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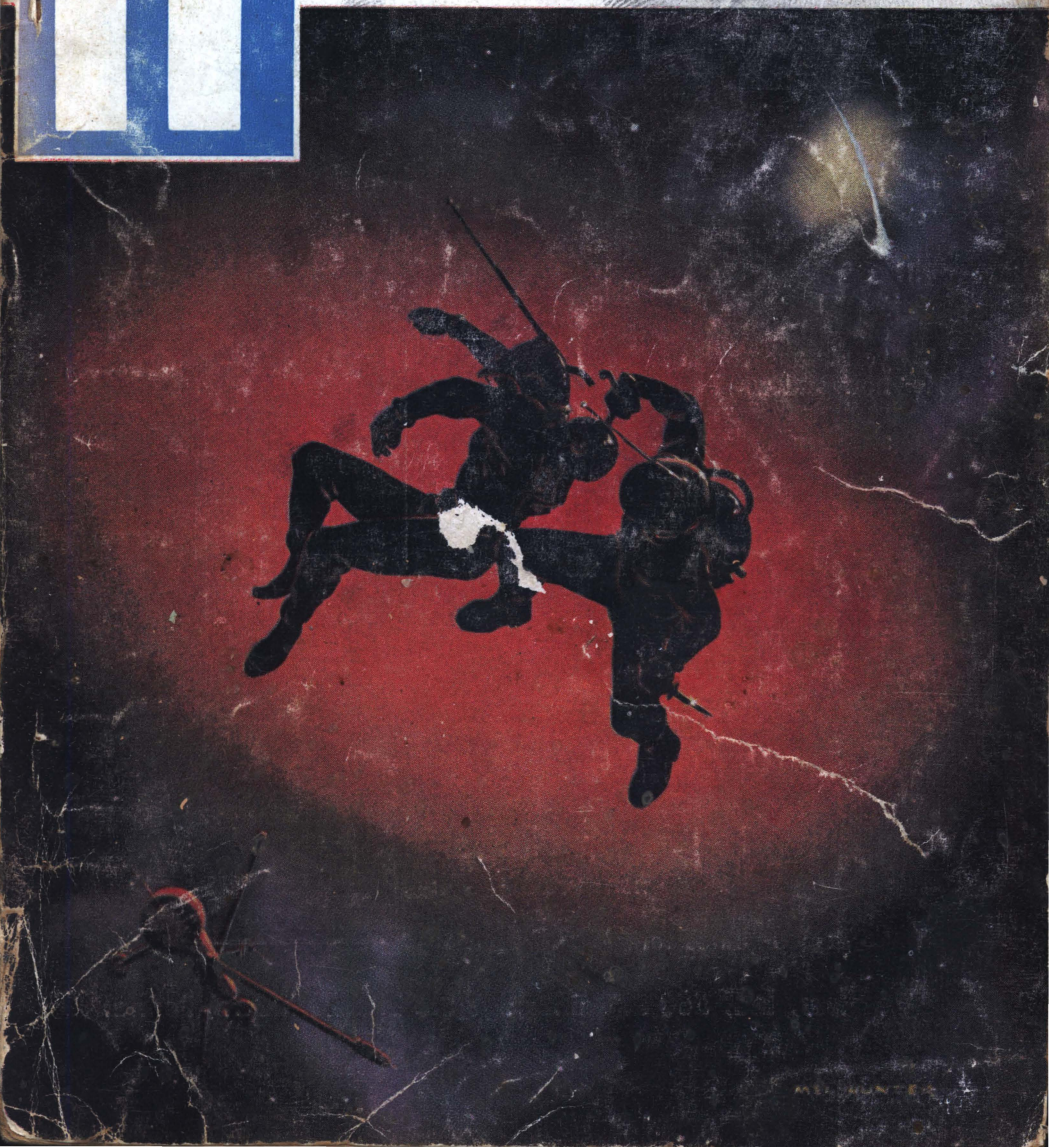
MINDSNAKE

By JIM HARMON



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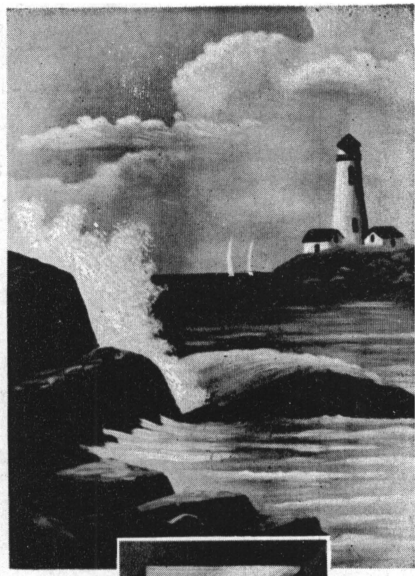

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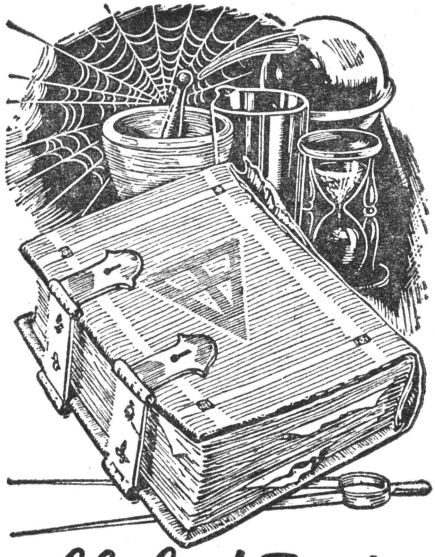

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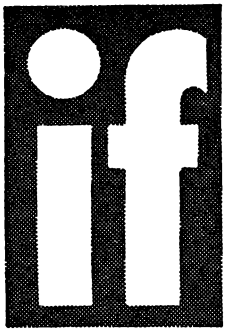

WORLDS OF SCIENCE FICTION

NOVEMBER 1960

All Stories New and Complete

Editor: **H. L. GOLD**

Feature Editor: **FREDERIK POHL**

NOVELETTES

SHORT STORIES

FEATURE

Cover by Mel Hunter: "Combat Between the Stars"

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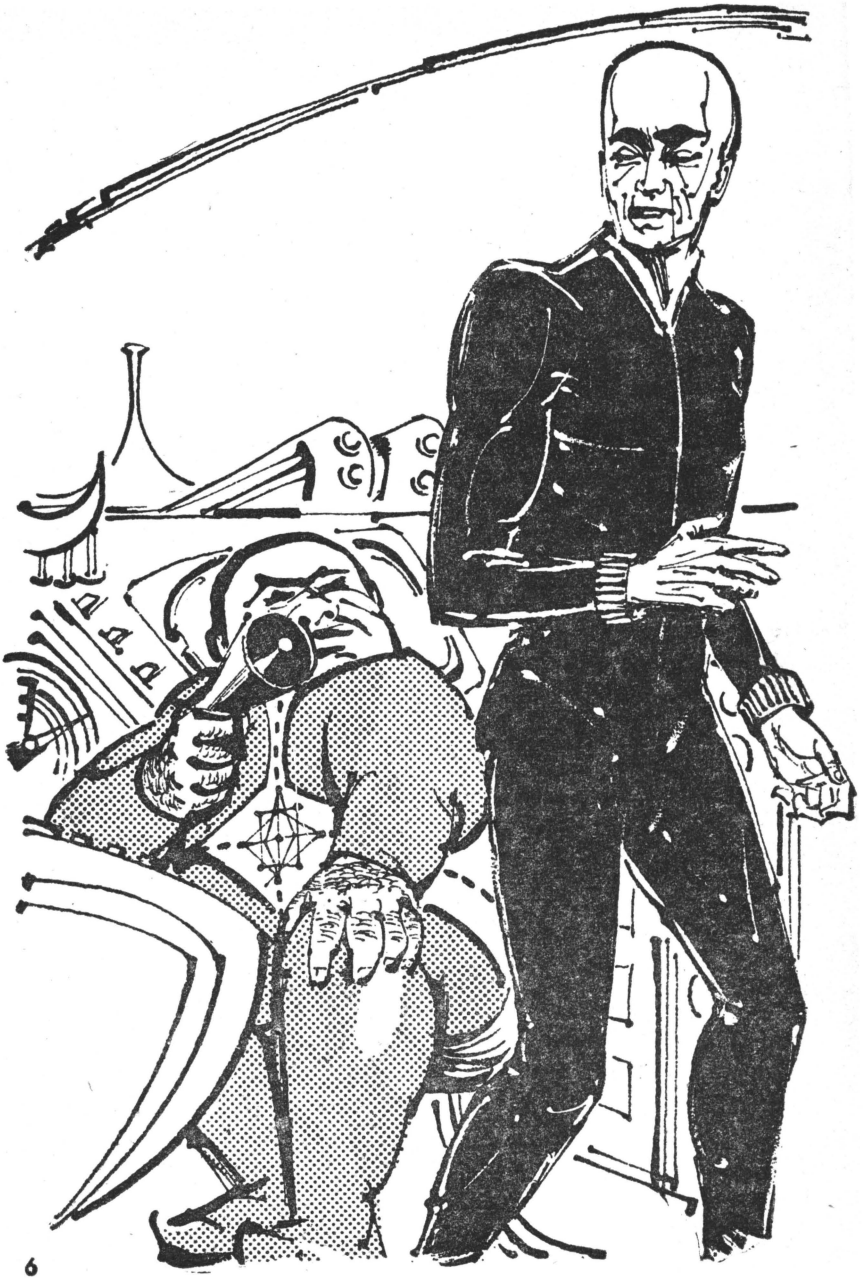
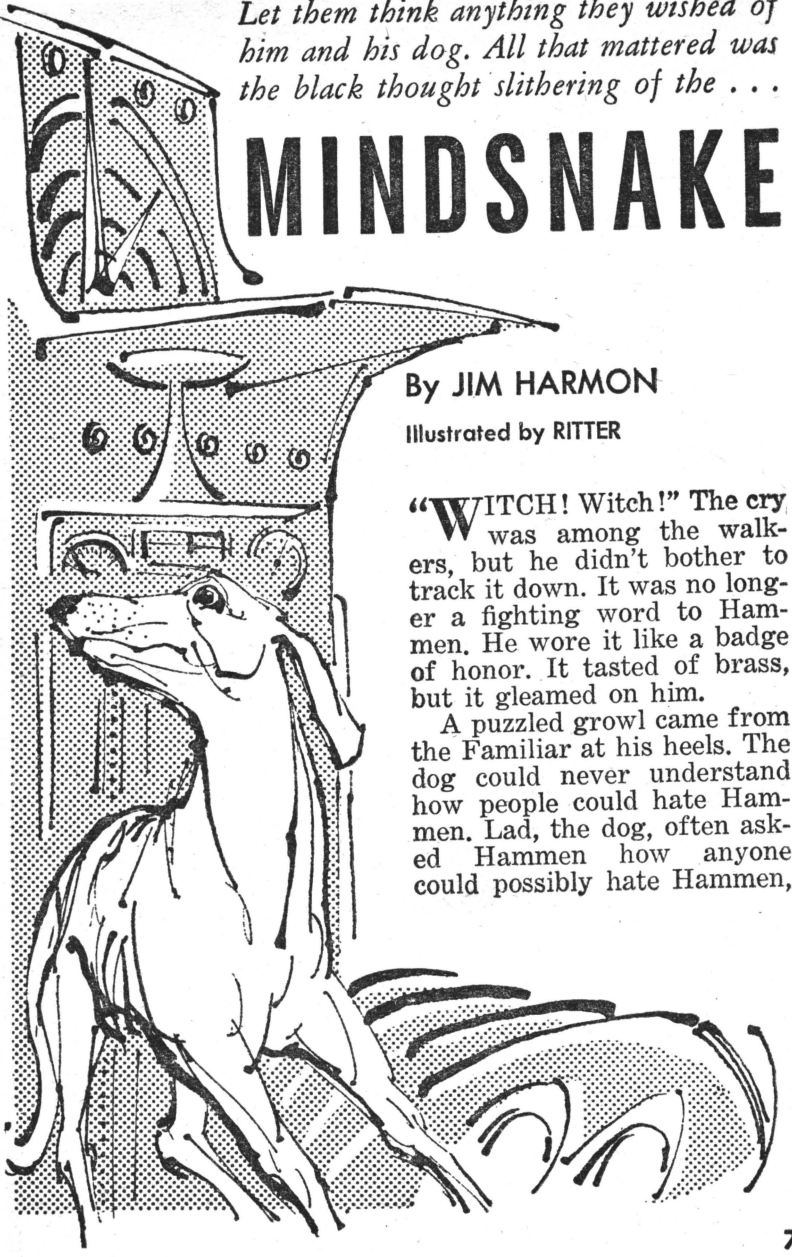


Let them think anything they wished of him and his dog. All that mattered was the black thought slithering of the . . .

MINDSNAKE



By JIM HARMON

Illustrated by RITTER

"WITCH! Witch!" The cry was among the walkers, but he didn't bother to track it down. It was no longer a fighting word to Hammen. He wore it like a badge of honor. It tasted of brass, but it gleamed on him.

A puzzled growl came from the Familiar at his heels. The dog could never understand how people could hate Hammen. Lad, the dog, often asked Hammen how anyone could possibly hate Hammen,

and Hammen always told him to shut up; he couldn't understand—he was only a dog.

The walk ramp was crowded this afternoon with people fresh from the transmatter stations, eager to tell themselves they were walking on a strange planet. Hammen passed among the nudists, the cavaliers, the zip-suiters, the zoot-suiters, the Ivy-coated, the Moss-covered, walking not for novelty or exercise but because he preferred to go everywhere under his own power. Even to the stars.

Hale and Lora saluted him a few paces away from the entrance to the station. They were a beautiful blond couple, with brightly polished faces. Hammen didn't much like them, but he didn't feel sufficiently pressed to be rude enough to let them become aware of it.

"How goes it, kids?" he asked them.

"Couldn't be better," Hale said.

"Of course not," Lora added.

HAMMEN'S slate eyes moved from the man to the woman. "Are you troubled?"

"This isn't the time to talk about it, not before you and Lad transmit yourself," the girl said quickly.

It wasn't, Hammen admitted to himself. Only now that they had let it slip, he would rest better knowing the whole truth of it.

"Come on," Hammen urged. "It's not as if I wasn't interested."

Hale looked at his wife. "Lora doesn't like Wagner any more."

"Perdition!" said Hammen. "I *never* liked Wagner. She's growing up."

Lora put a half-closed fist to her lips, and didn't look at either of the men, or at the dog who stood with freshly pointed ears.

"No," she said softly. "I lost something on the last one. Gee, I wonder if the Mindsnake likes Wagner now? Still, it's not as if I had stopped liking music altogether, or books. Not this time."

Hale grabbed her arm roughly. "You're sure doing a great job of getting Hammen ready for the jump."

Lora's eyes clouded. "I'm sorry, Ham." She looked up, smiled warmly, kissed her fingertips and placed them on Hammen's lips. "Companion's Code, huh?"

He took her hand and for the moment liked her. "Okay, honey. I guess even a Witch squeezes in under the wire for that."

The young team was abruptly embarrassed. "Oh, well, Witch," Hale said deprecatingly, "what does cargo know, anyway?"

Hammen laughed and scratched Lad's ears. "They

know I'm a Witch. But it has its advantages. I don't have to worry about Lad losing his taste for Wagner. A dog does not have that much to lose. If it comes to that, he's just gone."

Lora shuddered delicately, the way of a watered flower. "How could you stand to lose a Companion with so little feeling?"

"I've lost three Companions, and got myself and my cargo into port. They were only dogs."

Hale looked at him sharply. "But you were Companioning with them. It must have been," he selected a word, "difficult for you."

"Don't absorb the cargo's superstitions about Witches and their Familiars. They have fogged, even dirty, ideas. They were just dogs to me. Like Lad."

