE DETERMINED on the line of his endeavors, he briefly marvelled again on the still unexplored potentialities of his brain. The weapon would be mounted on his own cart and electricity could

either be broadcast or self-contained. For mobility, he decided on a power pack. The weapon itself evolved so easily that he wondered why no one had thought of it before now. Special type condensers built a battery charge up to over a million volts for a split second. This charge, invisible until it hit an object more solid than air, was contained in a very narrow beam by strong screens of opposite polarity. The entire sequence of operation was almost instantaneous, and the bolt was more in the nature of an electrical projectile than a continuous beam.

He decided that the unit, resembling a flashlight, could be mounted in a concealed spot under his "eye" so that it could be fired at whatever he might be looking at.

Now that he had a means of defending himself, Mel felt more at ease but at a loss for his next step. Merely eliminating both Jenkins and Neil would gain his revenge but what then? He could always notify the authorities but mentally flinched at exposing himself to the world as a freak and being at the mercy of the morbid curiosity of millions.

He had hardly begun to lay his plans before disaster struck. Neil came in early one morning and had Mel begin working on a problem concerning a new type of steel that would combine structural strength with the lightweight qualities of aluminum. Mel energized his calculators that were, electrically, practically part of his brain. He briefly wondered why Neil appeared so restless, wandering around the room with his hands be-

hind his back, studying everything. Then the problem became so intriguing that he completely forgot that anyone was in the room.

His first inkling that anything was wrong was when Neil straightened up from the cart with a twisted smile on his face and exclaimed:

"Ha!"

Mel's first, startled conjecture was that the other had discovered the special weapon. He tried to rotate the lens so that the weapon would point at Neil but could see, by other stationary lenses in the room, that the one on the cart remained motionless. The same was true of the mechanical arm. In fact, the entire cart was dead.

"I pulled the main power fuse," said Neil, a slight smile on his face. "I suppose you thought you were getting away with it completely." Not positive as to how much his partner knew, Mel, decided on silence as his defense. The smile disappeared from the other's face and he continued, slowly:

"Something must be wrong with your reasoning. I knew something was up when the power company's statement showed an unusually high increase in power consumption. From there on it was easy to read the meters at night myself, and then the next morning. What were you up to anyway?" Mel still maintained his silence.

"Okay if that's the way you want it," said Neil more harshly. He walked to the end of the tank and Mel felt his brain telegraphing warnings to severed nerve connections not yet again in use. Neil reached out to a valve Mel recog-

nized as controlling the minute amount of chemicals that served to nourish the cells in his brain. Relays were connected to it that also regulated the injection of oxygen proportionately into the fluid. He turned it slightly then began watching the oscilloscope closely. In a matter of seconds, Mel felt his usually sharp senses begin to dull. The oscilloscope blurred until, by great effort, he brought it into focus again. He saw that the height of the wavy line denoting the strength of his brain's output was abnormally low.

"Feeling all right?" asked Neil in mock anxiety. He turned the valve back to its correct setting and almost instantly Mel felt better. "That's just a sample of what can happen if you force me to it," warned the other. "A little more of a turn and that super brain of yours would be garbage. Only I wouldn't do that, of course. There are a few more experiments I want to make before your brain dies." Knowing the vicious nature of his partner, Mel decided to talk before the other goaded himself into some unplanned action.

"Don't forget the fable about the goose that laid the golden eggs," his voice rolled out. "There's still a lot I could do for you, you know —or *not* do." He saw with relief that the anger receded from the other's face to be replaced by a look of cunning.

"I almost forgot," said Neil. "I've another surprise for you." He went to a circuit near the master calculator that he himself had installed only several days ago. All the master components were open,

a rheostat appearing to be the primary control. Mel had decided at the time it had to do with voltage regulation of the calculator since there had been trouble with it.

Neil placed his hand on it, then turned his head in the general direction of the tank and said, "Just in case you get ideas of not cooperating, I can use this for persuasion." He cracked the vernier just a trifle and agony knifed through Mel's brain. It receded, leaving a slight ache.

"Not much voltage," Neil was saying with satisfaction, "but, judging from the way your brain wave jumped, I don't imagine it felt very good, did it?"

"You win," was Mel's only comment, not wanting another jolt. Never before had he felt so helpless and completely at the mercy of another. He realized more and more that he had less defense than a new-born baby, which could at least kick and wave its hands. He could do nothing except try to retain his sanity and wait for his day to come. . .

"Good," approved his partner, his manner indicating that it was the most natural thing in the world that Mel should give in. "Just in case you forget, I think I'll keep the cart disconnected so that you can't do anything to harm yourself at night." His manner abruptly turned business-like. "Now then, that paint formula story got around and we've got a lot of business to handle. Most of it's routine for you but we'll drag it out and sock them plenty. A couple of items we'll copy after you've solved them and say it couldn't be done."

MEL MISSED the cart more than he thought he would. It was much like the time when, as a boy, he'd broken a leg and had to stay in bed for several weeks. He was forced to turn in on himself.

The real turn in the development of his mind, and above the level he had thought possible, came about as an accident one day. Resting, with nothing to do, he had the full room in vision with the stationary lenses. A flicker of motion caught his attention and careful waiting disclosed it to be a small mouse that had somehow gained access to the laboratory and then into his room. Welcoming any change in his routine, he watched as the small creature scurried around the room looking for something to eat. Several times Mel amused himself by causing his voice box to rumble, making the rodent scurry around madly for a hiding place until the imagined danger had passed. Eventually it became used to the noise and not even talking affected it.

It disappeared from sight for several minutes and Mel had just begun to wonder if it had a nest in the equipment when it reappeared on top of the calculator, near the electrical prod that Neil had used on his brain. Remembering the searing jolt it had given him, Mel watched anxiously as the mouse pushed an inquisitive nose into the still exposed components. He became more concerned as the animal became more intrigued. Not only was there danger that the mouse would push down on a delicate relay and close it, but he could conceivably short out the main

power supply. The result wasn't pleasant to contemplate. If it didn't permanently damage some of his brain cells, the pain might drive him into insanity.

He tried shouting but the mouse paid no attention to him. He called for first, Jenkins and then Neil until he remembered that his partner had said they were going in after some special equipment. While he watched helplessly, the mouse stretched out and touched a relay point. Instantly pain knifed through his brain and he became aware of a roaring sound that he realized was his voice blaring out. The extra loud and continued blast of sound had caused the mouse to withdraw nervously from the relay. Something about it had made him determined, however, and as Mel was barely recovering from the first jolt, the mouse moved back. Mel wished desperately that the cart had been left in operation so that he might at least use the sound of motion or the mechanical arm to frighten his tiny tormentor from the vicinity of the relay.

He watched intently as the mouse came closer to the points, oblivious to everything else in the room. As it almost touched the points, a violent surge of hate coursed through his brain cells and he was surprised to see the mouse flung violently back down to the floor. It lay there motionless and he finally realized, with thankfulness, that it was dead. As the pain from the jolt subsided to the point where he could barely feel it, he began to wonder what had happened. The amount of voltage necessary to hurt him was so small that nothing be-

yond a direct short across the primary power would have affected the mouse. He began to analyze everything preceding the point where the mouse had been flung from the top of the calculator. A check and recheck brought the same answer, one that he had at first refused to believe—his thoughts had been responsible.

Further contemplation convinced him that, while his thoughts had undoubtedly been responsible, the mental power itself had not been enough, as pure, brute force, to accomplish the task, but must have struck at the rodent's brain itself. That would have been enough to convulse the animal's muscles and make it look at first as if some outside force had hurled it to the floor. The stolid Jenkins was somewhat perturbed when he found the dead mouse.

"But how could it get in here," he demanded querulously. Then, as if in sudden thought, "and what could have killed it?"

Mel suddenly decided that it might be better if the other were set at ease since even Jenkins could dissect it if he became curious enough and might find enough to make Neil suspicious.

"I saw it yesterday," he said. "I didn't say anything since it was interesting and was company for me. I noticed that it was moving more slowly today and seemed to be weaker. It must have starved to death. Nothing to eat in here, and he couldn't get out."

"Yeah," agreed the other, picking it up and throwing it into a wastepaper basket. The explanation had evidently satisfied him,

since he went about his routine tasks.

AFTER THE excitement of his discovery had worn off, Mel began to cautiously test its potential. He carefully directed his thoughts at Jenkins and caused an instant reaction. For a brief moment, he felt a resiliant pressure as if something were pressing against his own brain. He instinctively pushed back harder and heard Jenkins yell as the opposing pressure collapsed. The assistant was leaning against a work table, a dazed look on his face.

"What happened?" Mel asked.