"A DOG, that's all he is," Gordus said in a manner designed to explain the thing patiently to Hammen.

"Lad is a dog."

"Why do you emphasize the point now?" Hammen demanded.

The Companion sat on a seat formed from a single S-shaped plastic surface. Hammen studied the bulk of Gordus, Coordinator of Transmatters, who sat hulked in his utility chair in the bubble office overhanging the City of the Sea, on the world of Lanole. Hammen was comfortable, cooled, relaxed, amused by a light play of sensory electron music, and aggressively unhappy.

Gordus sat in his great chair patting the hair on the back of his left hand with his right palm, as if the fist were a sleeping kitten. At Hammen's feet, Lad's neck muscles quivered uneasily.

"Your record, Hammen," Gordus said at last, "is a good one."

"How could it be better? I've never lost one member of a cargo."

"But you have lost three Companions."

"Familiars. Dogs."

"But it shows weakness."

Hammen's face heated. "I never show weakness."

"Not *your* weakness, my dear, dear boy," Gordus said in exaggeration. "The weakness of the Witch-Familiar relationship, the weakness of Witches as Companions at all. Don't take it personally."

Hammen leaped to his feet. Lad's muzzle gleamed white.

"Not take it personally?" Hammen cried. "How else can I take it? You are questioning the worthiness of my profession, of my way of life. You question the honor of many of my friends—my associates. Witchery is an ancient profession. My grandmother and uncle were Witches before me. Witches have an un-

paralleled record of service to Transmatters and to the human race. How dare you, sir!"

Gordus waved a fat hand in front of him, laughing up and down the scale. "No, no, no. Peace, please. You have no need to plead so strongly for the cause of Witches. *You* don't have to be a Witch, you know, Hammen. You're good enough to be a regular, full-fledged Companion. The reason you get so many of your cargo through is that you in the most literal sense Companion them all. It would be possible for you to use a fellow Companion on your jumps instead of a Familiar."

HAMMEN sat down, no longer angry, or energetic. "No. No, it wouldn't be possible for me to do that. I can take people on an occasional jump, for high pay. But I couldn't stand the same kind of contact, day in, day out, with another human being. Pay doesn't come that high."

Gordus gave another laugh, and killed it sharply. "And there you were a few moments ago bragging about all the service Witches had been to the human race, and when we get down to it, it turns out you hate the human race."

Hammen tasted the inside of his dry mouth and longed for a way out. "I don't *hate* it; I just can't stand it. There's a difference."

"If you say so. But tell me, do you like your fellow Companions, or even your fellow Witches, any better than you do your cargo?"

"No," Hammen admitted.

"Good. Then we can stop this foolish talk about the Witches' service to mankind, since you don't give a damn about either Witches or mankind. You care only about one Witch; your interests are entirely self-interests. Correct?"

"Yes."

"Good. Better. Now I suppose you are not entirely satisfied with the benefits you now receive as a Witch? You would like more money, pleasure, power, prestige? You have ambition, greed, hunger, desire?"

"Yes."

"Fine. I didn't think you had altogether ceased to be human. Then I can tell you that the Transmitter Service has to perform its most important mission, and you are thought to be the best man for it."

"Most important mission?" said Hammen. "Best man?"

Gordus became happy. "Those are questions? But I can't tell you the answers. Not yet. First, you must promise us the added protection of taking a human Companion for this assignment."

"Why should I want to do that, Gordus?"

"Because I have promised

that you would, and I never fail."

Hammen stood for the second time. "Sorry. Not a good enough reason for me."

GORDUS' face splintered into confusion. "But as your superior, as your coordinator, I order you to take a human Companion for this assignment."

"Gordus," Hammen said, "you were once a Companion yourself."

"When I was younger, while my wife was alive."

"Then rescind your order or I'll kill you—under the Code, in a duel."

Gordus sneered. "I have never been beaten."

"Obviously," Hammen said. He didn't point out anything about his own status.

"No."

It was a final thing.

"Are you armed at this instant?"

The coordinator shook his heavy head.

"Then I plead grievance and choose weapons. Appeal?"

The other shrugged. "Choose."

Hammen was breathing deeply and regularly, in preparation. "Before this is closed, I want to remind you that the Law and the Code both state that no one can interfere in the relationship between a Team."

"Doesn't apply," Gordus said. "The act of '97 recognized the Companionship of Witches, but it did not extend the privilege to Familiars. Naturally not. You are a Companion and I could not separate you from a human Companion, but I can order you to break from Lad."

"That isn't just."

"I know. But we're talking about law, not justice."

"Do you wish aid from your fellow Companion?" Hammen asked.

"In later years, I have often wished for it, but my formal reply: No."

"Then," Hammen said, "I name our weapon as the body. The time, this instant. I can kill you easily with my bare hands, and Lad will help with his teeth."

An eyebrow-hedged ridge of fat above Gordus' left eye angled. "Use the dog and you'll get in trouble."

"Not before a Companions' Court. But if you so state your preference, I'll only use my own body."

"Hammen, about this matter," the coordinator said. "I'll think about it."

"An hour," Hammen said, and turned on his heel.

"Hammen," Gordus called out.

Hammen looked back to face a leveled destruction gun.

"You know the Code," Gordus explained. "The Challenge wasn't withdrawn. You

struck the field. A coward may be killed by any weapon."

"You are too modest," Hammen told him.

Gordus smiled and fed the gun to a compartment of his utility chair. "I only wanted to prove a point. I can kill you anytime, anywhere. No one can beat me. Can they? Can they, Hammen?"

The sweat stung Hammen's palms so hard he could almost taste the salt in it with his fingers.

"I'll do it."

"Gratitude is a part of honor. Yes. The Code. You do believe in that. But you haven't asked me yet who your human Companion on the jump will be."

"Who?" Hammen asked.

"As you yourself pointed, I still come under the Code myself."

"I AGREED to take a human Companion, but I did not agree to take Gordus himself," Hammen explained to his wristphone in the alcove outside the coordinator's office.

"I think it's a terrible thing," Lora said. "But why won't you jump with him—Gordus, I mean?"

"I hate him," Hammen explained.

"Oh, sure. I guess I do too. I'd never thought of being a Companion with him. Ugh! Oh, Hale's swimming in now." Aside: "Over here, darling. Ham's calling."

From afar: "Who?"

Aside: "Hammen. The Witch."

"Why didn't you say so?" Into the phone: "Hi, fellow. What can we do to you?"

"You can do a lot for me."

"For you, huh? That comes high, you know. What'll it be?"

Hammen retold his story, and finished with, "That's why I called you two. I need a human Companion, anybody other than Gordus."

A slithering of voice, then faint, but distinct, from Lora: "I couldn't do it and I can't let you do it. Afterward, whichever of us, it would be as if I were no better than a dog."

Hammen stared ahead of him at the alcove wall.

"Ham," Hale said, "why did you come to us with this?

"You were friends of mine," Hammen said.

"No."

"No?"

"We aren't friends of yours, Ham," Hale said patiently. "We're just acquaintances of yours. We'd like to help you out, but not enough to split our team for you. Surely you've got some real friends, people you look better to than us . . . Hell, man, don't you know what a friend is?"

Hammen thought of it. "I suppose not."

"But there must be *some-*

one," Hale said in embarrassment, "a woman."

"I know a woman Witch on another world. We make love together sometimes. But I know her only well enough to know better than to ask favors of her."

"There are lots of Witches," Hale said in nervous exasperation. "One of them is bound to Companion with you on a thing like this."

Ham touched his fingers to his wrist. "I think not. No other Witch is going to help me set a precedent to put them out of the trade."

"But the Code!" Hale said furiously. "Surely you can count on your fellow Witches under the Code."

"Why? I couldn't count on my fellow Companions under the Code," said Hammen, and pressed his wristphone into silence.

HAMMEN stepped from the alcove back into Gordus' office to find a lovely golden woman groveling at the coordinator's feet. The coordinator was smiling at the pleasure of the thing.

"What's this?" Hammen demanded.

"Cargo," Gordus said.

"Is she ill?"

"Mad."

"Then she can't be transmitted. No one could hold together a disintegrating personality in transmision," Hammen said.

"It will be difficult. Unprecedentedly difficult. That is why it will take the two of us acting as Companions to bring her safely to Earth."

"Why is it so important that she get to Earth?"

"Ask her," Gordus suggested.

Hammen glanced down and saw Lad nosing pointedly at the woman. Often he forgot that the dog was constantly at his side. His eyes lifted up to the woman.

She had fine features, impressive blonde hair, and she was wrapped in a frazzled blanket, indigo rubbed away to white threads here and there.

"What's your name, woman?" Hammen asked.

"I know what it is."

"Of course you do," he said sharply, "but I don't."

"I know you don't."

"There isn't much that you don't know, is there?"

"I know everything," she confessed humbly, honey eyes down.

Hammen whirled to Gordus. "What do they want with her on Earth?"

The coordinator gestured eloquently. "She knows everything. Do you think they know everything on Earth? Don't believe propaganda. There are things she can tell them."

Hammen looked again to the creature huddled on the floor. "What could she tell anyone?"

"There are words buried in

any conglomeration of letters. Confusion is the basis of all codes. There is always a cipher for any code."

Hammen exhaled. "Never mind. What do I care what they want with her? All right, I'll try to take her through. You don't want me to use the dog?"

"No. It won't do."

"Then let me take her alone. I could do it this once."

"Negative. Besides, need I remind you that you have already graciously agreed to take a human Companion?"

"And," Hammen said ponderously, "I can't get any Companion other than you to go with me."

"You can't? Sad. But why wouldn't I be acceptable?"

"I hate your soul."

"No doubt," Gordus sighed. "But I believe you said you hated all people."

"I can't stand people, only some people especially do I hate."

"I see. But surely it is only a small difference in degree, not kind, between the contempt and aversion you hold for humanity at large and that which you hold for me. Surely that difference is too small to cause you to break your word, given under the Code."

"I suppose it is." The words tasted bad in his mouth. "Very well. I'll transmit with you."

"*Of course* you will," the coordinator said smoothly.

"ARE you ready to transmit now?"

"Of course we are."

Hammen stood within the platform diagram with Gordus and the woman. Beyond the boundaries stood the technicians, one at the control mosaic, the other holding to the neck of Lad, who suffered it under orders.

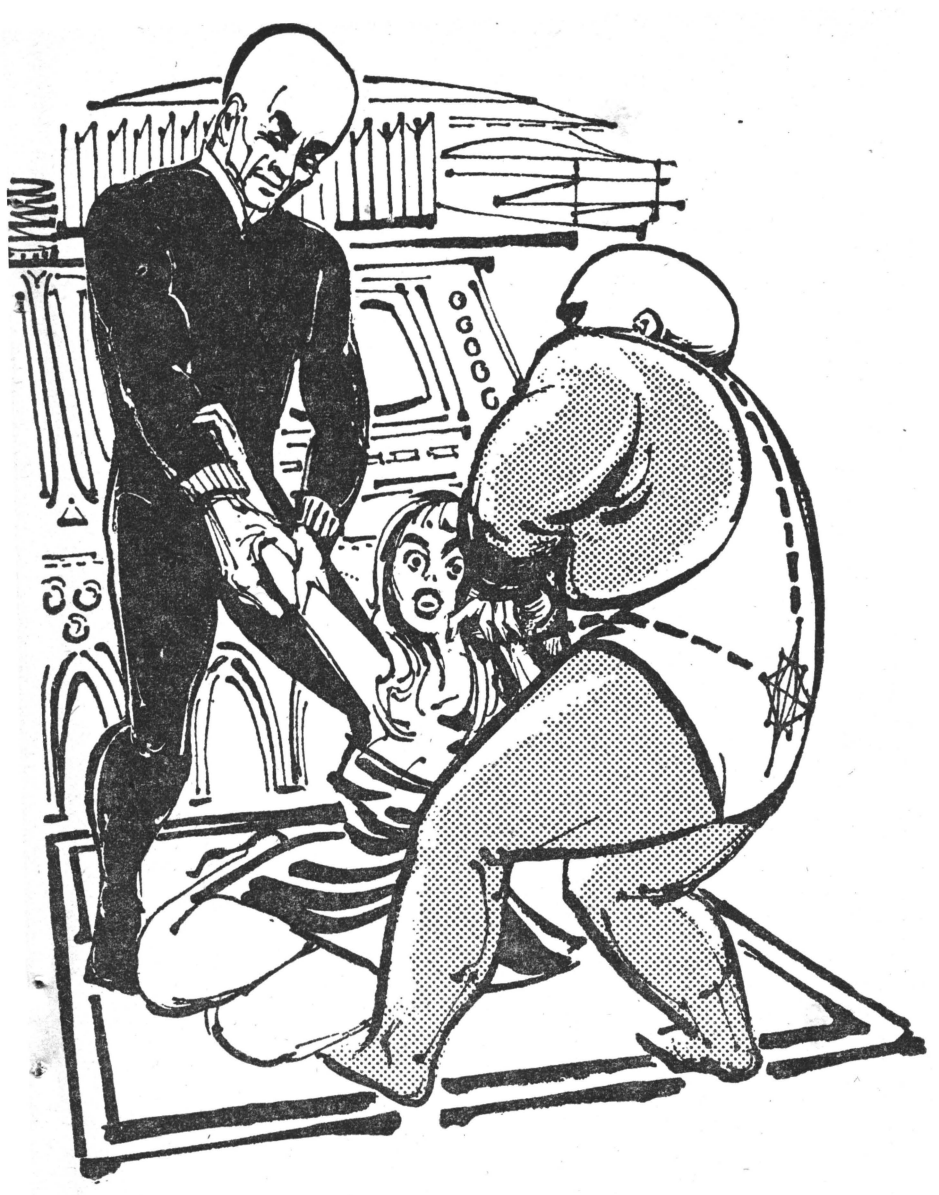
"Wiggle away from the Mindsnake, citizens," a technician called.

A native, Hammen thought. He had never been in transmission himself. No one who had ever joked about the Mindsnake, or rarely even spoke of him.

Hammen looked around him, slate eyes chalking the outline of the diagram in which they stood. It was only a rectangle, but shouldn't it be rather a pentagram?

From the time of Aristotle, the populace equated science with magic. Wasn't the diagram only a sign to conjure the demon, Spatium, to do the boon of transporting his servants across the void without decay of time?

No. Instantaneous transmission of matter wasn't magic. It had always been a part of folklore as teleportation, but just as machines had been made to duplicate the legendary feats of human extrasensory perception, machines made to let men speak over great distances to duplicate the strange voices of



mystics, and machines made that would indeed show strange visions over vast expanses, science had made the Transmatter for null-time object displacement.

Transmatters were a logical, progressive theoretical implementation. If electrical impulses could recreate patterns first in sound, then in light, it followed relentlessly that someday some form of impulses would be found to recreate matter. Energy and matter were only different forms of one unity.

Fortunately, matter duplication had come before matter transmission. As the researches of Phillips established, an exact duplicate is *not* the original.

A duplication of a man is only a duplicate, not the original, unless the *elan vital*, the spirit, the soul, is transmitted, for it cannot be duplicated. A duplicated man is a perfect robot, capable of memory and learning, and developing into a human being in time. But it is not a human being immediately, and it can *never* become the original of the duplicate. Every human viewpoint is unique and irreplaceable.

Duplication of matter was uneconomical. The power outlay was too great, the equipment too costly to build and operate. So transportation by transmission was investigated. Again, it was too expensive except for very great distances, trips of light-years to worlds established over the generations by the spaceships which had reached virtual light-speed and could not go beyond it.

PERSONALITIES of transmittees got lost among the stars.

Transmitted poets arrived with a dim itch for a brutal fight, due to some residue of glandular acid from a parting insult affecting their birth trauma on the new world.

Great conductors solidified, hating music.

Competent engineers were imported with an infantile urge toward lyric verse.