"I don't know," said the other, pressing a hand to the side of his head. "It felt as if something had hit me in the head, now it aches a little. Guess I'll have to do something about this cold." He left, still holding a hand to his head.

It was obvious that his newly discovered power could be dangerous so Mel proceeded with his experimenting more slowly. Jenkins was still his only guinea pig and he learned to gage just when the assistant's resistance was about to collapse and reduce the intensity of his own probing accordingly. He was disappointed to discover that either it was impossible to read another's mind or that he hadn't discovered the method. However, he could roughly direct the other's actions. Jenkins had been becoming increasingly nervous so Mel became even more subtle in his experimenting. He'd wait until the assistant was idle and then either make him cross his legs or put one

or the other of his hands up to scratch his head. He finally became so smooth and accurate in his control that it lost most of its interest as a means of recreation.

He began to extend his range. Wood and concrete offered no impedance at all. Metal, with the exception of aluminum, cut the intensity roughly about half. Jenkins was in Mel's room when he first probed Neil's brain. His partner's mental resistance was much higher and he pressed slowly but methodically so that the break-through would be controlled. To his surprise, he found that Neil's brain was much easier to control than that of Jenkins had been.

It was about this time that he found he was beginning to master the sharing of his host's eyesight. While he might not be able to read another's mind, it would be a big help to know that someone else was doing or what he was looking at. He tried searching outside the building but found nothing, other than an occasional small spot of resistance that would probably indicate a small animal. This wasn't surprising since the lab was hidden in caves in a secluded canyon that had no attraction to the casual wanderer.

His next concentration was on the animals he encountered every so often. His first few attempts resulted in sudden and complete collapse of resistance and he sadly concluded that his control had been too powerful and resulted in their death. He tried more carefully and was overjoyed when he established contact with their visual senses. The sensation was almost as over-

powering as if he had suddenly gained eyesight of his own. For the first time in months, he revelled in seeing the country around the outside of the lab and never before had he thought it so beautiful. Once, while in control of a rabbit's mind, he saw an eagle flying overhead. He quickly transferred and, before the bird flew far enough away to make control impossible, he enjoyed the far-reaching vision of the bird's eyes as it swept on towards some hidden nest. He could even see the city in the distance.

SEVERAL TIMES he neglected to notice Neil's entrance into the room, so absorbed did he become in his newly discovered, if second-hand, freedom.

"What's happened to you anyway?" demanded his erstwhile partner one day after he had had to repeat a question. "Half of the time lately you're lost in a world of your own. What're you up to anyway?"

"Nothing," replied Mel, suddenly alert to any new danger, although confident he could take care of himself now. "I was just going over some new equations I've been formulating as a hobby. Now that you've taken away my cart, there isn't much to keep me occupied you know. You don't begin to bring enough problems. What's wrong?"

Mel wished that he could read the others' mind since Neil began to act evasive. He laughed with a false heartiness. "Wrong? Why I've —we've—" he corrected, "—already made a fortune on a couple

of our own patents as well as commissions from project solutions. Someone might get suspicious if we did too well or too much."

This made sense but Mel couldn't resist digging. "You mean that your past record of success as measured against your supposed one now might make the police ask questions?" he asked. The other remained silent so he pressed the attack. "Or are they already wondering why I haven't been seen for so long?"

"There were a few questions at first," admitted the other, "but I think I've satisfied them all. However, I've been thinking that it might be a good idea to move you somewhere else."

"But hardly anyone knows the lab exists," protested Mel.

"The power company does, even if the meters are way down the road. We should've planned on our own generators from the first. Then there's the deed recorder. This land is in both of our names you know."

"It'd still be a tremendous project," pointed out Mel. "You couldn't begin to keep the new location secret because you'd need help in moving me. One little slip and it'd be all over."

There was an upward curl to the other's lips that Mel didn't like. "Oh, we'd have to be careful," he admitted. "Luckily the time delay wouldn't hurt any, there's so much money rolling in." He hesitated for a moment, as if in thought, then concluded, "In fact, there's no project on now unless you have a private one of your own. It might be a good idea to plan on the move right away."

"I still don't like the idea," stated Mel flatly. "I'd like to think it over for a couple of days."

"Think it over all you want," said Neil with a grin. He walked to the calculator and patted it near the jolter. "Only don't forget I don't have to ask you." He waited almost hopefully but Mel said nothing, content with the feeling of power and knowledge that, so long as he was prepared, the other could do nothing immediate to harm him. The time had come for action, however.

Mel kept mental contact with his partner after he had left. Neil went directly to the office and unlocked the center drawer of his desk. He then began pulling out papers and scanning them rapidly, placing some back and keeping others out. Mel gasped to himself when he saw the bank statement and the amount of money deposited under the name of the partnership. That in Neil's personal account was large but it was perfectly obvious, according to dates Mel could see through the other's eyes, that the transfer of funds had not been underway for long. As it now stood, they were both practically millionaires but he knew Neil wouldn't be satisfied.

Watching through the other's eyes, Mel had his vision switched from the desk to the door. He saw that Jenkins had just entered, mouth moving. He thought he could read his lips just enough to make out his own name. Jenkins appeared to stop and listen to Neil, then his facial expression changed as his lips protested over something. Mel's vision then switched to another desk drawer that had

been opened and he saw his missing revolver nesting in it. Neil withdrew it and pointed it at Jenkins. The assistant stepped back, hands up as if to ward off a blow. Then a placating, if anxious, smile spread over his face and his mouth worked rapidly, too much so for Mel to read any words. Whatever had been said, it appeared to satisfy Neil since he lowered the revolver.

MEL BROKE contact and came back to his own room and stationary video scanners that served as his eyes. Jenkins came in and his manner made it plain to Mel that he was laboring under an intense pressure. He began putting around the work table, gradually making his way closer to the tank housing Mel's brain.

"Jenkins," said Mel, purposely extra loud.

The assistant jumped nervously, dropping a piece of metal he had picked up.

"Yes," he almost quavered.

"Have you ever thought how it would be to be condemned to a life like mine?"

"No-o-o, not especially. Why should I?"

"You helped put me here, you know."

"I was only following orders, I—"

"All right, all right. I know how Neil can force a person to do something. But you could help me, you know."

"How's that?" suspiciously. "I'm not going to tell anyone, if that's what you're driving at."

"No, I'm not trying to get you

to do that. All I want is the fuse replaced on the cart. Then it would feel as if I were moving around and break up the monotony. This is worse than any solitary cell in prison could ever be."

"No," refused the assistant flatly. "It wouldn't do you any good anyway. It's just—" He stopped, hand going to his mouth as if he had said something he wasn't supposed to.

"How's that, Jenkins?" reminded Mel as gently as he could. "What's supposed to happen?"

"I don't know," replied Jenkins sullenly.

"Put a fuse back in the cart," directed Mel. At the same time he applied pressure almost to the breaking point against the other's mind.

"No!"

He knifed through to the other's brain with ease and just enough power to accomplish his purpose without harming Jenkins. This was the most complete control Mel had ever attempted and Jenkins' legs moved spasmodically as though he were a puppet on strings. There was horror in his bulging eyes and sweat began breaking out on his forehead. Relentlessly he was forced towards the cart until at last it had been reached.

"Jenkins," said Mel as low as he could. "Can you hear me?" A slight twitch of the head was the only indication that he could, so Mel instructed,

"There's a spare fuse near the holder, Jenkins. Take it out and place it in the primary circuit. Do that and I'll let you go. If need be, I could kill you now. The fuse,

Jenkins." He relaxed his hold slightly but Jenkins made no attempt to comply. Mel continued,

"Remember the dead mouse, Jenkins? I did that. The fuse, before I lose my patience." He applied more power until the other's hand began moving unsteadily towards the cart. As he withdrew slightly, from mental contact, Jenkins continued his task and in a moment Mel was able to move the cart. He had momentarily forgotten Jenkins until he became aware that the assistant had let out a yell of terror and was rushing for the door. Mel watched with amusement, knowing that he could have stopped the other with hardly a strain. Just before he reached the door, it opened and Neil appeared. Jenkins came to a halt and stared in terror at his employer.

"Well," said the other impatiently. "What's been keeping you, Jenkins? Did you—"

"No, he didn't," answered Mel. At the same time he caused the cart to move sideways and swung the video scanner until it was staring directly at Neil.

"Well," said the latter accusingly, switching his gaze to the terrified Jenkins. "So this is how you follow out orders."

"He made me do it, boss. He made me," babbled Jenkins as Neil, face set with determination, drew his revolver from a pocket. Before the astounded Mel could do more than gaze incredulously, there were two sharp cracks and Jenkins slowly placed his arms around his stomach and rocked back and forth in agony, before toppling over to the floor to lie motionless.

"Now you," said Neil, swinging his revolver towards Mel's tank. Mel frantically stabbed at his partner's mind but could feel no pressure. Another shot rang out and he felt a numbing pressure seemingly from every direction that could only mean it was against his physical brain itself. The shock forced him to use every bit of power he possessed to keep conscious. Neil had lowered the revolver a trifle and was saying in a superior tone,

"Whatever you did to Jenkins, it's only hastened the inevitable, if that makes you feel any better. I'd have had to get rid of him too, once you were disposed of."

He began raising the revolver again and the dazed Mel instinctively relayed power to the cart. The eye had been pointing directly at Neil and the only sound that indicated the energy gun had been set off was a slight hiss. The effect on Neil was not only instantaneous but horrible to see. His body appeared to swell until he looked bloated, then disintegrated.

MEL FELT himself becoming weak and hastily brought the cart over to examine the damage the one shot had done to him. Almost fearfully he scanned himself and saw, with relief, that the shot had penetrated the tank and was letting the life-giving liquid escape onto the floor. A quick glance into the tank showed that the lead pellet had missed his brain but the pressure on the liquid had caused him the initial pain.

He directed the cart over to the work bench and brought back a

tapered piece of wood. The arm placed it into the hole and then applied pressure until the trickle had stopped. It would do until he could effect a permanent patch. He began to feel stronger almost immediately and knew that the automatic features of his metal "body" were renewing the liquid at top speed.

Using the cart, he first checked the supply of chemicals, fed as needed into the tank, and saw that there was a sufficient quantity to last him for at least a month. He thanked the good fortune that had allowed Jenkins to put the cart into operation before it was too late. Without it, his end would have been as certain as if Neil had been successful in killing him.

His first task was to construct several more carts, each complete with video scanner. One of them was larger than the other. Its first task was to dispose of the two putrefying bodies. Working almost 24 hours a day, he hooked an intercommunications system to every room of the underground lab and directly into his system. Even the telephone was connected to it so that, if necessary, he could answer it or make a call.

The day finally arrived when there was no more he could do. The entire lab was almost like a steel and concrete body, so thoroughly had its every function been integrated as part of his brain. The decision he had been almost frantically avoiding could no longer be put aside. He had approximately a week in which to decide. It would be simple to call the police and in turn let them notify the various

scientists as to his position.

He dreaded the thought of the circus that the lab would become. Erstwhile friends would troop in to look at him with morbid curiosity. Then when his potential became known, tasks would be assigned. There was a definite possibility that he would be moved, even at the danger of injury to himself. Countless thousands would demand it and their will would be obeyed unless the curtain of national security could be drawn across him.

One day was spent in contacting the animals outside the lab and revelling in flight for awhile. Then he sped through the countryside, first with a coyote, then with a deer. There was a possibility that if the scientists moved him, his new tank would be shielded so that it would be impossible to enjoy himself as he now was. All in the name of science of course.

On the other hand, if it were possible to have all supplies delivered to a nearby point where he could pick them up, he could continue his present method of existence. His mind jumped eagerly from problem to problem which he could undoubtedly solve for the benefit of mankind. The present patents in the partnership's name would bring enough money indefinitely to pursue them since much could be done by pure thought.

There was the survival phase first. He would devise an electronic

blanketing ray that would dampen all atomic explosions. Then he could turn to the health of people all over the world, wipe out diseases. All this would depend, of course on his being able to remain undisturbed and that might tax his powers to their utmost. He wondered if it would be worth the effort.

Finally he had less than three days left, which narrowed the safety margin to the lowest point he cared to think about. He opened the telephone circuit and heard the operator say, "Number please."

He hesitated briefly, then said, "The Waring Chemical Supply House, please." His order was soon placed and, afterwards, he felt almost as free and elated as when, as a boy, school had let out for the summer. The manual dexterity of the metallic fingers he had constructed would enable him to write checks with his own signature. A faint idea had even tickled his curiosity and he felt certain that he could grow cells within a couple of weeks. From there, he could work on a body for himself, one even more efficient than the old one Neil had destroyed.

A human in the lab at that moment would have been startled. As near possible as it was for any wheeled vehicle to do so, he had several carts almost doing a jig in the main office. His new life had just begun.

• • • THE END

Answers to OUT OF THIS WORLD

1-c, 2-g, 3-j, 4-h, 5-i, 6-d, 7-b, 8-e, 9-a, 10-f.

If you ever get to drinking beer in your favorite saloon and meet a scared little guy who wants to buy you the joint, supply you with fur coats and dolls and run you for Congress—listen well! That is, if you really want the joint, the fur coats, the dolls and a seat in Congress. Just ask Mike Murphy...

probability

By Louis Trimble

Illustration by Ed Emsh

THE FIRST time this little guy comes in I'm new on the job. He looks around as if he's scared a prohibition agent will pop out of the walls and bite him. Then he gets up his nerve and sidles to the bar. His voice is as thin as the rest of him.

"Glass of beer."

I draw. He drinks and pays and goes out.

That keeps on, Monday through Friday at five-ten p.m., year in and year out. He slips in, peers around, has his beer, and pops out. Even in '33, when we become legitimate, he acts the same way—scared of his shadow. Except he isn't big enough to have a shadow.

During the war, when we're ra-

tioned, I save him his daily glass. He never fails to come in except for two weeks every summer when he's on vacation. From 1922 to 1953 he drinks one daily beer.

In thirty-one years, he and I grow older together, and after the first ten he talks a little so that over a period of time I manage to learn something about him. That first day he'd come in, he was on his first job out of college. Well, so was I, only I went to bartending school to learn how to mix prohibition liquor. But even so, it gave us something in common, and when he learned we had started life together—as he put it—he talked a little more.

His name is Pettis. Six months

after I learn that, I get his first name. It's Rabelais, and I could see why he doesn't like it. But when he breaks down and tells me, he gets real bold and says:

"And what's yours, my male Hebe?"

"Mike Murphy."

"Naturally," he said. He laughs. It is the only time I hear him laugh in thirty-one years. I can't see anything funny.

He is a draftsman for those old skinflints Cartner and Dillson. When they die, their sons take over and are even worse. In the depression, Pettis gets a little shabby but he always has the price of a glass of beer. In '53 he's at the same desk and doing the same job he started on in '22.

In '35 he gets married. He tells me so. Tasting his beer, he says, "I'll be married this time tomorrow." I often wonder what his wife looks like but I never see her. Not even when it gets decent for ladies to come in, she never shows. Marriage doesn't seem to change him; he never looks happier or less shabby or less browbeat.

In '42 I heard his first complaint. By then we're both getting into our forties and, what with his lack of size and caved-in chest and my insides all busted up from pre-World War I football, the army doesn't want us. So he never misses a day except on his vacation.

He says, "I can't get raw materials." About three months later, I understand what he means when he says, "My hobby is inventing."

In '45 I ask him, "What do you invent?"

It takes him two years to decide

to tell me. By now we are pretty good pals. He never tells anyone else that I know of. He says, "I invent machines. Super machines."

In '48 he says, "But they don't work. Someday . . ."

AND IN '53, on the day of our thirty-first anniversary, you might say, he comes in and things are different. All different. I can feel it when he opens the door and comes in at five-o-nine instead of five-ten. There is plenty more different, too. He walks up to the bar like it's his and roars:

"Two beers, Mike!"

I drop a glass I'm so surprised, but I give him two beers like he wants. He gulps them both down, puts a foot on the rail and looks me straight in the eye. His eyes are a sort of washed blue. I've never noticed them before.

"Beer for the house!" he yells at me.

"Take it easy, Mr. Pettis," I says.

"Easy, hell!" he shouts and slaps a roll as big as his hand on the bar. "And call me Rabelais, Mike. We're pals, aren't we?"

"You bet," I assures him. And I mean it. Not because of the dough. That makes me sweat. I can't figure where this little guy gets such a wad. And good money, too.

He sets them up three times. By now he's feeling fine. I suggest he get going before he misses the last train home.

"I already missed it," he says proudly. "And I'm not going home. Let the old battle-axe really have something to complain about. Beer, Mike!"



ORBAN

In a way I hate to see it, but then I figure a man has a right to let off a little steam once every thirty-one years. Even so, I get a little worried when he asks for the phone and calls up his wife.

He says, "Myrtle, this Rabelais. Rabelais, your husband, you old sow." He takes a breath and says, "You're damned right I'm drunk. And I'm staying that way. Go home to your mother . . . Oh yes, you are. You're leaving on the 12:05 tomorrow and you'll eat chicken a la king on the train and fall asleep at Holt's Corner and snore all the way home. And your mother will be mad because her left fender will get dented on the way to the station." Bang! He hangs up.

"Beer, Mike."