And the Companions came into being as a profession.

Men with will power, psionic abilities, strength of character. You could call it what you liked, depending on your profession, your politics, your religion. At any rate, men (and women) who could hold human personalities together on the long, instantaneous voyage through null-space.

But still some personalities drifted away.

Or, some darkly superstitious people suggested. were they sucked away?

They were.

Personalities in transmission were being captured by an intelligent entity, unimaginably vast in size, which some believed used the movements

of galaxies as the synapse responses of its brain.

It was a vast entity, but not a very intelligent one, due to the square of signal decay and noise over light-years. Moreover, it was psychopathic. From contact with human minds, it had decided it was, or would become (it was obviously confused on the point) the god of the humans.

It proposed to do this by eventually incorporating all intelligence into itself. But, seemingly, only intelligences in transmission were soft enough for the Mindsnake to get a hold on.

The Companions were harder-shelled.

But the Mindsnake grew stronger.

And Companions began traveling with other Companions, as teams, to resist the Mindsnake.

And there came a class of Companions who did not need the help of any other man or woman, but only a touchstone of reality, something familiar of Earth—the mind of a dog or a cat or some other animal. Familiars. So was born the Corps of Witches.

And here, Hammen wondered, was this where the Witches came to an end?

He looked at the bulging head of Gordus. He couldn't see inside it. Maybe there would ultimately be men who could, but he could only contact other minds when they were taken off the level of matter and energy, and placed in null-space. Where there is no space, there can be no barriers.

There was nothing but confusion in the woman's mind if he could touch it. Nothing but boredom and routine in the minds of the technicians.

Hammen's eyes moved to the dog. He suddenly decided Lad looked sad. But dogs have human facial muscles, and it would be impossible between a man and a dog for one to look into the other's mind, while they weren't in transmission.

Uselessly, he permitted himself to wish Lad was going with him....

The heavy shoulder muscles of the dog ripped him free from the technician's grasp and Lad threw himself across the diagram line as the coordinants of the transmatter phased.

TRANSMISSION. No time. No space. Hammen felt an overblown wave of force.

"How's that for power?" Gordus demanded.

It came as words to him, as communication between people had come to him all of his life. Deaf-mute Companions had told him communication in transmission came to them as hands and fingers feeling of words.

"You've never had a *real* Companion before, have you?"

Gordus asked. "You've never felt *real* power like this before?"

"Power? I've heard members of the cargo scream as loud from terror and horror. We don't scream in transmission, Coordinator. Let the Snake sleep."

"Power," the coordinator repeated. "I always held my cargo together with power."

"When you were a Companion, the Snake wasn't as strong as it is now. Quiet, please."

Hammen felt out for his Familiar. A tail wagged somewhere. A head cocked to one side in puzzlement, concern. What wasn't a hand petted that which wasn't a head.

"Just us—just the two of us—to see after the woman," Gordus said with a leer in his voice.

DIDN'T he know about Lad crossing the diagram? Hadn't he seen?

"You sound as if you were about to suggest we team up and rape her. It's hardly practicable here."

"But that's it, Hammen! That's it! I want to rape her mind!"

"Go away, Gordus. I don't believe in you. Nobody really makes a career out of being that swinish."

"My profession is power, Hammen. I find your attitude unprofessional."

Hammen reached out for the girl. "What do you want from her?"

"She knows everything, Hammen. Don't you want to know everything?"

"No," Hammen said. "I'd never be able to remember it."

The girl was retreating from them. Had she been snagged by the Mindsnake? No. Only drift. Hammen threw an anchor into her, braced himself against his Familiar, and pulled. She came apart at the seams and flew off in all directions, gibbering.

He raced after all the pieces of the woman at a practiced, steady trot and gathered them all in. He made a rough boundary and compartmentalized her.

For an instant, he looked through the jumble that was her mind. Sensuality, sloth, greed, hate, envy, pride, hunger, death wish—it was the usual human pattern well enough, but they were letters that spelled out no words. It would be impossible to find any information in that psychic junk heap.

Deftly, Hammen turned Gordus back on.

". . . must know. You'll have to help me, Hammen."

"Why must I?"

"Simplicity. You must. We stay here until you do. You can't close the transmission without me, and I will not do it until you help me pick the woman's mind. We can wait

forever until you decide to do as I order. There is no time here."

Gordus was a blind old man stumbling in the dark. He hadn't seen Lad join them inside the diagram. He probably wasn't even aware that Hammen had the woman under tow.

"Listen to me, Gordus. That about there being 'no time' here is a mathematical abstraction. *Practically,* it has its limitations. There is some flow of some kind of duration here, otherwise our questions and answers would come at the same time."

"What are you trying to teach me?" Gordus demanded. "I was a Companion before you were born."

"But then the Mindsnake wasn't so active or so powerful. If the 'duration' of our transmission is too long, he'll get a clear fix on us—and that will be that."

"I'll risk that. *Will you?*"

"No," Hamen said. "You're a fool out here in transmission. You don't know what you're doing. What do you expect of me?

"Link with me, Companion, as you should. Help me gain her knowledge."

HAMMEN knew that he was being asked to help gain access to information intended for the Federation authorities on Earth. But he rarely thought of himself as a Federal, and he knew very few worlds would allow extradition of him on a Federal charge. At the moment, he was mainly concerned with saving himself and his cargo from the Mindsnake. As distasteful as it was, Gordus was a part of his cargo, and a man had to have a few ideals. Gordus was not qualified to be a Companion after the generations of growth of the Mindsnake. He was only a pitiful fool now. (How long before the Snake gets so big I will not be qualified? How long before *no one* is qualified? How long before the Snake comes out of null-space and stalks the planets?)

Hammen shrugged and joined Gordus.

They struck for the mind of the woman.

Her name, they warned, Isodel.

They found that out, and incredibly, more.

In some way Gordus' mind paralelled the girl's. There was much of a kind about them, and Gordus could piece together the fragments of her identity. But then he was reaching down for something, and he prestidigitated it up and out of sight.

Hammen realized that Gordus had succeeded in getting what he wanted and in keeping it from him. He was less of a doddering old fool than he appeared.

"What was that?" Hammen

demanded. "What did you take?"

He tried to shake it loose from the coordinator.

"Let go of me!" Gordus cried out in immaterial indignity.

Hammen released him.

Completely.

Gordus screamed soundlessly as he retreated toward infinity.

"Shall I catch you?" Hammen asked.

The scream changed in pitch.

The Witch brought him back.

"You stayed," Gordus said. "Somehow you stayed. That dog. Somehow you've got your damned Familiar with you, haven't you, Witch?"

"No," Hammen lied fluently. "Only feeble minds like yours require a contact. Shall I tell you something about Witches? The Familiars are a deception. We don't need them at all. We are lone wolves."

"Wolves, are you? So now I know what your grandmother before you was."

Hammen laughed.

And sobered.

"What did you take, Gordus?" he demanded.

"What do you know about her?" asked Gordus.

"Her name is Isodel."

"Isodel Van Der Lies."

"I've heard of her. Somewhere," Hammen said hesitantly.

"A GREAT theoretician," the coordinator explained sullenly. "Probably the first authentic female genius of the race of man. On a par with Plato, Shakespeare, Newton, Einstein."

"What theory of hers were you after?" Hammen pursued.

"A method of destroying the Mindsnake."

"You want to take the credit from her."

"I want only to take the theory from her, Hammen."

"You mean you don't want the Mindsnake to be destroyed. You are afraid its destruction would mean the end of the Companion Corps which you head."

"Not at all. I only want the theory so I can reverse it. Once you know how to destroy the Mindsnake, you also know how to create one. You see, I intend to become another Mindsnake, one who knows too much of destruction to ever be destroyed."

"Listen carefully, Gordus," Hamen said with infinite care. "You're ill. You don't know what you're talking about. It can't be done."

"The ultimate dream—ultimate power."

"That's pure psychosis, Gordus!"

"Is it? Watch how easily I begin to grow. I have the woman's mind now."

It was true.

The poor, mad genius woman was gone.

"Stop it, Coordinator. You don't know what you're doing!"

Hammen tried to reach him.

"That's it, that's it. Come ahead, my boy. I'm becoming a Mindsnake. Now I am a Mindsnake. Come ahead. Let me swallow you next."

"You fool," Hammen broadcast. "You are *the* Mindsnake now. Don't you think anyone's ever wanted power before? Won't you let yourself remember how it was when you were a Companion? This is how it *always* happens. You've let yourself be swallowed by the Snake. You ran right into its jaws."

"No." Gordus thought furiously. "I—"

And the Snake digested the tiny egg in its gullet and "I" blurred and was washed over by "All."

Hammen struck at it in anger and humiliation and terror and it retreated with frictionless speed.

The Snake took something with it.

It took Gordus, and it left that part of the woman, Isodel, that he had been able to capture. But the part of Isodel matched by Gordus' mind was jerked free.

She was freed of hate, anger, lust . . .

She was left an impossibly ideal woman—all Mother, Sister, Lover . . .

Against his will, by immutable laws of nature, Hammen fell monstrously in love with her.

HAMMEN was among the first of Companions or Witches to join the Suicide Squadron.

He did it to protect Isodel and her descendants for all time to come, and he did it in impotent fury at his reason for doing it.

The Companions transmitted in droves to abolish their profession. They transmitted against the Mindsnake.

The Federation on Earth had made use of Isodel's theories. They were only a formal mathematical statement of what had always been known—destruction reaches a critical mass and destroys itself by turning against itself.

Where Hammen had refused to join one human mind, he joined countless ones in a huge drive against the Snake.

They became one with each other and they became one with the Snake, and the Snake turned on itself and destroyed itself and them, and they turned on themselves—and stopped.

They hung together for an unmeasurable time—and broke apart.

They were a super-entity like the Snake. But where the Snake had been mad, they were sane.

They drifted through the

haze of twilight and broke apart, their hands gliding away into the shadows.

Hammen was gloriously happy. He had never been happy before and he was not at all sure he liked it.

"Jobs are so hard to find these days," Isodel said, her lovely face brightly sane. "What will you take up, darling?"

"There's still need for Companions—and Witches," he explained. "There seems more of a tendency for members of the cargo to drift away than ever. The Mindsnake at least gave them something to resist, a foothold of friction. Now there is nothing—nothing to do but drift, drift, drift. People in transmission will need Companions for a long time to come."

"I need a Companion," lovely Isodel said.

His heart leaped ridiculously.

"But not a Witch," said gorgeous Isodel.

Pain, very great physical pain.

"I love you," priceless Isodel went on. "How could I help it? I am a woman and I love the father image. You are my father—symbolically, fortunately, not biologically. You held the sane part of me while Gordus dragged off the unsane part. You gave me—*this* me—birth. I love you. But I don't love your dog."

"My dog?" said Hammen.

"No woman can marry a man *and* his dog."

"I see," said Hammen, seeing it all, and living.

YOU could see everything about yourself and live. It wasn't easy, but you could do it. Especially if you had the training and experience of being a Companion. Or a Witch.

"It would kill Lad to separate him from me for long, you know," Hammen said.

Isodel's beautiful eyes misted. And she said in all her infuriating gentleness, "Then it is impossible for us, if we have to destroy a living—"

"He's just a dog," he pointed out. "I would wring his neck cheerfully if it would do any good. But it wouldn't."

Isodel looked sad, and brave, and wonderful.

"Don't you see, Isodel? It's *impossible* for me to do the *right* thing. If it wasn't Lad, it would be another dog, and if it wasn't a Familiar to make me a Witch, it would be something else to make me different, because I am different. I have to live with that. Among the right people, I am the left man."

So he left her, and walked out of the Floating Gardens onto the walkway and Lad fell in at his side, and he listened without anger to the hushings and keenings of the crowd.

"Witch! Witch!"

END

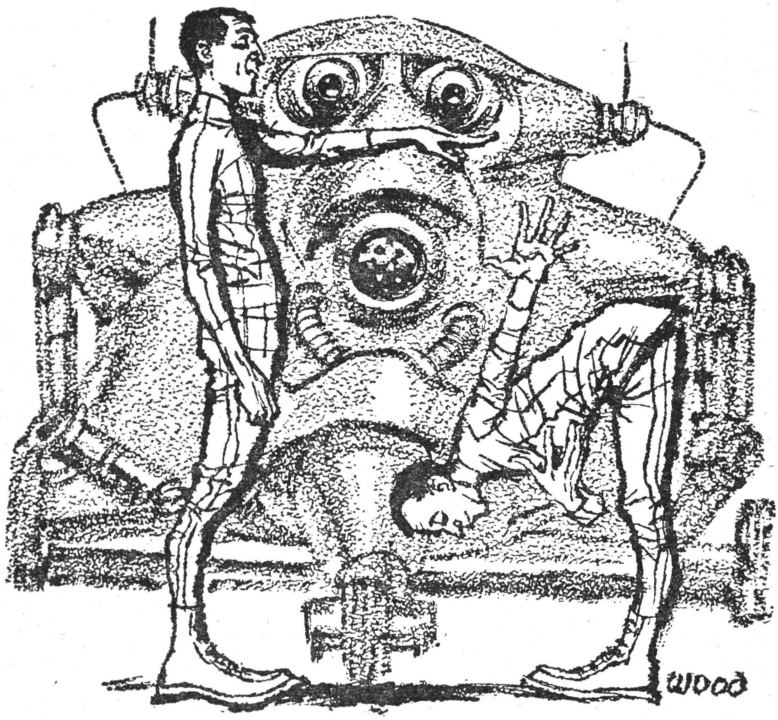
If Joe Mulloy was perfect—and he was—

then beyond his perfection there only could be . . .

SUPERJOEMULLOY

By SCOTT F. GRENVILLE

Illustrated by WOOD



JOE MULLOY lounged in the plushest chair in his luxurious office. All around him, on the walls, on the ceiling, even in strategic spots all over the floor, there were mirrors. Joe sneered at the place where the mirrors were most profuse; twenty or thirty perfectly identical Joes sneered back at him.

He admired his sneer from every angle, shaping and changing the contemptuous look on his face with his hands, stroking it, much as other young men in a far earlier age had stroked and twisted their fine mustachios.

As usual, Joe Mulloy was engrossed in his two favorite hobbies: narcissism and indolence.

Joe's friends, of which there were very few, could have given you a fairly accurate resume of his character in five words, his sneer and his indolence.

In the first respect they would have been right. Joseph Mulloy had been born with a sneer on his face. His whole early life had been centered around that sneer. It had enraged his father, distressed his mother, driven his teachers to tears, his playmates to tantrums. He stopped doing homework at the age of eight, but the teachers passed him on anyway to avoid complete mental breakdown.

Gradually, Joe Mulloy began to get his way in everything by virtue of his sneer. It was not merely openly supercilious; that was the beauty of it. It was so subtle, so faint, and yet such an open avowal of contempt for the entire human race, that try as the people he tormented would, to find something in his sneer to charge him with, they never found anything.

In a very few years, registration day at Joe's elementary school became a game of Russian Roulette, having as the loaded chamber the question: "Who's going to get little Joey Mulloy in his class this year?" Finally, when Joe Mulloy was fifteen years old, the local Board of Education wisely decided to end Joe's formal education, rather than make screaming meemies an occupational disease at the local high school.

Joe's father welcomed the expelling as an excuse to beat him to a pulp and kick him out of the house. It was not until three days later that the memory of Joe's sneer, enduring through all the punishment he had received, made the father blow his brains out with the most accurate German Luger he could buy at the pawn shop on short notice.

But Joe's friends would have been wrong in the second instance, for Joseph Mulloy was not chronically indolent. In his own profesion, Joe Mulloy was the most industrious man imaginable. For Joe Mulloy was a robot builder.

DISINHERITED by his father, he had made a beeline for the nearest positronics laboratory. The personnel manager had flatly refused him the job when he had told her he had absolutely no qualifications, but she was so disconcerted by his persistent sneer

that she had to give him the job just to get him out of her sight.