"Now look, Mr.—Rabelais—"

He ignores me. "Mike, who owns this place?"

I don't, but I'd like to. I tell him who my boss is and he hunts him up in the phone book and calls him. He says, "This is Rabelais Pettis. I want to buy your Fifth Avenue Tavern. How much? . . . Sold!"

And so help me, the boss comes down and Rabelais hauls bills from every pocket and lays it on the bar in a great big pile. Then he has the boss sign the place over to me. Me, Mike Murphy. I figure tomorrow when he wakes up broke I'll have to give it back. But tonight I own it. I'm real proud.

But I don't get to enjoy it. He says, "Mike, let's do the town." Can you refuse a guy who just gives you a thirty thousand dollar property? We do the town. We do the girl shows, and he yells at all

the dames and tries to date the usherettes until we finally get pitched out. We get pitched out of five before I steer him to a hash house.

"Phooey," he says. "We'll go to the Buster for a steak." That's our fanciest place where the food starts at ten dollars. We have two of the biggest steaks I ever saw with champagne and stuff, and so help me, when Rabelais tries to date the floor show girls, instead of getting pitched out, we walk out with two of the cutest kids I ever hope to see. Only they're young enough to be our daughters or maybe granddaughters even.

Rabelais is big hearted if not big in any other way. He says to his kid, a redhead a foot taller than he, "Do you have a fur coat?"

"No, Rabelais." She learns fast that he likes the name now.

"Ha," he says. "Then we'll get some."

"In the summer?" I asks.

"We'll make it winter," Rabelais says. "I'm tired of summer. Besides in '56 there's a new bar in town and it's a pip."

Now the three of us are halfway sober and we just look at each other and shrug. But Rabelais acts and talks normal enough. He calls a cab and has us hauled to an old cottage in the suburbs. He waves the cabby off with a twenty dollar bill. When we go inside, he points across the way. "I live there. This is my secret laboratory."

We think he is kidding us some more because there isn't anything but dust and cobwebs in the place. But he takes us to the basement and there is a whole mess of junk

lying around. There are bars and gears and wires and some stuff that doesn't make any sense at all. It has cobwebs and dust on it too.

"My super machines," he says. "They don't work."

The redhead looks a little as if she thinks he's nuts. But what can she do? Already he's given her a hundred dollar bill just for fun.

"But," he says, leading us into another room, "this one does work."

There isn't anything in the room but a big metal plate on the floor with a wooden bench on it and levers and rods in front of the bench. "Climb on," Rabelais says.

We sit on the bench to humor him and he pulls one lever as far left as he can, then another a little ways, then another, and a fourth. Then he twists a rod to the right. The lights go out and a cold draft of air comes in through a window. When the lights come on the air is still cold. The girls are shivering.

"Three p.m., January 12, 1956," says Rabelais. "Let's go get fur coats."

So we go out the way we came in and it's daylight. And there's snow on the ground. The cottage is the same but the street is a highway now. Rabalais hails the fanciest looking cab I ever see and we get driven to town where he buys all of us fur coats in a store I never heard of. Then we go to a dinner club that makes the Buster look like a greasy spoon. None of us can say a word.

After he pays the check, Rabelais says, "I'm short of cash. Let's go to the bank."

"Banks ain't open," I remind him.

"Mine is," he says and makes a phone call. Pretty soon a big fancy limousine with a chauffeur drives up and we all pile in. I manage to balk long enough to buy a newspaper. Sure enough, the date is January 12, 1956.

We go to the financial section and right past my tavern. It's all lighted up and fancy looking and there's a big sign saying, "MIKE'S" outside.

Rabelais says, "You're making a mint, Mike."

"I see," I agrees, dazed. Rabelais flicks the paper with a silly grin and tells me to look on page four. I do and there's an editorial beside a cartoon of me, pot belly and all, and it says, "Mayor Mike Murphy agrees to run for Congress . . ."

"Me?"

"You," says Rabelais. "You make it, too, Mike."

Before I can answer, we stop at a building lighted up. Over the door it says, "Pettis." That's all. It's his, the whole building. And it's full of offices. He shows me one where his former bosses are slaving over drafting boards. The bank part is closed but some slaves are working late as people in banks always do and we go in and Rabelais gets a wad of money and we leave.

It goes on like that. I'm ashamed to say we get sort of looped and the next thing we know we're in Paris and having a fine time. Then we take another flier on his machine and it's summer. We enjoy that for a while and then try another season. It goes on that way for a couple weeks. Once we accept the fact that we're traveling in time, it's easy.

But Rabelais, even when he's looped, won't take us into the past or far into the future. He just says, "We have to watch probability, Mike."

I don't get the idea but it doesn't seem to matter much. We're having too good a time kicking around in the near future. Finally when we all feel ready for a Keeley cure, Rabelais takes us home. We land in the basement at the very moment we left it but with our fur coats and fancy luggage and souvenirs. Rabelais locks over all the gadgets we have and those that are too much ahead of our time, he throws away.

In a taxi heading for town, I smoke my dollar cigar. I'm happy. The girls are quiet, a little sad.

"It was fun," the redhead sighs. "Kicking won't seem the same."

"Quit that kind of work," Rabelais says. "Go to college or something." And he hands each of them a big wad of money.

Downtown we split up, each of us going off somewhere to get the rest we need. I sleep around the clock and a little more. When I wake up I'm the owner of a tavern still, so I figure I'm to be mayor in '54 and congressman in '56. It's a wonderful life for a while. The only thing is that I miss Rabelais coming in at five-ten for his beer.

In '54 I get elected Mayor like he said. My business gets remodelled and all is swell.

THEN ONE night I go to sleep in my new house and I wake up in the middle of the night feeling a cold draft. When I turn over I roll onto a lump in the mattress

and I know it was all a dream and I'm Mike Murphy, bartender, again.

The next a.m. I pick up the paper and it's the summer of '53, the day of Rabelais and my thirty-first anniversary and I'm back at the old stand. It was a fine dream, I says, and go to work.

At five-o-nine, though, I can't help looking at the clock. And sure enough, Rabelais comes in, walks up to the bar like he owns it and roars at me, "Two beers, Mike!"

I can't help saying, "Look, haven't we done this before?"

He grins at me. "And we may have to do it again a few times," he says.

By now I know him pretty well, I think—or maybe I dreamed I know him; I'm not sure. Anyway, I give him the two beers and wait for him to get around to telling me whatever is on his mind.

He goes through the same act as before—only I can't be sure he did go through the act or I dreamed he did. "Beer for the house," he yells.

"Take it easy," I cautions. "Take it easy, Rabelais."

"You never called me by my first name before, did you, Mike?"

I open my mouth to remind him that he told me to back in 1953 and then I remember it is 1953. That confuses me because I remember, too, that in 1954 I was—or maybe it's that I'm going to be—mayor. I just close my mouth and wait.

Rabelais takes his time. When the early rush clears out, he gets me off to one end of the bar and says, "Sorry to keep you waiting,

Mike, but we have to do it all over again."

"Then it wasn't a dream?"

"No dream," he says.

"But everything was going fine."

"Up to a point," he says. "Up to the sixties."

Then he explains the way his machine works. But all I get out of what he says is that there's a law of probability so he can't go back and shoot his grandfather when the old man is a boy or juggle stocks in '47 to pay off and make him rich in '53 and things like that. That is why he wouldn't let us go back into the past. He was afraid we would do something to change history and—bingo.

And he wouldn't let us go into the future very far because up a way the atom bomb gets loose and it is awfully sad to see and dangerous besides.

"That was in the sixties," he says. "Or will be in the sixties. Only I got it figured out so it won't be, Mike."

It's over my head; I just keep on waiting.

He explains that he made a pile of dough in the near future by betting on horse races and cleaning out a few bookies and investing his winnings in stocks he knew were going up (and in fact they wouldn't have gone up if he hadn't looked into the future and known they would so he could go back and buy them) and anyway, he figured the exact day it would be safe to start and so he did.

"Only," he says, "we made a mistake by making you mayor and then congressman. I have it figured

out for you to be congressman right from the start—in fifty-four. That gives you two extra years of seniority on Congress and so when the chips are down you have a little more pull."

"Fine," I says and start to take off my apron.

"The thing is," he explains, "there are a couple of lunkheads in Congress that get super-patriotic and they're the ones who cause the trouble with the bomb getting loose." He leans over the bar and looks real serious at me. "And you," he goes on, "are the one who stops them before they get started."

"Me? Me, Mike Murphy?"

"You," he says. "We just go on a different time track from the one we tried before. And this one ought to work." He gives me his grin. "You should see the history books about the year 2000. You're a real national hero, Mike."

I throw my apron into a corner and roll down my sleeves. I'm ready.

And it goes just like Rabelais says. I pass up the mayor's job and go straight to Congress. In my third term I get a chance to cool those two excitable characters—cool them politically, that is, and I do.

The only thing wrong is that Rabelais never lets me go into the future to read the history books that tell what a great guy I was and the things I did. So I'm never sure I'm doing the right thing. Like I tell him, how can I be sure what to do if he won't let me read about what I did?



Alas, poor Halvor! He was, undoubtedly, as intelligent and capable as many of our most famous conquerors. Unfortunately, however, Halvor the Omnipotent lived in a day when people had changed—considerably!

The Last Conqueror

By Morton Klass

Illustrated by Phillip Parsons

THIS IS the story of a man who wanted to conquer the world. And who did. His name was Halvor the Omnipotent.

You all know the name of course. The day of his death is commemorated yearly by the entire world. And now you are old enough to understand the reason why.

When you belonged to earlier age groupings, you learned of the ancient conquerors—Alexander, Caesar, Genghis Khan, Napoleon, Hitler, Stalin and others who raised mighty armies and waged wars which cost millions and millions of lives. But these were conquerors of ancient times, while Halvor lived in a world very much like your own.

Halvor was born almost eight hundred years ago, almost two hundred years after the Last Great War of 1993-2010 and the estab-

lishment of the New Civilization. He lived in a children's house which was probably very much like the one you are living in now. His childhood was very much like yours.

With one difference.

Halvor was born suffering from hemophilia. In two hundred years mankind had made tremendous strides. Microbe and virus diseases had disappeared. It was no longer possible to inherit functional disabilities. But certain things take time. With gene control still in its infancy at that time, if a child were born of mutated germ plasm, the science of eight hundred years ago could do little for him.

Oh, they made things as comfortable as possible for Halvor. By the time he was three years old he had learned how to apply clotting salve to any cuts he received. What

his blood was not capable of doing, science could do for him. But from some things Halvor would be eternally barred. He could never play the everyday games of the other children. He could never romp with the animals in the woods outside the children's house. And he was different from the other children. They knew it—and he knew it.

That would never happen today. First, of course, because hemophilia such as his would be removed before the baby was born, and secondly, because we know enough today to see to it that *no* child feels different from the rest. You mustn't sneer at the world of Halvor's day. They were learning as fast as they could, after so many thousands of years of total ignorance, but there was so much to learn, and so much to understand. And there still is. You will know more than your parents, and your children more than you.

Well, Halvor was different. He studied the same things the other children did, but, because he was different, they meant different things to him. The other children learned of the horrible habits of the primitive peoples of pre-civilizational times, and they were glad—just as you are—that they hadn't lived in those times. Halvor was unhappy in his world, and wished he had been born in some other. The filth, the sicknesses, the hunger, pain, unfriendliness, ignorance and discomforts of barbaric days had no significance for him.

His adult guides were aware of his attitudes, of course, and they reported it to the community lead-

ers. Everyone tried to think of some way to make Halvor happy. But there was nothing anyone could do. Many people felt it was their own fault that Halvor was not satisfied with his life—that they were still too ignorant to prevent unhappiness—and it made them very sad.

WHEN HALVOR reached his eighteenth birthday and left the children's house, the problem arose as to what he would do with his life. He was not the only misfit in his world, but the others were able to adjust. Some were unhappy because they were shorter than others, some because they were slower, some few felt—however illogically—that they were not as attractive as other people. Some had other physical and psychological difficulties.

Most of these individuals entered space explorational activities, where, from the hot side of Mercury to the cold wastes beyond Pluto, they made their peace with life. Even today, with teleportation common throughout the galaxy, there is adventure to be had by those who desire it. Perhaps one of you will have the honor of bringing life to a hitherto uninhabitable planet!

And if you should, remember to be grateful to Halvor, who made it possible.

It wasn't necessary in Halvor's time—just as it isn't now—for anyone to have to do anything. When the joyous Coming of Age ceremony—marking the end of his stay at the children's house—ended in a final week of songs and dances,

Halvor decided to go and live with his parents.

His father and mother understood Halvor's problems quite well. They had visited him even more often than the customary four times a week, trying to reach and comfort the tortured spirit of their strange, self-centered child. They loved him, and he seemed to respond to their affection, but they admitted in later years that they were always more at ease in the presence of their other children.

So, while most of Halvor's age group companions were establishing homes of their own, going off on the individual world tours which are always more exciting than the group voyages of childhood, settling down in some Higher-Learning community for further study, or in other ways finding their place in the adult world, Halvor himself moved into a room in his parents' home.

He brought with him a few of his favorite microfilms, a three-dim of his particular Coming of Age ceremony, and enough clotting salve to last for quite a while.

After Halvor had been living with them for almost two months, his parents, extremely troubled, went before the community leaders. They were no longer sure they were behaving properly toward him, and sought instruction. It appeared that in all the time since he had come to their house, Halvor had never once gone out with them to a nightly forest concert or an afternoon of games. He kept to his room, rereading his microfilms and occasionally ordering new ones from the community library. The

librarians had noted, with some surprise, that he invariably requested fiction that dealt with the warlike experiences of people in barbaric times—works like *The Three Musketeers*, *Caesar's Gallic Wars*, *The Boy Allies*, and others.

He left his room only at meal times and, after eating whatever his mother or father had ordered chuted from Central Kitchens, he returned to his microfilms. Any questions put to him were answered in monosyllables. The only time he had ever started a conversation was one evening at supper when he asked his father what he thought Hannibal of Carthage must have been like. Startled, Halvor's father said he imagined Hannibal must have been a very unhappy man. Halvor, his father reported had grimaced and turned back to his food.

At no period did Halvor indicate any interest in the local atomic power plant where his father, as senior technician, spent about fifteen hours a week. Nor did he ever ask to visit the underground hydroponics garden where his mother worked. This fact particularly disturbed the community leaders because children who develop no interest in any profession while in the children's house, from birth to their Coming of Age, generally tend to follow the occupation of one or the other of their parents upon their departure.

Sometimes his former group-mates would contact him on the telecom, asking if Halvor would care to join them in some voyage being planned, or if he cared to attend get-togethers of those of their

age group who were presently living in the community. Halvor always curtly refused.

One of the girls from the group called up, explaining that she had built a small cottage on the shore of a nearby lake. She had an interesting job in Central Kitchens, working about ten hours a week, but she was lonely. Would Halvor care to come and live with her? They had not been close friends in the children's house, but she had always admired his dark, quiet attractiveness. Furthermore, she herself had been born color blind and would therefore be able to sympathize with, and adjust to, Halvor's affliction.

Halvor switched the telecom off while she was still talking.

WHEN THE director of Halvor's children's house—who was present at the meeting—heard this last item, she offered her resignation, claiming that Halvor's behaviour indicated her unfitness for her position.

The community leaders, after some deliberation, refused to accept her resignation. Halvor's failure to adapt to the culture was a group responsibility, not any one individual's, they decided.

They were discussing the advisability of calling a world meeting and submitting the problem of Halvor's unhappiness to it, when they heard the sound of someone coming up the forest path toward their meeting place. Politely, they stopped talking and waited for the person to come into view.

The bushes parted, and Halvor

stepped into the sunny glade. For a long moment Halvor stood motionless, arms folded, surveying the sprawled bodies of the dozen adults before him. Then, his lip curling in a grimace none of the others could understand, he began to speak in his high-pitched, determined voice.

"I have come before you," Halvor said, "because, technically speaking, you are the leaders of the community in which I had the misfortune to be born. Actually, you are all quite powerless. You can order no one to do anything; you may merely suggest. You have no center of government, no appurtenances of authority. And in that sense, you really do represent something—the abysmal depths of man's last decadence!"

"What one of you—or of all latter-day mankind—is fit to lick the boots of those brawling humans of the past who knew how to fight, to weep—to die! Who, on this entire miserable planet, would have any idea of how to behave if some race should sweep in from the stars to enslave us?

"Fortunately, I have not been overwhelmed by the enervating philosophy which suffocates the world. I am not in a class with the greats of the heroic eras, but there is no one else in the world today to do the work that must be done. I demand, for the sake of humanity's future, that you recognize me as your leader, and that you follow me in the glorious task of awakening all mankind!"

There was a pause when Halvor had finished speaking. Though few present had any idea of the meaning of Halvor's words, they nodded

thoughtfully, as if they had been merely listening to an outline for a proposed series of concerts. This would require discussion, but obviously not in Halvor's presence.

The director of the local hydroponics garden was the first to speak. "Halvor," he asked, "is this what you require to make you happy?"

Halvor frowned. "It is not a question," he said carefully, "of my happiness, but of the salvation of mankind."