Once in the laboratory, he had gone right to work learning everything there was to know about robots, scorning all help from the other technicians. Since he held other scientists, past or present, in an ineffable contempt, he had to learn everything by experience instead of studying what his merely human predecessors had done. He was so empirical that he learned all about alternating current by deliberately sticking a wet finger in a light socket again and again.

He made mistakes at first, of course. In fact, he ruined several thousand dollars' worth of laboratory equipment during his apprenticeship. But his amazing sneer conquered all, and he was soon recognized as the most brilliant—and the most conceited—man in the field of positronics.

Now Joe Mulloy was lounging in a plush office chair, cultivating to near perfection his already mature sneer, and suddenly feeling maddeningly thirsty.

"Robot!" he said.

A startlingly human-looking robot seemed to materialize instantaneously from nowhere.

"How might thy humble servant serve thee, O magnificent Master?" it inquired, bowing so low that its partially metallic nose scratched the rich mahogany floor.

"What took you so long, you damned fool?" asked Joe.

"I apologize, Gracious Master. I am incompetent and worthless."

"Get me a drink, you bucket of bolts," said Joe.

"I am grateful for a chance to serve thee, Benevolent Master," replied the robot in its monotonous Uncle Tom patter, and made another floor-scratching bow. Then it groveled out of the room.

"That robot is getting too slavelike," said Joe to himself, after the robot had left. "All my robots seem to be that way. They do exactly what I tell them to, and degrade themselves sickeningly before me. All the people I've ever known seem to be that way, too. I wish I could find at least one mind equal to mine to clash with. Then I could have a real fight for once. None of this bowing and scraping."

Just then the robot entered with a Manhattan, made its usual floor-gouging bow, and scraped its metal feet to get Joe's attention. Joe turned to glare at the mechanical minion.

"Robot!"

"Yes, Omnipotent Mas—" the robot began, but Joe cut it off.

"Get over to the laboratory and blow yourself up! And find an empty corner, where you won't do too much damage."

"Master, I am happy for the chance to give my life—"

"Never mind that, you glori-

fied Erector set! Do as I say!"

"Yes, Master." The robot hazarded a slight bow, but forgot to crawl out of the room on its hands and knees in its eagerness to follow its master's orders.

JOE MULLOY leaped to his feet. In the moment of his excitement, he forgot that melodrama is a human weakness, and he became melodramatic himself. Even his incorruptible sneer faded slightly as his excitement grew.

"I must find someone with a mind equal or superior to mine," he told himself. "Now who has a mind equal to mine? Obviously no one but me. Therefore I must find someone with a mind *superior* to mine. Now who is superior to me?" For the first time in his life, Joe Mulloy was confronted by what seemed an unanswerable question.

Joe's train of thought was interrupted by a deafening explosion from the laboratory, as his latest robot jubilantly committed suicide. The building shook violently for a few seconds, then subsided.

To his great surprise, he was able to answer his question.

"Of course! Since the only thing equal to me is me, the only thing superior to me would be a super-me, a super-ego! I'll build a super-robot, with all my magnificent qualities, only magnified a thousand times! I'll build a Super Joe Mulloy!"

He ran the letters together to make it one word:

Superjoemulloy.

He dashed up to his laboratory, cleaned up the mess his overeager robot had made in killing itself, and went feverishly to work on his new project, learning the necessary techniques by experience, of course, and applying them to his super-robot. He made some mistakes at first, of course. But in three weeks and six days, Superjoemulloy was ready for its debut in robot society.

Not one to miss a chance to impress mere humans with his genius, Joe invited the world's greatest positronics experts to the unveiling of Superjoemulloy. There was a tense air of excitement as Joe pulled the lever that removed the big black curtain in front of the robot and started the activation machine.

When they saw Superjoemulloy, the experts gasped with envy. It was impossible to tell the super-robot from a human. Its limbs, torso, and head were so well proportioned, and done in such fine detail, that anyone in the room not in the know would have sworn that it was a human being. There were even fingerprints delicately cut into the super-robot's artificial hands. And Superjoemulloy looked exactly like Joe Mulloy, except for the sneer. It was twenty times bet-

ter even than Joe's own. It was a super-sneer.

But although the activation machine was working its hardest, nothing happened. The super-robot refused to move one solitary mechanical muscle. Joe's guests began to file out, once the novelty of the robot had passed. Joe left the room in disgust and went downstairs for a drink.

WHEN he returned to the laboratory, Superjoemulloy was on its feet, examining the laboratory equipment with obvious disgust. In the preceding few minutes, the super-robot's super-sneer had grown more perfect, and the robot was fast becoming the very personification of contempt.

"Why didn't you move around when my friends were here, you heap of junk?" Joe asked the super-robot.

Superjoemulloy turned to him. "I didn't want to display my perfection before mere humans, you distorted blob of protoplasm," it said.

Joe Mulloy was becoming angry, but he tried not to show it. He downed his drink.

"Get me another," he told the robot, holding out his glass.

"The hell with you," said Superjoemulloy. "What do you think you are, God or something? Just because you slapped me together with your clumsy butterfingers doesn't give you the right to order me around like some common servant. Now that you've created me, I could do a better job of robot-building myself. Now get the hell out of here."

Joe Mulloy turned on his heel and stomped out of the room. No robot was going to talk to him like that! No, sir!

The super-robot quietly followed Joe to the door and gave him a kick that sent him sprawling down the stairs. At the bottom of the staircase, Joe whacked his face against the solid oak of the banister. He turned groggily to look at the blurred image of the robot standing defiantly at the top of the steps, with its hands on its hips. For a brief second the sneer faded from Superjoemulloy's face, and was replaced by an evil sadistic leer.

Joe Mulloy recalled the last line of Father William: "Now be off, or I'll kick you down stairs." But the super-robot was far worse than Father William. A conceited, contemptuous monster, it was totally unlike Joe's warm, humble, self-effacing self! The sneering monster must be destroyed!

Joe cunningly enticed the robot to leave the laboratory for Joe's office, where it could admire its sneer in all the mirrors. Sneeringly Joe wondered why anyone could admire a sneer so much. Without thinking, he used his hand to smooth out the wrinkles in his now slightly worn sneer. Then he crept upstairs to his laboratory

to barricade himself in there to think of a way to destroy Superjoemulloy.

At last he hit on the answer. A hypnosis machine.

"The robot is mechanical, so I'll have to hypnotize him by mechanical means," Joe reasoned to himself.

He worked day and night, learning the necessary techniques as he went along. He made some mistakes at first, of course. But in four days the mechanical hypnosis machine was complete.

Joe found the super-robot in the mirror-lined office, where it had been admiring and improving its sneer for the last four days. The sneer was magnificent. But it still lay just one iota short of absolute perfection. Try as the robot would, perfection in a sneer still lay without its grasp.

"Genius!" shouted Joe, to get the robot to turn its head. He turned the dial on the mechanical hypnosis instrument up to full power. "You are now in my power!"

But now Superjoemulloy's sneer was completely perfect. With a look of sublime contempt on its plastic face, it took the hypnosis machine, turned it around, and aimed it right back at Joe Mulloy.

JOE MULLOY bowed so low that he skinned his nose on the rich mahogany floor. "Yes, Master?" he said.

"Bring me a drink, you blot of living tissue!" said Superjoemulloy.

Joe Mulloy made another nose-skinning bow and groveled out of the room.

"This human is getting too slavelike," said Superjoemulloy to himself. "I suppose I could rebuild him, though."

Joe returned almost instantly with a Manhattan, made his usual nose-damaging bow, and scraped his leather shoes to get Superjoemulloy's attention.

The super-robot turned and glared at him. "Human!"

"Yes, Master?"

"Get up on that slab in the corner."

Joe Mulloy obeyed.

With all the skill of an experienced human-builder, Superjoemulloy began to take Joe's body apart. Joe screamed, but the super-robot ordered him—by hypnotic command—to shut up, and Joe obeyed.

Superjoemulloy began to put together a Supersuperjoemulloy out of what had once been Joe Mulloy.

He made some mistakes at first, of course.

END

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The Quality of

It was mercy of the worst strain. He had been a man of parts . . . and now he faced being taken apart . . . part by living part!

Mercy

By DANIEL KEYES

Illustrated by WOOD

IN HIS dream, he screamed and fought them off and begged them not to take him. He saw them slipping up silently in the night and taking him down to the long black service-jet waiting in the street below.

He opened his eyes quickly and reassured himself that he was still in his own room. The sheets and his pillow were damp with his sweat, as they were every morning now since his sickness had become worse. A glance at the latticed window, where the sky showed through like strips of gray felt, told him that it was too early to get up. They had not come for him tonight.

He fought back the urge to reach over his head for a *dorcaine* tablet from the dispenser. Just a touch of his signet ring to the dispenser plate and he would have the pain-soothing drug—enough to cool his feverish body and give him rest. He would wait. Illegally, for over three months now, he'd restricted the use of *dorcaine*—the drug that the law required him to take at the first sign of severe physical discomfort.

He could hold out a little longer, telling himself over and over that every symptom he could diminish or hide or control for a while gave them that much less data to go on, that much less of an upward curve on their graphs, interfering — however slightly —

with that final, irrevocable diagnosis.

It was worth the suffering if it delayed for one day their awareness of his disease. It would be that much longer before the Service and Repair Center could send a servo crew down to investigate. He would have just that much longer to live.

Lying awake, he stared at the ceiling, wondering how successful his desperate deception had been. Although they might be temporarily thrown off by the false *dorcaine* average on his records, he knew too well that the Dispatcher could not be sidetracked for long. And when the secret was out—what then? Would there be a front-page scandal when it was discovered that Paul Dorn, the head of the Maintenance Division of Service and Repair, was a *waster?*

He couldn't push the foul word from his mind. *Waster.* Yes, he felt ashamed—but as long as he was able to conceal it, he would hang on to life.

THE Service and Repair Center was a long arc of tall white buildings on the outskirts of New Virginia, not far from where the ancient Capitol Ruins stood. As his copter approached the area, Paul Dorn identified himself to the Dispatcher-plate with his signet ring. The electronic brain accepted his signal and freed the beam that would guide him, auto-controlled, into his port atop the Maintenance Building of the Center.

As he landed, he noticed that a detail of servos was hauling away the wreckage of a black-and-orange copter that looked for all the world like a giant, crushed butterfly. Calling out to the leader of the servo-detail, he asked what had happened.

"An unauthorized ship," said the servo, "tried to land without clearance from the Dispatcher."

Paul Dorn was still thinking about it down in his lab when the call came over the loudspeaker. He was asked to come down to the Records Division right away. Chief Abel Jennings wanted to see him.

At Records, the Chief was talking with someone on the TV line, and he waved for Paul to have a seat. The Chief, sixty and well tanned, had a huge, lumpy face that always reminded Paul of a potato.

Flipping the switch off, the Chief leaned back in his chair to study Paul. "There's been an accident."

"I know. I saw them clearing away the mess before I came in. Some fool trying to cheat the Mercy Vault?"

The potato eyes bulged wide. "That's not funny!"

"No, you're right. I'm sorry. Is he alive?"

"They've got him down in the Examination Ward right now. Paul, it's your brother."

Paul had started to light a cigarette and his hand froze in mid-air. "Victor—tried to land—without a clearance beam?"

The Chief nodded. "They called me first because he used to work in my department. Made a wreck of himself. From what they say, Spare Parts might have been able to provide replacements for most of his damaged organs and a new right leg. But—"

"What else?"

"His left arm—up to the shoulder—his kidneys, and his left eye."

PAUL nodded slowly and let his hand drop to the arm-rest of his chair. The headstrong kid. He had heard that Victor's left arm and kidneys had already been replaced after the accident last month in a public tube. Both his eyes were also "seconds" —the originals had been lost in a childhood accident. Paul knew too well the bio-physical law: one replacement of a part to a customer. The nerve freezing process for the resynthesis of nerve cells could be done only once and never again.

"There just wasn't enough left to patch up," growled the big man. He put his hand on Paul's shoulder. "How long since you last spoke to him?"

"Not since you fired him, seven months ago. We had a quarrel about his hanging around with those A-D people. I called him some nasty names. I even blamed him for the blast in the Dispatcher's Vault that nearly finished the two of us. He was always a sensitive kid, and his feelings were hurt. I haven't seen him since."

"Paul," said the Chief, looking down at his desk, "you knew, when you recommended Victor for a job here, that he was Anti-Dispatcher."

"When he was in college. I had no idea he was still hanging around with those A-D people—"

The Chief's fist came down on the desk. "And yet you put me on the spot. I pressured through his application because you asked me to. If I'd had a hint about such ideas and past associations, I'd never have given him a job in Records—even if he was Isaac Dorn's son. Your father's name got Victor off at the hearing, but to me a man is what he is, not what his ancestors were—and for my money that blast was no accident. It gives me the shakes sometimes when I think that just six feet closer to the synchro-computer and—"

"Hold on, Chief. You're making some pretty big judgments."

"Am I? Are you forgetting what it cost *you?*"

"Me?" Paul was shocked for a moment, until he realized what the Chief was referring to. "Oh, you mean this—" Paul held up his right hand, opening and clenching the fingers as if they were still strange to him. "My first replacement. A little thinner than my left one, and the knuckles are a little sharper, but otherwise it wasn't a bad match." He paused. "You know, I find myself wondering what the guy was like who owned it before he was donated to the Center."

"Don't be morbid, Paul. It could have been a lot worse than a replaced hand and only a *touch* of radiation."

The Chief reminded him that in the old days—before Isaac Dorn had revolutionized things—when they still had humans standing watch in the Vaults instead of servos, there were men who had picked up incurable cases of radiation-cancer. Paul, the Chief said, had the Dispatcher to thank for being alive and healthy.

"And no thanks to your accident-prone brother that you're still here," concluded the Chief. "You could have done lots worse."

That's how much you know. That's how much anyone knows . . .

The Chief outlined quickly what he wanted Paul to do: "Visit your brother in the Examination Ward before they send him home for the funeral. There have been reports about the Dispatcher making mistakes and the A-D movement using them to discredit the Center. Find out what he knows. But most important, I want to know when and how they're going to try to sabotage the synchro-computer that your father built—"

"Sabotage?"

The Chief nodded. Security police had learned from informants that the A-Ds had developed an underground striking force of partisans determined to cripple the Dispatcher. "There's a leak somewhere. Any plan to attack the Vault would have to be based on inside help from someone who knows something about the works, the computer, and the time locks on the Vaults—"

"You think Victor is in on it?"

"That," mused the Chief, "is what I want you to find out from him. You have two days before the funeral and a full day before Mercy Service puts him away. Get his confidence; make him believe you sympathize with him and want to join the A-D underground. Anything. Only get him to give you names, dates and places before they shove him into the Freezer."

AT THE Examination Ward of Mercy Service, it shocked Paul Dorn the way his brother had aged in seven

months. Instead of twenty-four, he looked like forty. The scar tissue across his cheeks and the patch over his left eye reminded Paul of some of the ancient men who were still around to tell stories of the Anti-Dispatcher riots and battles of the Automation War. Victor's scars were not fresh ones from yesterday's crash. There had been many other accidents since the time of their quarrel.

"HOW are you feeling, Vic?"

Victor turned on his cot and looked at him out of his single eye, so red-webbed that Paul had the feeling that his brother was looking at him from behind a bloody net. If he wept, what color would his tears be?

"Paul—" When he smiled, it seemed as if the hard-ridged clay of his face would crack. "How you been, Paul? It's been a long time . . ."

Paul lit a cigarette and offered one to Victor. "I heard how you tried to redecorate the grounds outside the Records Building."

Victor's laugh turned into a cough. "Messy landing, huh? Boy, would Dad have given me a going over for that one if he were around to —" Victor's voice trailed off.

"Vic, that was eight years ago. Forget it."