The director nodded, as if his query had been satisfactorily answered. A quick glance—no more than the flicker of a troubled eyebrow—passed between the men and women on the grass.

"Halvor," said the director of the children's house, "we can't give you an answer immediately." She went on hurriedly, repressing with great difficulty her impulse to listen politely when she saw Halvor's mouth begin to open. "We realize how impatient you are to get on with the work you've outlined, but you must remember that this is a situation without precedent in our lives. We must have time to discuss it."

Halvor looked up at the noon sun. "I'll be back in an hour," he announced. Turning on his heel, he strode into the forest, his thin shoulders thrown back, and his pale back held stiffly erect.

The first few moments after Halvor's departure the community leaders spent soothing the grief of Halvor's parents. It was pointed out to them that they were no more responsible for Halvor's state of mind than the rest of the people of the Earth. The Chief Librarian put

it most succinctly: "Let us once and for all realize that to the communal ignorance of humanity belongs the blame, and to no individual or group of individuals. Our problem now is to fit Halvor into the world, or—at least in his eyes—to fit the world to him!"

It was on this point that the discussion proceeded. The talk was leisurely, as is the custom, but they kept within Halvor's time limit. Finally, the director of the local Central Kitchens summed things up.

"Why should we not grant Halvor his wish? If a man demanded payment in ancient money for his work, or a woman requested clothes to wear, would we not try to satisfy them? Halvor longs for the meaningless trappings of a past that seems more pleasant to him than his own present. Very well. Surely our society is flexible enough to encompass an individual who wishes to call himself world leader. We should notify the other communities, of course, but I think that all will agree with our decision to grant Halvor his desire."

No one dissented, and the Communications Director announced that he would contact the rest of the world that very night.

Just before Halvor re-entered the glade, the Health Director commented, frowning, "Still, I wish that the old sciences of mental disorders had not been so thoroughly neglected in the past century." Turning to the Chief Librarian, he continued, "I'd appreciate all the books on the subject you can round up. . . ."

When Halvor stood before them,

waiting impassively, but with burning eyes, the director of the power plant rose to his feet. He remembered dimly from his childhood readings that among some ancient peoples this was considered a sign of respect.

"We're going to grant your request, Halvor," the director told him solemnly. "In our eyes, henceforth, you are to be considered the—ruler, is it?—of the world, and are to be given all honors accruing to that position. Furthermore, we'll notify the rest of the world of our decision and the reasons for it. There will be community meetings, here and in all other settlements on the globe, but I am quite sure they'll all end as ours did today. Do you have any other requests to make?"

Halvor stared at the director and, for a moment, all present could see how young and defenceless Halvor was. Then his jaw hardened and his voice, when he answered, was without emotion.

"I will have many *instructions* for you in a few days—be sure of that. At the moment, let me congratulate you for showing an amount of wisdom I did not think humans capable of in this degenerate age. And from now on, you are to address me as 'Your Magnificence' and you are to refer to me as, 'Halvor the Omnipotent'!"

THE DIRECTOR of the power plant was correct, of course. Meetings were held all over the world. For days afterward, Halvor's novel request was the subject of conversation at breakfast tables,

sports fields, laboratories, concerts, and wherever else people gathered. Community decisions accumulated slowly. But at the end of a week it was clear that the people of Earth were in agreement.

Halvor the Omnipotent was the accepted ruler of all humanity.

His first demands were modest. He wanted a tight-fitting suit of black, a swirling cape, a plumed helmet, and knee-length leather boots. You will find illustrations of these items—or similar ones—in your copy of *Humanity Covers Himself: From Animal Skins to Coal Derivatives*.

The clothes were manufactured for him by one of the winter-weather textile factories who, as you know, also make costumes for drama groups. They exercised considerable ingenuity, making garments sturdy enough to protect the wearer from the minor cuts and bruises that were so dangerous.

Halvor also demanded, and received, a grav-car for his personal use. He requested that it be painted black and that the figure of a golden sword be drawn on the side, near the door. In barbaric days, symbols were used to represent groupings of people, popular philosophies and abstract ideas. A few of them still remain with us. You are probably all familiar with the mathematical symbol for infinity.

When all of these demands had been met, Halvor donned his new coverings and, with an adequate supply of clotting salve, set out in his grav-car for what he termed his "triumphal tour of his worldly domains."

All went well for Halvor in the beginning.

In whatever part of the world Halvor landed, large crowds gathered to greet him. Usually, he preferred to come down on some low hilltop surrounded by flat, treeless meadowland. Word of his arrival would spread, as Halvor stood erect and unsmiling—arms folded, legs outspread—beside his black grav-car.

The local children's houses would empty; kitchens, synthetic-meat mills, power plants, hydroponic gardens, higher-learning centers, libraries, play groups—all would shut down, or be maintained by a bare skeleton crew, as men, women and children flocked to see the ruler of the world.

It was not merely politeness that drew them, nor their natural desire to make Halvor happy, but also a certain curiosity about this young man who had announced his preference for barbarism in such a marked manner. His odd garb intrigued them, and his speeches, on these occasions, were always entertaining.

When it was learned that Halvor enjoyed delivering barbarically heroic—if intellectually quite meaningless—lectures, many individuals delved into ancient history, memorizing the proper crowd-responses. This was done at first simply to please Halvor, but soon many individuals found the competition of trying to discover the most interesting or obscure crowd-response as amusing as some find poetry-writing contests or feats of athletic skill.

Many of Halvor's speeches were

recorded, of course, and have been of great interest to later students. Here is a transcript of one of the shorter, but typical, ones:

"Fellow humans! Worthy subjects! (said Halvor) Gazing out upon your humble, earnest faces, I take heart. Humanity is not lost. There is yet hope that I may lead you back to the glorious days of manly strife and noble suffering!"

"Vive le roi!"

"For suffering is ennobling. I know you have been taught to avoid pain and hardship, to protect others, that the proper aim of mankind is to turn the earth into the green, insipid parkland that it is. A place where all may eat, all may love, study, play, work, sleep—with never a fear for tomorrow! I ask you—are we humans or butterflies?"

"Hoo-raw!"

"Remember the Maine!"

"See what has happened to the world—what I am saving you from. Two hundred years ago, mankind was two billion strong. Today, even counting the settlers on the other planets, there are barely seven hundred million humans! Oh, I know those foul teachings—which I in my might am destroying—will snivel that so-called intelligent limiting of the population has helped create comfort and plenty for all! I say, Humanity is dying out!"

"Eee-ya-hooo!"

"If I had not come along, in a bare century mankind would have gone the way of the dinosaur! In one fifty-year period, before the rise of our decadent, slothful culture, a thousand weapons were invented; tremendous edifices—

monuments to the mightiness of man—towered in the sky. We have invented no weapons. In the short space of two hundreds years, we have forgotten how to use the old ones! We grovel in tiny huts set in the wilderness not, as you are taught to believe, because the simple life is healthier and pleasanter, but because we lack the ability to build cities!"

"For king and country, laddie!"

"Arise, ye prisoners of starvation!"

"A moi, A moi!"

"We must forget the vicious concept of 'labor for the sake of greater leisure'. So much has been left undone in the age of idleness, now happily past, that a time of strenuous, back-breaking endeavor is in store for all of us. But it will be well worth it, my people! For in this time to come—"

"Howdah!"

"Vino amo daj!"

"For in this time to come, mankind shall yet find himself! We shall rebuild the cities, taller and more glorious than before! And not only on Earth, but on every planet in the system!"

"Smrt fašisma!"

"The factories will rise once more. We shall produce not just enough for our needs, but enough to trade for all the wealth of the galaxy. And we will build the ships that will take us there in overwhelming force! And we shall build weapons, not only to protect ourselves against enemy races, but to build an empire in the stars! For it is written in the old books that the very stars are our heritage!"

"Hola!"

"Fifty-four forty or fight!"

"And we shall breed children. Not just enough to populate the Earth and the planets around our sun, but enough to crowd the cosmos! Strong, healthy, determined young men and women, fearless, and ready to take their rightful place in space. And mankind triumphant, under my leadership, shall rise to new heights of nobility, so that future generations shall look back on us, not with shame, but with pride and envy!"

"Kinder, kuche, kirche!"

"Tippecanoe and Tyler too!"

"Y'chi hedad, hedad, hedad!"

"Three rousers for the Iron Duke!"

"Sieg heil! Sieg heil! Sieg heil!"

Then, of course, after the speech was over, everyone would gaily wave good-by to Halvor, and go home to supper. Many would call out to Halvor to be sure to come their way again, for his speeches made interesting topics of conversation at forest festivals, and were certainly an amusing break in the normal routine of life.

FOR SOME MONTHS, Halvor continued around the world, making such speeches, often at the rate of three or four a day. Then, suddenly, he returned home.

He did not visit his parents or any of his old friends, but brought his grav-car down outside the modest cottage of the Communications Director. He strode into the house and demanded brusquely that all the community leaders be summoned at once. Concerned, the director set out for their homes. The

director's wife offered Halvor refreshments, but he refused curtly.

She reported later that, until the arrival of the leaders, Halvor spent his time pacing restlessly up and down, clenching his fists, slapping his thigh, and muttering thickly under his breath.

Naturally, since he was not speaking to her, she tried not to listen, but she could not avoid overhearing a few words. They were disconnected, consisting mostly of phrases like: "Hopeless, hopeless . . . no contact possible . . . can't make them understand . . . have to show. . ."

When the community leaders finally arrived, Halvor avoided all the usual formalities of greeting, and came immediately to the point.

"I have decided," announced Halvor, "that humanity is more enfeebled than even I had thought. Words — exhortations — are not enough. Something much more graphic is required, both to point out the world the significance of my position, and the differences between this decadent society and heroic ones of the past. I want a palace. I shall submit specifications, and you people will construct it as soon as possible."

The meeting that followed Halvor's request was one of the stormiest in the community's history. Twice, speakers were interrupted before they had finished and, even after a decision had been agreed upon, the Health Director confessed reluctantly that he was not satisfied that it was the best possible decision.

But Halvor was to have his palace. The major objection put forth

by the Health Director was that every attempt to satisfy Halvor, by agreeing to his demands, resulted only in his being more unhappy. Perhaps, the director suggested, a way might yet be found to integrate Halvor into the existing world, rather than to allow him to construct an unbelievable dream-world.

However, the meeting refused to even consider the idea of not granting an individual his desires, whatever form they took. And the statement of the Construction Director that he and his group were looking forward to the problems of Halvor's palace with some interest clinched the matter.

Halvor's specifications, when submitted, were not too complete. They consisted mostly of illustrations from children's microfilms. Some, in fact, even contained features that were mutually exclusive. The construction group promised to build something as close as possible to Halvor's desires, and in two months the palace was completed.

For those two months, Halvor decided against living with his parents and moved into a small cottage which lay alone in a somewhat unattractive part of the local forest. The cottage itself was rather small, having been constructed for a family unit of two, and in Halvor's time the three or four unit family was becoming popular, with even an extra room or two for children who might want to come and stay a while with their parents.

THE DAY of Halvor's entrance into his new palace was marked by a gala festival. People came

from all over the world to participate in the event, and Halvor made a long speech.

Again, all went well for a short time. Halvor stayed in his palace, issuing proclamations. He was rarely lonely. Visitors arrived every day, some to see Halvor, many to view his anachronistic home. The palace still exists, of course, and many of you may have visited it. It is maintained as a memorial of humanity's gratitude to Halvor.

The major difficulty arose when Halvor demanded that all who visit him be dressed in special garments of his own design. Most people shrugged and did as he requested. A few, however, commented reasonably that they found clothes unpleasant and uncomfortable and refused to wear them.

In the second year of Halvor's residence in his palace, matters came to a head.

The incident occurred during one of the Health Director's weekly visits. For many months, this man had been trying to gain Halvor's confidence. To some degree, he did succeed. Certainly, Halvor spoke more freely in his presence than in that of any other person. The Health Director afterwards related that he found the youthful ruler of the world sitting alone in his throne room, apparently much distressed.

Falling to one knee, in accordance with Halvor's palace protocol, the Health Director asked, "Your Omnipotence, are you unwell?"

Halvor made a gesture of disgust. "Why doesn't the world listen to me?" he demanded angrily, sitting upright on his throne.

The Health Director climbed to his feet and considered the question. For a moment, he admitted later, he was tempted to lie. For those of you who are unfamiliar with the term, lying is the giving of incorrect information, knowingly and purposely. The Director was afraid the truth might be painful to Halvor.

But telling lies, while a frequent practice in barbaric times, is an extremely difficult thing for us to do. It goes against the basic fabric of our culture. Even back in the days of Halvor, lying was already considered an uncomfortable, irrational act, and the Health Director could not bring himself to do it.

"They listen, Your Omnipotence," he said hesitantly, "but they'll never change to suit your ideas."

"Why?"

"Because they're happy. Man has personal, individual peace and security, and that's what he wants—all he ever wanted."

"But he's dead!" Halvor groaned. "Can't you see it? The aimless, uneventful—meaningless—pattern of life in the civilization!"

The Health Director shook his head. "What has meaning for a man, Your Omnipotence? Where is this—purpose—you talk of, inscribed? A man is born, lives his years, and dies. As a baby, he has only two basic needs—food, and affection. And through the rest of his life he searches continually for those same two things. Security, and a sense of fellowship with the people around him. No culture ever existed where the ordinary people did not cooperate in some

way for the common good and join together in some communal recreation."

Halvor began to pace the floor. "And no community ever existed without warriors, without strife of some sort!"

"Many did—"

"Isolated, tiny groups," Halvor said, "which were wiped out as soon as they were contacted by more virile people!"

"Yes," the Health Director agreed. "You're right. Many of them were. But even in barbaric times few really believed that 'Might made Right' or that killing a man proved your arguments were better than his.

"You talk of strife," he went on. "Insecure people, striking out in fear, destroying other individuals because they didn't know how to live with them. Poor, sick folk. In their way they wanted peace and security too. . . ."

"Suppose we're invaded by beings from space?" Halvor demanded. "Earth wouldn't know how to fight!"

"Suppose we're not attacked?" The Health Director smiled. "Wouldn't it be foolish to make an armed camp of the planet, just to ward off some unlikely invasion? Besides, happiness never killed a man, or destroyed his spirit. History has shown that the greatest fighters were always those who were fighting to protect their homes—and a way of life that gave them personal happiness and security. And if happiness won't weaken an individual, why should it weaken a group of individuals—or the whole human race?"

Halvor was beginning to show signs of great discomfort, but the Health Director could see no way to rechannel the conversation.

"A sense of accomplishment," Halvor said thickly. "Even an individual needs it. Life is dull!"

"Dull? Isn't it just as exciting to win a foot race as a duel? Youth seeks adventure, admittedly. Well, they can hike through the Matto Grosso, or live in an igloo for a year, hunting seals. Or prospect for uranium on Ganymede. And adults lead full, rich lives, contributing part of their time to the welfare of the community, and the rest of it to their own private pursuits.

"Accomplishment?" he went on. "Why don't you really study the accomplishments of your own time, Halvor—I mean, Your Omnipotence? Some of the students from our Higher Learning center will be giving a series of lectures next week. Why not attend? And there will be a poetry contest in two weeks—which reminds me! Halvor, your speeches indicate you have a feeling for words. Why not enter the poetry contest yourself? I'm sure you could compete with the best—"

Halvor interrupted him, crying in a loud, unfamiliar voice, "Remove this man and execute him at once!"

It was a little while before he made it clear that what he wanted was to have the man forcibly deprived of life. The Health Director left the palace and, soon after, Halvor asked whether his request had been carried out. When an attempt was made to explain why such a request was hardly feasible,

Halvor became violently unhappy and attempted to insert a table knife into one of the people present. It took three men to remove the knife from his hand.

A WORLD meeting was held that day. The situation was becoming quite serious. If Halvor could behave that irrationally once, he might very well do it again. Waving a sharp implement as carelessly as he had, he might cut himself very badly one day, and even the best clotting salves might not be able to save him.

The Health Director told of his visit and declared Halvor to be insane, an archaic term meaning that he had completely lost contact with reality, and could no longer be depended upon to take care of himself. The final decision was to permit Halvor to live as he had in his palace, to try to satisfy all of his wishes that did not badly interfere with the lives of other people, and to see to it that someone was near him at all times.

All sharp things were removed from the palace, of course. The builders, aware of Halvor's infirmities, had constructed the palace without any acute edges anywhere which might cut Halvor's skin and cause him to bleed.

For five more years Halvor lived this way, attempting occasionally to take either his own or someone else's life. In the fifth year, however, Halvor found himself momentarily alone, and threw himself from the imitation stone staircase, breaking his neck and dying immediately.

That was the day, seven hundred and sixty-five years ago, when the first teleport materialized on Earth, bearing delegates from the Galactic Federation, and an invitation for Earth to join the other civilized peoples of the galaxy.

You know that date, of course. What you may not have known till now was that the Federation had been observing us for some time, weighing our new civilization against our barbaric past. It was Earth's treatment of Halvor that decided them.

Humanity was at last fully mature.

In the excitement of the day, people forgot about Halvor, and when at last he was remembered it was too late. Halvor the Omnipotent, ruler of Earth, and the unknowing bearer of the galactic membership to his planet—was dead.