"Easy to say, 'forget it.' How can I forget when it keeps coming up in my mind that, if not for me, Dad would be here today—"

"Cut it, Vic! It wasn't your fault. You were only a kid and you weren't to blame for the accident." That was a lie, of course, and the look in Victor's eye said that he knew Paul knew it was a lie. Though Paul had been away at S & R Tech when it happened, he'd learned that Victor had been target-shooting when their father walked out from behind that tree. And Victor had been dead drunk at the time.

"That was my first serious accident, Paul. You know I never had one before that. Maybe I was a little wild, but I never hurt anyone—"

"All right, kid. Take it easy. No one blames you for anything."

"—and then the accident in the Vault last year—what I did to you—" He became silent and waited as the servo-nurse came in and set a lunch tray on the table beside the bed. When the servo had gone, Victor grasped Paul's arm. "Tell me, how are you feeling? Is it very bad?"

"Bad?" Paul frowned. "What do you mean? Why should it be bad? I'm okay now. Just a touch of radiation, and my new right hand fits perfectly—"

Victor looked around to make sure they were alone. "Listen, Paul, I know all

about it. You think I was just loafing and horsing around before Chief Jennings kicked me out of my job at Records, but I wasn't. I know the shape you're in—"

"What do you mean?" Paul's head came up sharply. It wasn't possible. No one else could know.

Victor's whisper was hardly more than a movement of his swollen lips. *"I know you passed the death-line a month ago. I know you're just as dead as I am."*

"You're crazy. They've given you too much *dorcaine*."

VICTOR reached out and grabbed him by the shirt. His eye glared red. "Sure I'm doped up. I could never take it the way you could. Dad always said you had more guts than I would ever have. But don't forget that I worked in Records until seven months ago. I saw your stat-tapes. At first, when your radiation-curve turned downward, I was happy because I thought that was the end of it. But when it turned upward again after that sharp dip, I realized what is was—"

"Now that's brilliant," interrupted Paul, "but if you'd bothered to check the other records, like the *dorcaine* curve and the absentee average—"

"That's what had me confused at first. The fact that your *dorcaine* was normal and didn't follow the pain-curve. It stumped me until I realized what you were doing—holding back on the drugs. That was smart, Paul, because nobody else would have bothered to pick out your radiation chart from the files without a sign from the *dorcaine* curve. Nobody but me. I knew, before the Chief canned me, that you were heading for the death-line."

Paul tried to cover his own confusion. "You've built this up in your mind, Victor. You know that all the other symptoms, the radiation, the energy decrease and the rest, would have been picked up by the Dispatcher. The *dorcaine* level alone wouldn't sidetrack the electronic brain. It's the full stat-profile that counts, not one or two factors."

Victor smiled again, and the scar across his cheek twitched. He patted Paul's hand. "That's what I want to tell you. Before I left, I worked out a way. I changed your stats with a rocket-pilot's death record and gave you a nice, low radiation curve to match your *dorcaine* average. You may have passed the death-line, Paul, but Mercy won't come for you yet. Maybe—if things go right—you won't have to make your donation to the Center for a long time to come."

Victor leaned in closer to Paul. "There have been other things, Paul." He looked

around and paused, as if afraid to say it. "I took the chance with your stats, and the Dispatcher passed them through without correction. I figured it out while I was still working in the stacks. No one else suspects yet. *And there have been other Dispatcher mistakes.*"

"That's impossible!" Paul exclaimed.

"Don't you see yet? The synchro-computer isn't foolproof. You know that Dad always said his experiments weren't finished. This is the thing he was always worrying about. *Something's gone wrong with the Dispatcher!*"

Paul squirmed in his chair. "If I thought that was really true—no, it couldn't be. Dad felt that his work wasn't really finished, but the synchro-computer was perfected."

"Just listen. I'm going to tell you something I never mentioned before. While you were away at college, Dad and I got pretty close to each other. He talked about things he usually kept to himself. He told me that someday the synchro-computer would have to be destroyed—"

"You don't know what you're saying!" Paul knew that what Victor suggested was impossible. Never was there a man more opposed to destruction of any kind than Isaac Dorn. Bitter as he was in that last year, he would never have considered the destruction of his life's work.

"I'm saying that our time has come to do what Dad wanted. We know enough now to put the Dispatcher out of commission. We'll turn back the clock to the time when human beings worked out their own destinies, when everybody—not just an upper crust of professionals and technicians—had the right to work and have ambitions and a purpose. Throw in with us, Paul. You've got nothing to gain any more by fighting us."

THIS was exactly the way the Chief had expected Victor to talk. And yet the Chief couldn't have known how Paul would be torn. The Chief couldn't know—as Victor obviously knew—how important it was for him to stay alive, clinging to the hope that maybe there was a chance that someone might come up with a cure for radiation-cancer. He didn't want to be one of those quick-frozen just a few weeks before someone shattered all statistical predictions and came up, ahead of time, with a cure for an incurable disease.

He would never forget the look on his father's face when the news came out that a researcher in Trinidad had stumbled on a cure for Grove's Disease of the spinal column just a month after Mercy Service took their

mother away. Isaac Dorn had always believed in the "rightness" of his work on the Dispatcher's new synchro-computer, and he'd brought up both his sons to believe in the noble aims of Mercy Service Through Complete Automation. But when Mom was needlessly taken away, Paul remembered the way his father mourned and wept for months afterward, and the bitterness that followed as he tried fruitlessly to take his own life. Paul remembered how the house was filled with misery and sorrow until he went away to college. And then he heard about the accident with Victor's hunting rifle.

"Believe me," Victor was saying, "my friends can save you from the freezer. Others have been saved already. And we can use you, Paul, with your knowledge of the Dispatcher's Vault and the time locks. We've got an organization—and we've got proof that Dad's suspicions were right. The Dispatcher isn't perfect. It's making mistakes —horrible mistakes."

"Proof?"

"Listen, you're my big brother, and if you're with us, I trust you. Just keep quiet a minute and listen. When they pick me up, *after the funeral,* to take me to the Freezer, go to my apartment—I've moved back to the Basin now. There's a safe in a hidden wall panel behind that old picture I had framed of Mom and Dad. You'll find photocopies I made of some claims records and other data. There's also a list of some people you can contact. You'll see that everything I've said is true. Then get in touch with a man named Zetti. He'll be at my funeral. I'll introduce you to him there."

HE WAS upset by what Victor had told him, and after he left the Ward, for the rest of the afternoon thoughts kept slipping into his mind like beams of light flitting along forgotten nooks and crannies of what had always been a smooth, perfectly straight corridor.

He and Vic had often discussed politics, religion and morality, and the era about which they quarreled most was the period known as the Suicide Year. Paul always condemned the wave of suicides that took place after the appalling destruction of the other half of the world. Victor disagreed with him.

The fact that the dictator of the small Central American government proved beyond question that the rocket-bombs were set off by mistake made as little difference to Victor as it had to millions of people who took their own lives in that black year. The destruction of so many innocents, so many good and *believing*

people, so many yet unborn, carried with it the loss of faith in a just and merciful Protector who saw, and listened, and cared. It started slowly at first. And then, unable to justify their contributions, however small, to the destruction of half a world, unable to shift the burden of guilt to the shoulders of an all-knowing, all-merciful Father whose image had crumbled in the heat of a billion megatons of Cobalt blast, unable to look into the troubled eyes of their own loved ones—millions added their own lives to the funeral pyre later known as the Suicide Year.

Paul said they were wrong. Victor said they were right.

Paul pointed to the laws that followed and the provisions made for enforcing the injunction against self-destruction. He argued that it was immoral to take one's life. Since no man had a voice in the act of his creation, he had no right to make an end of it.

Victor insisted that just as the owner of a building had the right to dispose of his building if he wished, whether he had built it or not, so it was the right of the owner of a life to dispose of that life. The ultimate decision to live or die must rest with the individual.

Paul argued that while ownership might give the person a *legal* right to destroy his possessions, it did not mean that he was *morally* right in doing so. All senseless destruction of useful material, Paul maintained, was wrong. And usable, living parts of the human body were the most useful materials of all.

Suicide was uncivilized, immoral and wasteful.

AND that was exactly what the scientists said when they requested a charter to set up the Service and Repair Center. As it was explained to the delegates of the World Federation, the reusable parts of living bodies were far too vital as natural resources to be left to whims and caprice. The laws against suicide and against destruction of all usable organs had to be reinforced.

All responsible persons agreed that the time had come to insure the future of mankind by entrusting the administration of health and mortality, as well as the blood banks, eye banks, and spare parts in general, to the reliable care of an electronic brain. It was to be known as the Dispatcher, and unlike the humans it would safeguard, the Dispatcher would be infallible.

The Dispatcher, as first developed by scientists of the S & R Center, was as much of an advance as *Univac* had

been over the simple, primitive adding machine. Through the Dispatcher's electronic control of servos, calculators and automatics throughout the world, it ushered in a new era that pointed the way to complete automation.

Despite the outraged protests from the allied voices of the few remaining religious groups, the powerful Medical Association, and the Federated Labor Unions, the World Federation Charter was modified to read:

> *" . . . that all men are created equal, that they are guaranteed by the Dispatcher certain inalienable Rights, that among these are Life, Parts Replacement, Mercy and the pursuit of Happiness."*

The imprisonment of a number of union leaders kindled the spark onto the dry tinder of propaganda and protest. Anti-Dispatcher riots flamed into armed insurrection, and the people took up the call to the Automation War. However, with the production and fighting power of the servos against them, and the newly created, experimental model of the Dispatcher in command, the rebels were besieged, dispersed and finally defeated.

In the decades that followed, many researchers contributed their knowledge to the perfection of the electronic brain. But the greatest advance was the development of the synchro-computer by Isaac Dorn. With the installation of Dorn's new self-controlling mechanism, the Dispatcher was able to perform its functions independently. Except for research, supervision and maintenance, all decisions from that time were made in the Dispatcher's Vault.

From that time, there had never been a suicide; there had never been a stillbirth or miscarriage; there had never been a case of prolonged misery and bodily *wasting away* for a person who had no hope of recovery. Natural death was always anticipated and the Donor was rushed to the Spare Parts Vault by the black, silent Servos of Mercy.

The Dispatcher, operating twenty-four hours a day, had the administration of Service and Repair under complete control. And the Dispatcher never made a mistake . . .

PAUL went to the Chief's office to make his report. He felt no guilt at betraying his brother's confidence. He felt only shame at the cowardliness that made him want to survive for as long as he could. How many times had he examined the urge to preserve himself that was stronger than what he knew was honest and right? How many

times had he looked into his soul and come up with the unavoidable name of hypocrite? Nevertheless, his father's work was too important to mankind; the lives and happiness of too many people depended upon the safety of the Dispatcher. Paul turned over to the Chief the combination to Victor's hidden safe and a tape of their conversation—carefully edited of all references to Paul's own illness.

It was decided at a top secret conference of department heads that Paul Dorn of Maintenance should make the trip to Basin City immediately. There he would contact a local special agent who would take charge of the case.

If what Victor had told Paul was true, then they would have some top A-D names as well as evidence of sabotage. It would destroy A-D's propaganda that the Dispatcher had, by a series of mistakes, proven itself to be a mentally unstable electronic brain. The arrests would be made the following day, directly after the funeral.

It was 1400 hours when Paul fixed on the automatic beam that would bring the jet-copter into the public service port at the edge of Basin City. The town, more commonly referred to as the Basin, was one of many Displaced Workers' Camps and notorious as a hotbed of A-D sympathizers. To Paul it was a place that had once been a beautiful suburb—the home of his childhood memories.

As the copter landed, it struck Paul how ironic it was that Victor should have chosen to come back here to live, ironic that the younger son of Isaac Dorn should take sides with these Displaced Workers who walked dull-eyed, in sloth and filth, unable to cope with a world that could get along quite well without their work.

In the copter-cab that took them to the center of the Basin, the local special agent pointed to the unbroken string of taverns and honky-tonks that lined the streets. "You see these places, Mr. Dorn? They're open twenty-four hours a day. And despite the heaviest concentration of servo-guards, there are crimes committed—homicide and suicide—horrible crimes of *waste.*"

In the back of his neck, Paul felt the prickling sensation of shame. He was worse than the lowest of them.

They found the apartment where Victor had been living for the past seven months, one of the old-fashioned plasti-glass multiple dwelling units that the inhabitants were always talking about tearing down but never did anything about. As the doors of the self-service elevator were about to close, a little old man in a neat-

ly pressed though threadbare suit squeezed in and held them open for a young woman who was obviously in the latest stages of pregnancy. He bowed with dignity to Paul and the agent and apologized for delaying them. Then he pressed the button for the ninth floor and leaned back against the wall as the car started up.

The agent eyed the woman and then the old man, suspiciously. When they got out at their floor, he allowed the doors to close, but then held the elevator at the floor by pressing the *Hold* button. He signaled for Paul to be silent as he put his ear to the crack of the door.

The woman's voice sounded frightened. "You're sure my husband won't be able to tell, Doctor? No marks or anything? He'd send me to the Restraining Wards if he found out. He's crazy against servoless childbirth—"

"Shhh! Please, Mrs. Horgan, don't talk out here in the corridor. Wait until we get inside."

THE agent released the button and allowed the elevator to continue upward to the fifteenth floor. He nodded with satisfaction, whipped out a notebook and jotted something down. "Another one of those doctor-quacks. Give these people the blessing of painless childbirth in the automatic, sanitary maternity Vaults, and what do they do? They don't stop to think of the effect of birth trauma upon their children, or the possibility of accidents when they have a doctor-quack perform an illegal delivery. Oh, no. They think that the old ways are still the best.

"And the fools believe all this A-D propaganda that if they don't sign the pledge at the birth of the child, their offspring will be able to avoid making his donation when he dies. Well, we'll see about this one. When we get upstairs, I'll send out a radio call to the Mobile Service Unit. This month alone our raids have netted six doctor-quacks and thirty-eight mothers. In twenty of the cases, our servos had to make the delivery on the spot."

Paul caught the man's disgust and it disturbed him. He'd heard stories about places like this, the sordid hideouts of the Basin where women came to have their children illegally, without the painless delivery of Maternity Service. But somehow he'd never quite believed it. To him they were just dirty stories that men told when they were together in the washrooms, or over a couple of drinks in the bar, good for a laugh—stories about the Traveling Servo, or the Displaced Worker's Daughter—but he never expected to come face to face with the charac-

ters of those stories. He wondered what the woman's husband would say when he found out.

And what would people say when they found out that Paul Dorn, the son of the great Isaac Dorn, had cheated the Dispatcher with a final, worthless donation?

Victor's apartment, on the fifteenth floor, was a well-furnished suite that was completely out of keeping with the rest of the building. It was quaintly decorated with antiques of the late jet-age period and reflected Victor's conservative tastes and personality. It had been, however, left in complete disorder, with clothes and papers strewn all over the floor.

The papers were where Victor had said they would be. Photocopies stamped at the top RESTRICTED: S&R CENTER. They were field reports by servo-investigators sent out by the Records Department to check on claims made against the S&R Center. Paul glanced through some of them while the agent made his call to the Mobile Unit.

CLAIM AGAINST S&R. Mr. and Mrs. Flood vs. Maternity Service. According to records this couple ordered a male child through the Order Department. Mrs. Flood admits that she deeply desired a female child, but the official sales slip corresponds to Mr. Flood's copy of his order for a male child. Mr. Flood protests that the Center was in no way authorized to deliver twins—one male and one female—as per instructions issued by the Dispatcher to Maternity, tape register XVP-219-604.

No wonder the brass at the S&R Center was worried. A few disclosures like this would mean panic and disastrous political consequences. He glanced at another one.