There was a long period of mourning.

• • • THE END

SEXTUS Rollo Forsyte had trouble with the bottle, but nothing out of a bottle ever produced the likes of a hotel such as the Mahoney-Plaza! . . . Don't miss the chortles and laughs in *Forsyte's Retreat*, by Winston Marks, in the May issue—out March 10th!



SCIENCE BRIEFS

New Transistors

HERE'S BEEN a blessed event in the transistor family. The tiny pea-sized germanium device that can amplify radio waves, music and speech has a brand new set of twin brothers for company. These newcomers, "tetrodes" and "pentodes" by name, are different from big brother only in that they have three and four wires respectively running from the germanium nugget instead of the two which the triode transistor has. This means the new transistors can do the work of two, and in some instances three, of the older variety, and that television sets of the future may be fantastically small as a result.

These new twins will simplify electronic circuits and will probably find their first jobs in electronic computers. Since a transistor performance can't be standardized, and one tetrode or pentode can't be substituted for another without modifying the whole circuit they can't as yet be used in anything but a non-critical circuit such as the sort found in hearing aids. Radar circuits and many others are too complicated to be modified each time a new transistor needs to be installed, but future refinements

of these miraculous little gadgets may make them suitable for most of the jobs now handled by the more cumbersome vacuum tube.

Robot Car

SOME DAY you may be able to drop off to sleep and let your robot car do the job of driving for you. A model of this fool-proof car of the future has already been made and is now being tested by scientists at the Radio Corporation of America.

This model robot car is guided by a wire which would be buried under the roadbed of a super highway. The wire sets up a magnetic field which is picked up by two coils placed on either side of the model car. If one of the coils gets a stronger signal than its mate it is a warning that the car has swerved from its course and electronic steering equipment immediately guides the car back on its proper course.

Signals coming back along the wire from a vehicle or obstruction ahead are passed to the steering mechanism and so prevent collisions and accidents. The five-foot model robot car can stop, start, steer itself along the road and, when necessary, pass another robot vehicle. The passing is accomplished by diagonal wires which shunt the car into the passing lane and then back to the right side of the road again all by way of the signals sent to the steering gear.

Dr. V. K. Zworykin, head of the project, says there won't be any robot cars on the market in the very near future, but that devices

to cope with bad weather steering and collision prevention are really just around the corner and should annually save thousands of lives.

Spotlight into the Brain

A NEW TECHNIQUE, unparalleled in the history of science, has been developed in study of the human brain. By the use of moist electrodes, fastened to the scalp and carrying no current except the tiny impulses emitted by the brain itself, a young British physiologist has been able to throw a spotlight deep into the human brain. The impulses are recorded on sensitive instruments which control a light flashing into the subject's eyes in a rhythm similar to the one pulsating from the brain.

Another instrument called the toposcope which samples the electrical conditions in twenty or more areas of the brain and reproduces them in the changing glow of electronic tubes arranged in the same pattern as the brain areas, is the particular wonder child of this very new science. For example, a resting brain will show up dark at the front, but with rhythmic flickers of light at the back. An angry brain shows dim flickerings everywhere, while a brain stimulated by lights flashing into the subjects eyes has a brilliant general glow.

Certain waves known as alpha, theta, and delta rhythms have been discovered in this way, each with its own stimulant. Alphas are pattern-seeking, thetas are indications of bad temper, and deltas are the deadeners of the conscious mind. These studies reveal not only new

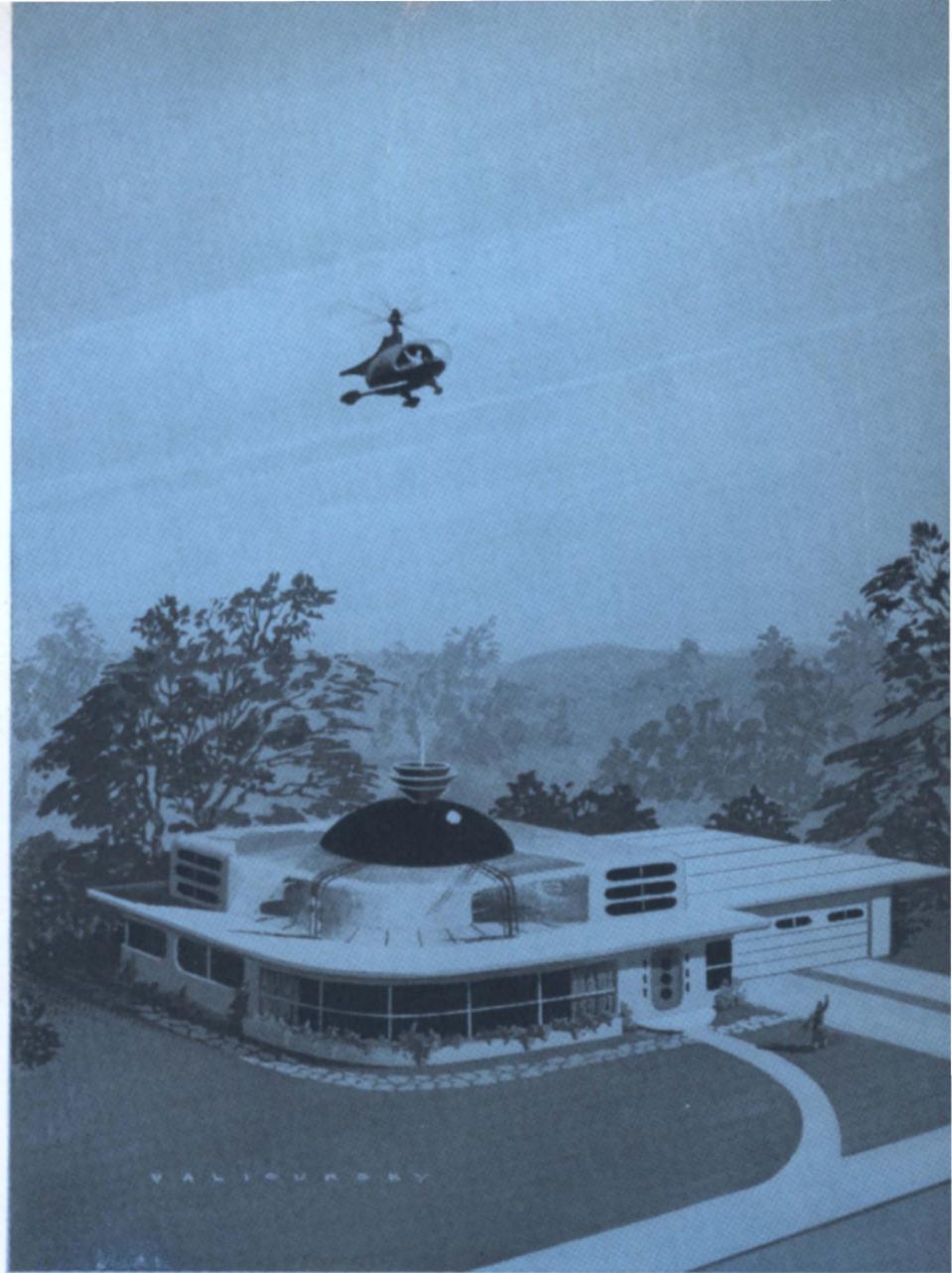
knowledge about the brain, but personality types and human relations as well. Although it is new as a science, a start has been made, and it is already helping doctors to understand mental illnesses.

Crystals with Memory

LITTLE CRYSTALS, about one-half inch square with a memory that some humans might envy, are one of the newest developments of the Bell Telephone Laboratories. These flat crystals, a few thousandths of an inch thick, have a unique ability to remember vast amounts of information for an indefinite period of time. Each one of these ferroelectric crystals can store approximately two hundred and fifty bits of memory and answer questions put to it later by an automatic machine.

Grown artificially from the chemical barium titanate, these flat little crystals receive tiny charges of electricity which represent the answers to questions the machine might ask. A plus charge is given for a yes answer and a negative charge for a no.

Although the telephone dialling systems now in use have remembering devices, they require far more space than an equivalent system using barium titanate crystals would need. Because of this, telephone engineers believe that these artificially-grown crystals have a vast significance in the ever expanding Bell system, and should prove of inestimable value in the saving of space—among other possibilities foreseen as a use for this new “crystal with a memory”.



WILDERNESS HOME—In the near future people will live comfortably, even luxuriously, deep in the woods and be as convenient to urban business as they are today commuting from the suburbs. This private home is not as independent as the multiple desert dwelling, but with the same type of electronic communications, helicopter and surface travel it is within easy emergency reach of all facilities in cities up to 200 miles distant. (Drawings by Ed Valigursky.)