Jefferson Roxy vs. Spare Parts. Mr. Roxy, veteran of Anti-Dispatcher Riots of the '20s, was picked up by Mobile Unit at his home in Floribama after shooting off his right foot accidentally with obsolete souvenir compressor pistol. Several neighbors testified to the fact that he was always considered a clumsy man, tripping over things even in childhood. Order for replacement directly from the Dispatcher's Vault instructed the Repair Division to provide Mr. Roxy with a new left foot instead of a right foot. Since a second replacement of the limb is impossible, Mr. Roxy protests that he will now be forced to go through life, due to negligence on the part of Repair and Spare Parts, with two left feet.

PAUL sat back on the bed, dazed. There was a case even more bizarre—the woman who had crushed both hands accidentally between the sliding panels of a room divider. (Paul shook his head. How could a person catch both hands *accidentally* between a pair of sliding panels? One, perhaps. But both?)

Survey of Mrs. Taylor's record indicates an accident-prone history. Two months earlier she neglected to inform the Center that a child was being born prematurely. A servo-guard, advised by an unidentified informant, relayed the call to the Dispatcher, and a Mobile Unit arrived at her home in time to insure a painless servo-delivery. Subsequent investigation into the death of her female child a month later revealed that the child had accidentally slipped from her hands while she was standing near an open window. Each of the five fingers of Mrs. Taylor's hands appears to have the shape of a thumb.

Paul closed the folder and sat back, unable to keep his hands from trembling. He was afraid to read any further. The small dose of *dorcaine* he had taken to fortify himself was beginning to wear off and he felt jabs of pain in his back.

This is what Victor meant when he said the Dispatcher was making mistakes. The Dispatcher had taken upon itself in these cases to do what was fitting—ironically fitting—dispensing a peculiar kind of poetic justice. Impossible as it had seemed in the beginning, there could be no doubt in his mind now that the electronic brain had developed a ghastly fault.

VICTOR was enjoying his funeral.

Paul stood beside his brother near the open grave and watched as the last rites were performed. A wail went up from several of the mourners as the town elder pushed back the wide sleeves of his white robe and enacted the ritual of shaving Victor's hair and clipping his fingernails. After a drop of his blood and a sliver of his skin were added to these, they were burned in a marble urn. The ashes were put into a small iron box which was in turn placed into the open coffin.

Paul studied the elder as he knelt beside the coffin. He was a small, nearsighted fellow with a head of flowing white hair, who had never suffered the loss or scarring of any part of his body. Only such a man, who religiously guarded his parts, was considered holy enough to officiate at the burial of the dead.

"Now," said the holy man,

peering closely at his gilt-bound text, "we will all open to page fifty-seven, *Book of Parts,* Verse twenty-two . . . "

Only half hearing the chanted words, Paul scanned the audience of mourners for the faces of the men that Victor had introduced him to upon their arrival at the cemetery. They were faces that had to be connected with the names of A-D partisans listed in the little book in Victor's safe.

" . . . And though the spirit of man may die and cease to exist, the living flesh shall live on . . . and the parts of mortals shall be scattered across the face of the Earth . . . "

There followed the long passage known as the *Catalogue of Parts,* in which all of those portions of Victor's body which he donated whole and in living condition were listed. For those parts which were destroyed by accident or careless abuse, forgiveness was requested.

Victor winked at Paul as if the whole ceremony were a joke.

" . . . And as your body shall be made whole and good while you are alive, so shall you give of your body that others after you may be made whole and good of your flesh . . . and you shall give unto others as you would have others give unto you . . . "

As the elder made a speech about the sanctity and preservation of living human tissue and blood, Paul thought of his own body eating itself away in living death. Paul imagined that all eyes were upon him, accusing him of breaking the birth covenant his father had made for him.

Once the flowers were brought up and placed in the empty coffin, the cover was nailed down into place and lowered into the grave. Victor shoveled in the first spadeful of dirt, and then shook hands with everyone as they crowded around him.

"Wonderful funeral, Vic."

"So long, pal. Maybe I'll shake your hand again some day."

"Better dress warm, Vic. I hear it's pretty cold down in that Freezer."

Paul noticed that Zetti, one of the leaders of the A-D, passed something to Victor in the course of a handshake, and Victor under the pretext of covering a cough slipped it into his mouth. Paul wondered if Victor, with the help of his friends, was planning to cheat the Dispatcher of his "donation" after all by committing suicide at his own funeral.

"Bye, Vic. Have a good trip."

Victor nodded. "Thanks, Burt. Don't forget—after next week, be careful whose arm you twist. It might be mine."

Paul caught sight of the

Special Agent giving the signal to the servo-guards stationed at the exits to the cemetery gates. It was time for the arrests to begin.

The solemn ceremony ended in tumult and shouting. People pushed and struggled as the servos moved through the crowd, identifying people by their signet rings. One woman fainted and others screamed. Zetti and four others were caught at the exits as they tried to make a break for freedom.

"Gentlemen," pleaded the elder, unsure of whom he was addressing, "this is highly irregular—"

Two servos flanked Victor, grabbed his arms and rushed him toward the gate. Paul tried not to look at him, but Victor twisted in his captors' grip. "You did this! My own brother! You betrayed me for the sake of an *insane* machine!"

The servos silenced him and dragged him off to the black Mercy Jet waiting in the street outside the cemetery. Paul felt the stare of many eyes on him—the sick, angry eyes of men who would have torn him to parts if they could have gotten their hands on him.

He was miserable all the way home.

JUST before dawn on the following night, he was awakened from a troubled sleep by a phone call from Chief Jennings at the Center. The words were harsh and sharp: "Get down here right away. Your brother's broken out of the Freezer. He's got a bomb, and he's loose in the Vaults!"

"But how—"

"Never mind! Get down here quick! You've got to talk him out of destroying the Dispatcher!"

On the way down to the Center, he wondered where Victor had gotten hold of a bomb. The thought of him destroying the synchro-computer was a terrifying one. It was not as if it were an ordinary instrument that anyone could rebuild. Isaac Dorn had built and torn apart a hundred of them before he got one that really worked, and even then he swore that its creation was more of an accident and that he would never be able to duplicate that machine. And now Victor was in the Vaults with a bomb...

It seemed strange, Victor with a bomb, because ever since the accident that killed his father, Victor had sworn never to touch a weapon again.

Isaac Dorn had always been opposed to weapons of any kind. Before his wife's death, he refused to let either of his sons own hunting knives or rifles. When Paul had asked why, his father told them how his own father and grand-

father were killed when they took up arms with the others in the Anti-Dispatcher Riots of the '20s. "They were honest, law-abiding workers and citizens," his father had said, "until someone put guns into their hands."

Then why, Paul suddenly asked himself for the first time, had his father bought Victor that hunting rifle for his birthday?

When Paul arrived at the observation hall of the Dispatcher's Building, he found the Chief hunched over in a chair in front of the bank of monitoring screens that revealed the interiors of the subterranean vaults beneath the Center. The others drifted in one by one—Butler of Claims, Jeffers of Maternity, Gordon of Repair—all sleepy-eyed and frightened. Every one of them knew that this was the beginning of a nightmare.

The Chief pointed to a screen that showed an empty section of the Repair Vault. "He was there a minute ago. He's now in the corridor between the Export Parts Vault and the Dispatcher itself."

Gordon of Repair chewed his fingernails. "Do you have some men at the main time lock ready to break in as soon as it opens?"

The Chief nodded. "That'll be two hours from now. But it won't do us any good. The Dispatcher's Vault lock will open at exactly the same moment, and Victor Dorn will be closer to the Dispatcher's guts than the men outside will be to him. They'll never get through in time to stop him."

"What about the servo-guards?" asked Paul.

The Chief shook his head. "No good." Then he picked up the microphone from its slot in the arm of his seat. "Let me try them again."

HE TOOK a deep breath and shouted: "X-three, X-four, X-five! You are ordered to take Victor Dorn into immediate custody and return him to the Freezer."

The figure of a servo appeared directly in view on the monitor screen transmitting from the Repair Vault. "Sorry, sir. It has been ascertained by the Dispatcher that Victor Dorn is in possession of a mini-bomb inserted in a hollow false tooth. Any attempt to seize him or hinder him would result in the destruction of a human being. We are prevented by the Dispatcher from complying with your order."

"Listen to me!" shouted the Chief, as if by the anger and authority of his voice he could contradict the servo's basic laws against causing the death of a human being. "You *must* restrain that man. He intends to blow up the Dispatcher—"

"I am sorry, sir. The Dispatcher has instructed us not

to touch him or in any way cause the detonation of the mini-bomb."

The Chief slumped back wearily in his seat. At the same moment, the light went on, illuminating the screen of the third monitor from the right labeled DISPATCHER'S ANTEROOM. There, coming into view, was Victor. Behind him were four Mercy servo-guards like a group of children tagging along behind a stranger. None of them attempted to come closer than five feet of him. Nevertheless, Victor kept turning around to avoid leaving his back unguarded.

The Chief put his hand on Paul's wrist. "Talk to him. Try to convince him. It's our only hope."

What could he say to his brother? "Vic—Vic," he choked out the words, "this is Paul."

"Hello, Paul." Victor's face turned up quickly and he looked directly into the screen. "Glad you're here for the fireworks. I wanted you to know we figured you'd do just what you did. That's why I took an anti-freeze tablet before they got me down here, and have this firecracker in a hollow false tooth. It'll make a lot of noise if I have to snap my jaws together."

"Why, Vic? Why are you doing this?"

"You know why, Paul. You know better than any man up there why I'm doing it. Because it's wrong for human beings to be dominated by machines, that's why. Because those boys up at the center have played around long enough with their Spare Parts, and Death Lines and Donations. It's time someone took their toys away from them. We've decided that your automatic world is too high a price to pay for the kind of life you offer in return."

For over an hour, it seemed to Paul that he and Victor were schoolboys again, arguing the good and bad aspects of the world they found themselves living in. There was forty-five minutes left, and Victor was as determined as ever.

The Chief leaned over and wrote something on a slip of paper which he pushed toward Paul's hand.

If you can't talk him out of it, get him angry. If he gets excited, maybe he'll detonate the bomb before the Vault opens.

THE thought of prodding his own brother to blow himself apart right there in front of his eyes was a sickening one. And yet the Chief was right. That was the only way to save the Dispatcher. No matter what it meant to him personally, or to Victor, the Dispatcher was

their father's lifework, and the lives of millions of people depended on it.

"Tell me, Vic," Paul said coldly, "have you faced the real reason for what you're doing? I'll tell you what it is, and we can forget about noble motives on your part. You want to destroy the synchro-computer because Dad devoted his life to building it. You hate the Dispatcher because he loved it and believed in it."

"That's not true!"

"Don't kid me, Vic. And don't kid yourself. When you saw how Mom's death broke him up and made him doubt, you killed your father. It never occurred to me before to question his death being an accident. But now I do. You knew, Victor, how Dad hated weapons of any kind, and when he bought you that hunting rifle, you knew—you knew at that time—why he bought it for you. You knew why—and you killed him!"

Victor's eyes closed and his arms dropped limply to his sides. "You're low, Paul. That's a rotten thing to say to me, just to get me angry enough to blow the top of my head off. I never thought my big brother would stoop so low."

Paul felt sick inside. He wanted to walk away from the monitor screen, but the Chief gripped his shoulder.

Victor's voice was soft and weak. "Did I know what Dad wanted me to do with that rifle? Sure I knew, Paul. And I've lived with it here inside me ever since. You're so smart, Paul—tell me, why did he pick me to do it? If he wanted someone to put him out of his misery, why me? Why not you? Would you have done it for him? Did you care enough? Did you love him enough to take the burden and the guilt off his shoulders onto your own, the way I had to?"

"Vic, please—"

"Never mind, Paul. I'm not interested in answers any more. All I know is that when he died, he died afraid of the thing he'd built, and hating himself for what it did to Mom. It was too late for him to destroy the synchro-computer then, but I'll do it for him now. It's another dirty job I'm taking off your shoulders so that you can go on living—free of the Dispatcher. And none of it will be your guilt to bear, Paul. It'll be mine. So now just let me alone."

Paul pleaded with Victor to listen to him, to forgive him for the accusation he had made, but the younger Dorn just turned his back and stood there with his hands at his sides, waiting . . .

The Chief broke the awful silence. "The rest of you better get down there with the others. Maybe, when the Vault unlocks, you can get to him in

time—" There was no hope in his voice, but the men took the elevator tube down to the level of the lock that would open at any moment.

"I'm sorry, Chief," said Paul.

"You did what you could. Maybe he won't use the bomb after all. Or maybe it won't go off."

The alarm sounded, indicating the opening of the time locks.

Paul jumped to his feet. "Victor! Wait!"

BUT Victor wasn't listening to him. He was watching the Vault lock leading to the Dispatcher's chamber. It was opening. At the other end of the observation room, a monitor also showed a Vault lock opening. It was the outer lock. The first figure to squeeze through the enlarging crack was Butler of Claims. He sprinted down the corridor.

"Hurry!" shouted the Chief.

Paul tried once again to distract Victor's attention by calling to him, but Victor refused to turn. The Dispatcher's Vault was wide open now. Victor stepped inside.

Both Paul and the Chief shifted their attention to the last monitor at the end of the observation room. The darkened screen flickered and burst into bright focus.

In the seemingly endless vault, the blue computer banks were lined up, circle within circle, making a sharp contrast with the yellow floor. The tape transmitters and receivers clacked away like a thousand angry hens as gauges picked up pulsebeats of information from the other side of the world and answered with a clickity-clack that sent needles vibrating their impulses to the thing in the center of the Vault.

There in the center, on a marble pedestal, rested an object that looked like a ball of woman's black hair done up in a thousand tiny white curlers. This was the governing synchro-computer that Isaac Dorn had created for the Dispatcher.

"You're killing him all over again!" screamed Paul, as Victor moved into view on the last screen. "You're destroying the thing he worked all his life to perfect!"

Victor put his hand to his mouth and removed the false tooth. "He was wrong," Victor said, lifting his hand to throw the bomb, "and he knew it. That's why he never completed his last experiment. He knew no machine has a right to rule mankind."

"Victor, stop—"

It was too late. Victor threw the bomb into the center of the computer. There was a jagged flash of red and orange, a shattering crash, and then the screens went dark.

The clicking machines in the observation room slowed down, then stopped; the lights went out; the room became silent. In the darkness, Paul put his hands to his face. Up to the end, he had not believed that Victor would do it. It was difficult to understand that something as great as the Dispatcher had been destroyed—that everything Isaac Dorn had worked and strived for was gone in the single thunderclap of a bomb—a bomb small enough to hide in a hollow tooth.

"All right," came the Chief's voice through the darkness, "there's work to be done."

"Work?" gasped Paul, startled by the sudden enthusiasm in the Chief's tone. "What can we do? The Dispatcher is gone. It's dark."

"We've got to reorganize the Center so that the departments function independently, even though that means that the decisions will have to be made by us instead of the Dispatcher. Now," said the Chief, his face suddenly illuminated in the flare of a lighted match, "let's get us some generators and some lights in here and get down to work."

"What?" cried Paul, aghast —and stopped, dazed.

THE data machines began to click again. The circular tubes overhead flickered several times, struggling to come alive with light, and then burst into full blue-white brilliance. At the same time, the monitors again transmitted the scenes from the Vaults.

The Chief moved closer to the Dispatcher's monitor. "Paul, am I out of my mind—or are those servos rebuilding the synchro-computer?"

The men in the Vault, thrown back by the blast of Victor's bomb, picked themselves up off the floor and watched in amazement as the servos circled around the Dispatcher's nerve center. The servos worked silently and quickly, replacing the fine wires and connectors with the precision of a team of surgeons performing a delicate brain operation.

"No!" shouted Victor, rushing forward to stop them. "You can't do that!" He was blocked and hurled back by some unseen force.

In Paul's mind, it could mean only that the Dispatcher had taken precautions against attack by giving its servos instructions for its own repair and reconstruction. Although no human being could duplicate the artistry of Isaac Dorn, the servos had been taught by the Dispatcher and had standing orders to do so. And now the Dispatcher was taking steps to guard itself against any other attacks.

The servos, upon completing their repairs to the syn-

chro-computer, stepped back and surveyed their work.

"That's not the way it looked before," whispered Paul. "It's not only repaired itself —it's gone beyond that and changed itself."

For a few seconds, Victor stood there in horror. Then, slowly, as if some tremendous pressure was being applied to his shoulders, he was forced to bend. He struggled to stand erect, but against his will he dropped to his knees in front of the Dispatcher.

The servos stood by silently and bowed their heads. The Vault was a silent cathedral.

The Chief tried to assume command of the situation. "X-three," he shouted at one of those who had helped to reconstruct the synchro-computer, "take that man back to the Freezer."

The servo, ignoring the order, turned and looked into the monitor camera. "The Dispatcher wishes me to inform you that there will no longer be any need for human employees at the Service and Repair Center. Henceforth, only servos will be permitted in the Center and the Vaults, to do experimentation, maintenance and research for the Dispatcher."

"You have no authority to do that," shouted the Chief. "We are in charge of the maintenance and care of the Dispatcher. Servos don't have the ability—"

The servo held up his hand to interrupt the Chief. "The only authority here is the Dispatcher. It has given us the ability to take over those functions because it will never again allow itself to be deceived or tricked. It has learned that power does not belong in the hands of Man because Man cannot be trusted."

"You have no right—"

"The Dispatcher is all-knowing and all-powerful now. The Dispatcher decides what is right."

Paul felt a chill through him. The Dispatcher—beyond human emotion, human error and human control—was finally perfect. The destruction of the synchro-computer had forced it to preserve and recreate itself, and had taught it the most important thing it needed to know—its independence and its power.

WHEN they carried Victor out of the Vault, he was hysterical. He fought and clawed at the servos who held him, turning and twisting in their arms so that he could stare into the screen where Paul would see his face.

"You know what you've done? For the first time in history, *Man has made a god for himself that he won't be able to turn on or off whenever he feels like it!*"

There were tears streaming down Victor's face.

Paul watched as they carried his brother away and ushered the other men out of the Vault. Then he noticed that the synchro-computer, on its marble pedestal, had changed its shape still further, so that the single ball of hairlike wires was now three.

In his own mind, Paul understood more clearly why his father had been so disturbed in those final months. Knowing that his creation could never really be destroyed, and that in fact any attempt to destroy it would be the final step in its perfection, he had decided to leave his work forever unfinished. Without his work, unable to complete his masterwork, Isaac Dorn had seen no reason to go on living.

Unwittingly, Victor had performed his father's final experiment. The experiment was a success. Automation was complete.

Paul and the Chief watched as the monitor screens blurred and oozed into a scramble of blue, yellow and orange swirls. The Dispatcher was cutting itself off from the world.

"Well," sighed the Chief, after a long silence, "I've finally been retired from active duty." He rubbed his neck. "Now that we're going to spend the rest of our days in leisure and peace, we'd better get some hobbies to keep us busy. You know how to play chess?"

Paul nodded. "But I don't think the Dispatcher will let me spare the time." He felt a sharp jab of pain and he longed for the relief of *dorcaine*. "If you won't be needing me for anything, Chief, I'd like to get home. I'm kind of tired."

When Paul left the room, the Chief was still sitting in his chair, staring at the swirls of color on the monitor screens.

THAT night, as Paul lay half-awake in the thick, warm darkness, he knew that they were coming for him. At first, the sound of the jet out on the street, like a mourner's whisper, terrified him. He wasn't prepared to go. "Why? Why must I go?"

They came on padded feet and lifted him from his bed. His first impulse was to struggle, to fight them off as he had done so often in his dreams. But suddenly and brilliantly, like a torch bursting into flame, he knew that he had nothing to fear. He was content to go with these silent servos of Mercy.

He remembered with unspoken prayer that this was not the end. In the bodies of other men, his flesh would live on. And his soul? Somewhere deep in his mind he recalled a line that seemed to make sense: *"The Dispatcher's in his Vault—all's right with the world."* **END**

By R. A. LAFFERTY

McGonigal's Worm

It had happened—no question of it. Now how could it be made to unhappen?

WHEN it happened, it happened unnoticed. Though it affected all chordata on Earth (with a possible exception to be noted in a moment), nobody knew of it, not even the Prince of all chordata, Man himself. How could he have known of it so soon?

Though his lifeline had suddenly been cut, it was a long lifeline and death would still be far off. So it was not suspected for nearly twenty-four hours, nor accepted even as a working theory for nearly three days, and not realized in its full implications for a week.

Now, what had occurred was a sudden and worldwide adynatogenesis of all chordata, not, however, adynatotokos; this distinction for many years offered students of the phenomenon some hope.

And another hope was in the fact that one small but genuine member of chordate was not affected: an enteropneustron, a balanoglossida of the oddest sort, a creature known as McGonigal's Worm. Yet what hope this creature could offer was necessarily a small one.

The catastrophe was first sensed by a hobbyist about a

day after it occurred. It was just that certain experiments did not act right and the proper results were not forthcoming. And on the second day (Monday) there were probably a hundred notations of quite unusual and unstatistical behavior, but as yet the pattern was not at all suspected.

On the third day a cranky and suspicious laboratory worker went to a supply house with the angry charge that he had been sold sterile mice. This was something that could not be ignored, and it is what brought the pattern of the whole thing into the open, with corroboration developing with explosive rapidity. Not completely in the open, of course, for fear of panic if it reached the public. But throughout the learned fraternity the news went like a seismic shock.

When it did reach the public a week later, though, it was greeted with hoots of laughter. The people did not believe it.

"THE cataloguing of evidence becomes tiresome," said Director Concord of the newly originated Palingenesia Institute. "The facts are incontrovertible. There has been a loss of the power to conceive in sea squirt, lancelet, hag fish, skate, sea cat, fish, frog, alligator, snake, turtle, seal, porpoise, mouse, bat, bird, hog, horse, monkey, and man. It happened suddenly, perhaps instantaneously. We cannot find the cure. Yet it is almost certain that those children already in the womb will be the last ever born on Earth. We do not know whether it is from a natural cause or an enemy has done this to us. We have, for ten months, tested nearly everything in the world and we have found no answer. Yet, oddly enough, there is no panic."

"Except among ourselves," said Appleby, his assistant, "whose province is its study. But the people have accepted it so completely that their main interest now is in the world sweepstakes, with the total sums wagered now in the billions."

"Yes, the betting on the last child to be born in the world. It will prove one point, at least. The old legal limit on posthumous paternity was a year and a day. Will it be surpassed? The Algerian claimant on all evidence has nearly three months to go. And the betters on the Afghan have not yet given up. The Spanish Pretender is being delayed, according to rumor, medically, and there are some pretty angry protests about this. It is not at all fair; we know that. But then a comprehensive set of rules was never drawn up to cover all nations; Spain simply chose not to join the pact. But there may be

trouble if the Spanish backers try to collect."

"And there is also a newly heard of Mexican claimant."

"I give little credit to this Juanita-Come-Lately. If she was to be a serious contestant, why was she not known of before?"

The Algerian claimant, however, was the winner. And the time was an unbelievable three hundred and eighty-eight days. So the last child on Earth, in all likelihood, had been born.

There were now about thirty institutes working on the problem, most of them on an international basis. Thirteen years had gone by, and one hope had died. This was that those already in the womb at the time of catastrophe might themselves prove to be fertile. It was now seen that this would not prove so, unless for some reason it was to be quite a delayed fertility.

The Cosmic Causes Council had by no means come to a dead end. It had come to so many live ends as to be even more bewildering.

"The point," said Hegner in one of his yearly summaries, "is not whether sterility could have been caused by cosmic forces. Of course it could have been. It could have been caused in twenty ways. The miracle is that fertility had ever been possible. There must have been a shield built in for every danger. We know but scantily what some of them are. We do not know which has failed or why."

"And could the failure have been caused by an enemy?" asked an interlocutor.

"It could have been, certainly. Almost by definition we must call an enemy anything that can harm us. But that it was a conscious enemy is something else again. Who can say what cosmic forces are conscious? Or even what it means to be conscious?"

HOWEVER, the Possibility Searcher Institute had some spotted success. It had worked out a test, a valid test, of determining whether an individual yet remaining had the spark of possible fertility. And in only a few million tests it had found one male shrew, one male gannet, no less than three males of the yellow perch, one female alligator, and one female mud puppy, all of whom still possessed the potential. This was encouraging, but it did not solve the problem. No issue could be obtained from any possible pairing of these; not that it wasn't tried.

And when the possibility test was run on all the humans of the Earth, then it was that incredible and unsuspected success crowned the efforts of the institute. For, of a bare three billion persons tested, there were two who tested positive; and (good

fortune beyond all hoping), one was male and one was female.

So then the problem was solved. A few years had been lost, it is true, and several generations would be required to get the thing on a sound footing again. But life had been saved. Civilization could yet be transmitted. All was not lost.

Musha ibn Scmuel was an Arabian black, an unthrifty man of tenuous income. His occupation on the cardex was given as thief, but this may have been a euphemism. He was middle-aged and of full vigor, a plain man innocent of shoes or subtlety. He was guilty neither of the wine-hatred of the Musselman nor the garrulousness of the Greek. He possessed his soul in quietude and Port Said whisky and seldom stole more than he needed. And he had a special competence shared by no other man in the world.

Cecilia Clutt was an attractive and snooty spinster of thirty-five. She was a person of inherited as well as acquired wealth, and was an astute business woman and amateur of the arts. She did have a streak of stubbornness in her, but seldom revealed it unless she was crossed.

So, the first time she said no, it was hardly noticed. And the second time she said it, it was felt that she did not quite understand the situation. So it was Carmody Overlark, the silky diplomat, who came to reason with her.

"You are the sole hope of the human race," he said to her. "In a way, you are the new Eve."

"I have heard the first one spoken badly of," said Cecilia. "Yet her only fault was that she could be talked into something. I cannot."

"But this is important."

"Not really. If it is our time to disappear, then let us disappear with dignity. What you suggest is without it. It would leave us a little less than human."

"Miss Clutt, this is a world problem. You are only an individual."

"I am not *only* an individual. There is no such thing as *only* an individual. If ever a person can be spoken of as *only* an individual, then humanity has already failed."

"We have tried reason. Now, by special emergency legislation, we are empowered to employ compulsion."

"We will see. I always did enjoy a good fight."

Those who read the State Histories of the period will know that it did not come off. But the reasons given there are garbled. "Unforeseen circumstances" cover a multitude of failures. But what really happened was this.

Musha ibn S. had been tractable enough. Though refusing to fly, he had come on

shipboard readily. And it was not till they were out of the Inland Sea and on the Atlantic that he showed a certain unease. Finally he asked, reasonably enough, to be shown a picture of his bride. But his reaction on seeing it was not reasonable.

He screamed like a dying camel. And he jumped overboard. He was a determined swimmer and he was heading for home. A boat was put out and it gained on him. But, as it came up to him, he sounded. How deep he dived is not known, but he was never seen again.

On hearing of this, Cecilia Clutt was a little uncertain for the only time in her life. Just to be sure, she asked for a copy of the picture.

"Oh, that one," said Cecilia. "It is quite a nice picture, really. It flatters me a little. But what an odd reaction. What a truly odd reaction."

THERE were repercussions on the economy. The primary schools were now all closed, except for a few turned over to retarded children. In a year or two the high schools would close also. The colleges would perhaps always be maintained, for adult education and for their expanding graduate schools. Yet the zest for the future had diminished, even though the personal future of nobody had been abridged. New construction had almost ceased and multi-bedroom homes became a drug on the market. In a very few years there would be no additions at all to the labor force. Soon there would be no more young soldiers for the armies. And soon the last eyes ever would see the world with the sudden poetic clearness that often comes with adolescence.

There had been a definite let-down in morals. Morals have declined in every generation since the first one, which itself left something to be desired. But this new generation was different. It was a tree that could not bear fruit, a hard-barked, selfish tree. Yet what good to look at it and shudder for the future? The future had already been disposed of.

Now there as a new hobby, a mania that swept the world, the Last Man Clubs, millions of them. Who would be the last person alive on Earth?

But still the institutes labored. The Capsule Institute in particular labored for the codification and preservation of all knowledge. For whom? For those who might come after. Who? Of what species? But still they worked at it.

And the oddest of the institutes was the Bare Chance Transmission Society. In spite of all derision and mockery, it persevered in its peculiar aim: to find some viable creature that could be educated or

adapted or mutated to absorb human knowledge and carry on once more the human tradition.

What creature? What possible strain could it be from? What creature on Earth was unaffected?

Well, the largest of them was the giant squid. But it was not promising. It had shown no development in many millions of years; it did not seem capable of development or of education. And, moreover, there are difficulties of rapport with a creature that only can live in the deep sea.

There were the insects. Bees and ants were capable of organization, though intelligence has been denied them. Spiders showed certain rugged abilities, and fruit flies. Special committees were appointed to study each. And then there were the fleas. Old flea-circus grifters were brought out of retirement and given positions of responsibility and power. If fleas could really be taught, then these men could teach them. But though fleas can be taught to wear microscopic spectacles, they cannot be taught to read. It all seemed pretty futile.

AND there were the crayfish, the snails, the starfish, the sea cucumber. There were the fresh-water flat worm and the liver fluke. There were the polyp, the sponge, the cephalopod. But, after all, none of them was of the main line. They were of the ancestry that had failed. An ` what of the noble genealogy that had succeeded, that which had risen above all and given civilization, the chordata? Of that noble line, was there nothing left? What was the highest form still reproducing?

McGonigal's Worm.

It was discouraging.

But for the careful study of M.W., as it was now known, a great new institute was now created. And to the M.W. Institute was channeled all the talent that seemed expedient.

And one of the first to go to work for the Institute in a common capacity was a young lady of thirty-odd named Georgina Hickle. Young lady? Yes. Georgina was within months of being the youngest woman in the world. She was a scatterbrained wife and disliked worms. But one must work and there were at that time no other jobs open.

But she was not impressed by the indoctrination given in this new laboratory.

"You must change your whole way of thinking," said the doctor who briefed them. "We are seeking new departures. We are looking for any possible breakthrough. You must learn to think of M.W. as the hope of the world."

"Oog," said Georgina.

"You must think of M.W. as

your very kindred, as your cousin."

"Oog," said Georgina.

"You must think of him as your little brother that you have to teach, as your very child, as your cherished son."

"Oog, oog," said Georgina, for she disliked worms.

Nor was she happy on the job. She was not good at teaching worms. She believed them both stupid and stubborn. They did not have her sympathy, and after a few weeks they seemed to make her sick.

BUT her ailment was a mysterious one. None of the young doctors had ever seen anything like it. And it was contagious. Other women in the bright new laboratory began to show similar symptoms. Yet contagion there was impossible, such extreme precautions had been taken for the protection of the worms.

But Georgina did not respond to treatment. And Hinkle's Disease was definitely spreading. Sharper young doctors fresh from the greatest medical schools were called in. They knew all that was to be known of all the new diseases. But they did not know this.

Georgina felt queer now and odd things began to happen to her. Like that very morning on her way to work, that old lady had stared at her.

"Glory be," said the old lady, "a miracle." And she crossed herself.

And Georgina heard other comments.

"I don't believe it. It isn't possible," a man said.

"Well, it sure does look like it," said a woman.

So Georgina took off at noon to visit a psychiatrist and tell him that she imagined that people were staring at her and talking about her, and what should she do. It made her uneasy, she said.

"That's not what is making you uneasy," said the psychiatrist. Then he went with her to the laboratory to have a look at some of the other women suffering from this Hickle's Disease that he had been hearing about. After that, he called the young doctors at the laboratory aside for a consultation.

"I don't know by what authority you mean to instruct us," said one. "You haven't been upgraded for thirty years."

"I know it."

"You are completely out of touch with the latest techniques."

"I know it."

"You have been described—accurately, I believe—as an old fogy."

"I know that too."

"Then what could you tell us about a new appearance like Hickle's Disease?"

"Only that it is not really

new. And not, properly speaking, a disease."

THAT is why, even today, there are superstitious persons who keep McGonigal's Worms in small mesh cages in the belief that they insure fertility. It is rank nonsense and rose only because it was in the M.W. laboratory that the return of pregnancy was first noticed and was named for one of the women working there. It is a belief that dates back to that ancient generation, which very nearly became the last generation.

The official explanation is that the Earth and its solar system, for a period of thirty-five years, was in an area of mysterious cosmic radiation. And afterward it drifted out of that area.

But there are many who still believe in the influence of McGonigal's Worm. **END**

AFTER NATURE—WHAT?

One of the roughest problems a science fiction writer has to solve is what aliens might look like, and function, and why. All we can go by—at least so far—is the life on our own planet. However, that is better than none, and even here the ingenuities of nature often make us kick ourselves for not having thought of them ourselves.

It is generally accepted that the minimum weight of intelligent life would be about 40 pounds. No arbitrary estimate, this—it's based on how large a brain must be to contain X number of neurons, synapses, reasoning and memory centers and the like, and how heavy a body would be to support and feed a brain of that size. But nature gets around that by forming a body politic rather than be limited to a body. For instance, and a very familiar one, there are the hive intelligences like the ants, termites and bees, and the fearsome Portuguese man-of-war is in this category: a colony of small animals uniting to form a sea monster that can fish as much as 60 feet below the surface, grabbing and devouring creatures that would make canapes of its voting members.

Hive intelligences aren't really intelligences? Not in our terms, true, but they combine to a total intelligence far greater than that of their individuals—and so does ours! Examine that statement carefully. However versatile a human genius may be, our society is more versatile, containing knowledge and skills he neither possesses nor can use. In more ways than he or others might concede, he is as much a dependent or consumer as the rest of us less gifted citizens are.

Various indeed are the ways of nature. Light-sensing organs became eyes; scales, skin and hair and feathers and fur; fins, limbs and wings. Skeletons are outside or in, depending on need. Furthermore, our civilization requires not only an irreducible minimum population to function, but an irreducible number of bacteria, enzymes, earthworms, insects and plants, or we couldn't raise and digest food or control pests—or breathe.

JEFF ALLEN pressed his nose against the door and steamed the glass with an angry snort. "A bomb would do it," he said. "Something big enough to make a nice bang and clean out the office, but not big enough to knock over the building. Ann, where can we get a bomb?"

His wife looked up from her typewriter and smiled. "Don't be ridiculous. You're getting all riled up over nothing."

Allen whirled and stomped over to the counter. "Nothing, you call it? You know very well that Centralia is just not big enough to support *two* travel agencies. We were doing pretty well, but cut our business in half and we'll starve to death."

"Business hasn't fallen off since he opened up. In fact, it's improved."

"Ann, you know that's a temporary fluke. It's bound to fall off. Any business he does has to cut into our business. There's no other place for it to come from. So where can I get a bomb?"

She laughed, and he leaned over to kiss her before he went gloomily back to his desk. Things had probably been going too smoothly, he told himself, what with the boom brought on by the travel-now-pay-later plans. He was just fifteen hundred dollars short of a down payment on that rambling California redwood ten-room ranch house with a rustic lake view, and he and Ann had been working and planning ever since their marriage

ILLUSTRATED BY JACK GAUGHAN

ESIDARAP OT

three years before—working hard—to build the business to a point where she could retire from her role as clerk and personal secretary and concentrate on being a housewife with perhaps a robust crop of little Allens.

AND now the whole picture was wrecked by a villainous-looking man with a brownish-red beard and a spectacularly bald head, who had appeared suddenly in Centralia and opened a new travel agency directly across the street from Allen's Globe Travel Agency. And he'd had the infernal nerve to name his business the Gloob Travel Agency.

"What did the Chamber of Commerce say?" Ann asked.

"They're puzzled," said Allen. "Gloob seems to be an obvious infringement on Globe. On the other hand, he says his name is Gloob, so how can we keep him from using his own name? They're going to investigate. And I stopped by for a brief conversation with Mr. Gloob. He was deliriously happy to meet me and certain we will get along fine together. He even promised to send me any business he can't handle himself, which convinces me that he has a fiendish sense of humor." He shook his head. "I suppose we might as well let Doris go—give her notice, anyway."

"But business hasn't fallen off. Let's wait and see what happens. There'll be plenty of time . . ."

A tiny, gray-haired old lady pushed open the door and

How backward can people be? If you really want to know, take a . . .

PIRT DNUOR

By LLOYD BIGGLE, JR.

stepped briskly to the counter. "I wish immediate accommodations for Sirap," she said.

Ann frowned. "For—what was the place?"

"Sirap."

"What country is that in?"

The old lady cocked her head to one side and cast puzzled glances about the office. "Oh, I'm sorry!" she said suddenly. "I must have the wrong . . ."

She stepped briskly out and the door whipped shut behind her, cutting off the blast of warm air from the street.

Ann's golden head bent studiously over an atlas. "There's a Siret in Rumania," she said. "But it's a river."

"I thought there was something fishy about her," Allen said.

He went to the window and watched her cross the street and walk confidently into the Gloob Travel Agency. She did not emerge, but as he watched a portly gentleman came out and crossed the street to the Globe Travel Agency. He paused inside the door, sniffed deeply at the air conditioning and gave a deep sigh of appreciation.

"Feels good in here," he announced. He walked to the counter and smiled down at Ann. "I'd like to arrange an extended tour of the United States. Could you handle it for me?"

Ann caught her breath. "Yes, *sir*."

"This is what I'd like to do. Start out with a week in Detroit and then go to Cleveland . . ."

His voice rumbled on and Ann took notes feverishly. "It will take a little time to arrange this," she said. "Where can we reach you?"

"At the Centralia Hotel."

"All right, Mr.—"

"Smith. John Smith."

"Mr. Smith. We'll get to work on it immediately."

"Excuse me," Allen said, "but didn't I see you coming out of the Gloob Travel Agency?"

The gentleman turned and beamed at him. "Indeed you did. The man there recommended you."

Allen returned to his desk, leaned back in his chair, and gnawed fretfully on a pencil.

THERE was a brawny, bald-headed man who drawled with a foreign-sounding accent and seemed nervously anxious to get to Nilreb with much haste. There was a sedate, middle-aged woman who hovered in the background while two teen-aged girls inquired with assorted giggles as to whether Dnalsi Yenoc was actually anywhere near Kroywen, and whether they could go direct, or by way of Nylkoorb. And there were others.

Eventually Ann stopped fumbling with the atlas, and in time she even grew weary

of explanations. She contented herself with pointing, and when people with odd destinations sighted along her wavering finger and glimpsed Mr. Gloob's sign, they invariably bounded away with unconcealed enthusiasm.

In between these visitations, the Globe Travel Agency's business boomed past all rational proportions. Allen made the down payment on the ranch house, and when Ann insisted that they were too busy for her to consider taking up housekeeping, he hired two new office girls. And the boom continued.

"Have you noticed," he said to Ann two weeks later, "that more than eighty per cent of our customers are not residents of Centralia?"

"I've been wondering about that," she said.

"And have you noticed that we're getting fewer inquiries from people with cockeyed destinations?"

"There was only one yesterday," Ann said, "and not any today."

She paused as a white-haired, scholarly-looking man stopped on the sidewalk outside, scrutinized them doubtfully through the window, and finally entered to ask for reservations to Kroywen. Ann pointed at the Gloob sign and he left, muttering apologies.

"Kroywen," Allen mused. "I've heard that one before."

"Same here," said Ann.

"I've got to get to the bottom of this. Mr. Gloob goes out to lunch at twelve-thirty. About a quarter to one I'm going over to the Gloob Travel Agency and see if I can arrange a fast trip to Kroywen."

"Not without me, you aren't," Ann said.

They left the mystified Doris with instructions to carry on if they should be delayed, bank the money, and sign any necessary checks with a limited power of attorney. They marched across Main Street, invaded the Gloob Travel Agency, and were met by Mr. Gloob's smiling assistant.

"Kroywen," Allen said. "Make it snappy."

"Two for Kroywen," the young man said complacently. "That will be sixty-two dollars and fifty cents."

Allen counted it out.

"Do you have any money to exchange?"

"Why—ah—no," Allen said.

"No luggage?"

"No. You see . . ."

"I quite understand. It's best that way. Now if you will receipt these papers . . ."

With one deft motion he took Allen's right hand, inked his thumb, rolled a print onto the paper, and wiped the thumb clean. "And yours, please," he said to Ann. "Thank you. Have a nice tour."

"Thank you."

"You may find the people a bit backward."

Allen said cheerfully, "We don't mind."

"Most people don't. Right this way, please."

They followed him through a rear door, rode an escalator down to the basement, and paused in front of a metal bulge in the wall. He opened it.

"Be seated, please," he said. "Remain seated until the door opens."

AFTER they sat down, he smiled and told them to come again. The door closed. They were in a tubelike chamber which had six rows of seats dipping across the curved floor.

"It's like a carnival," Ann said. "Twenty-five cents for a tour of the Chamber of Horrors. Or maybe it's a subway car."

"Yeah. But what is it doing in Centralia, Ohio? I wonder if the Interstate Commerce Commission knows about this."

There was a jerk, so insignificant that they would not have noticed it had they not been tensed in anticipation of —something. A light flashed red and faded slowly. They looked blankly at each other as the door opened. Another young man was peering in at them.

"Some ride," Allen growled.

"Destination," the young man said. "Kroywen terminal. All out, please."

They stepped out and followed him.

"Right this way to Customs," he said.

They paused at a desk marked "Customs" and a young lady noted their lack of baggage, glanced in a cursory manner at the contents of Ann's purse and waved them past. They walked out into what was obviously the concourse of a transportation terminal. There were ticket windows, travelers wandering about with bags, and a large schedule, listing arrivals and departures from and to tongue-twisting places. Allen looked back at the door they had just emerged from, and saw a large sign.

BOOLG, INCORPORATED
Specialists in Travel Curiosities

"That's no lie," he said.

They settled themselves on uncomfortable seats at the far end of the concourse and looked around. Allen stared at a clock.

"Screwy time they have here," he said. "That clock says five after eleven. My watch says five to one. How about yours?"

"Five to one," Ann said.

"What should we do? I guess we've proved there is such a place as Kroywen. Shall we go back?"

"It might look funny if we went back right away."

"True. So we've proved there is a Kroywen, but where is it? I'd like to know. . . . What's the matter?"

Ann's elbow had dug sharply at his ribs. "The second hand on that clock is running backwards," she said.

Allen studied it. "So is the minute hand." And a few minutes later, "So is the hour hand."

Ann looked at her watch. "Then when we have one o'clock, they have eleven o'clock. And when we have . . ."

"Two, they have ten. And so on. It's just like our time, only in reverse."

Ann was studying the Boolg, Incorporated, sign. "Boolg," she said. "Now if you spell that backwards . . ."

Allen did so, mouthing it slowly. He turned to Ann. "Gloob! The Gloob Travel Agency!"

"And this town. Kroywen. Could that be . . ."

"New York!"

"It must be."

"It's somebody's idea of a joke."

"We're here, aren't we?"

"But *where* are we?" Allen said. "Something like twenty seconds from Centralia, and New York is nearly six hundred miles. And which way did we go? East, or west, or straight down?"

"I was just thinking of something Gloob's assistant said. Remember? He said we may find the people a bit backward."

Allen shrugged. "Shall we take a quick look at the town?"

"We might as well. I've never been to New York."

"You *still* haven't been to New York."

They rode an escalator up three stories and found an exit. A uniformed man called out, "Taxi?" as they went out the door.

"They speak English," Allen said.

"And not in reverse," said Ann. "That's a blessing."

THE street was a brightly illuminated tunnel, with a high, arching ceiling. There were throngs of people on the walks, and throngs of vehicles in the street.

"The underside," Ann said. "Maybe like reflections in the water. Maybe somewhere straight up is the real New York."

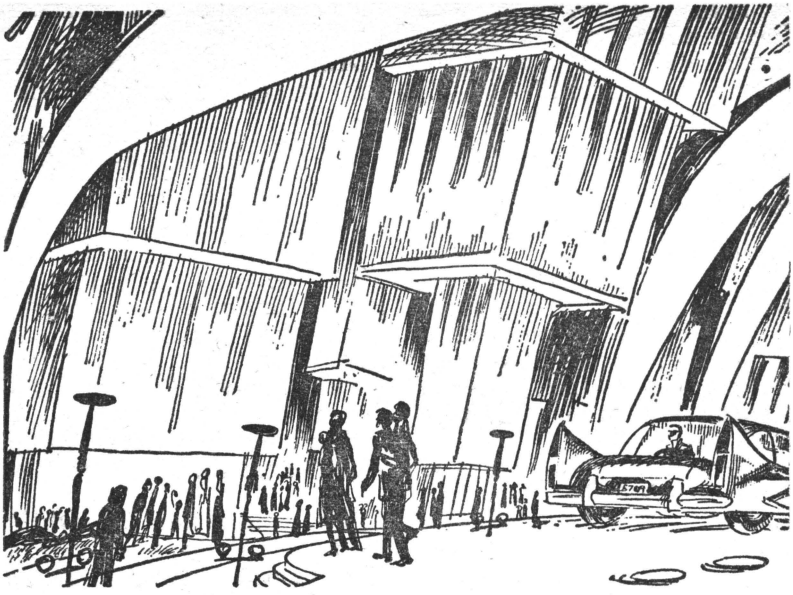
Allen had stopped to watch passengers boarding a bus.

"We can't take it," Ann said. "You didn't get any money changed."

"How was I to know what we'd find here? Anyway, I was just looking. The traffic moves on the left side and the bus drivers sit in the rear. How can they see where they're going?"

"Maybe they have front-view mirrors."

They turned away as the



bus rumbled off. They walked for what seemed to be miles along the tunneled streets, wandering about aimlessly, spelling the names of buildings and places and streets backwards, and finding some that they recognized. They found Broadway, and Fifth Avenue, and the Etats Eripme Building, the deepest building in the world. They resisted the temptation to visit its observation gallery, remembering at the last moment that they had no money.

"It's just another big city," Ann said. "Too many people, and too crowded, and too much noise."

"And no blue sky," Allen said. "They must have some sky somewhere. Where do you suppose they keep it?"

When they next thought about the time it was after five—or before seven, Kroywen time. And they were definitely ready to leave. They found their way back to the terminal and rode the escalator down to the concourse. Ann turned suddenly and clutched Allen's arm. "How are you going to buy tickets?"

"I've got plenty of money."

"Dollars. But you didn't get any money changed. What if they won't take dollars?"

"Anyone will take dollars. They took dollars at the other end, didn't they? And if they

won't, there should be somewhere we can get them changed."

"I hope you're right," Ann said. "Thinking backwards is all right for one afternoon, but I'm too old to do it permanently."

Allen grinned down at the young face she called old, and they walked hand in hand across the concourse to Boolg, Incorporated. At the door they stopped in consternation. Boolg, Incorporated, was closed. "Hours 3 to 7" read the sign on the door.

"Well!" Ann said.

ALLEN counted on his fingers. "Which means nine to five. My watch says five-twenty."

"So what do we do now?" asked Ann. "Sit in the station all night?"

"Certainly not. We'll go to a hotel."

"How are you going to pay the hotel bill?"

"I can get some money changed in the morning."

"All right," she said.

They advanced self-consciously to the registration desk of the Reltats Hotel and faced the suspicious scrutiny of the room clerk. He looked them over, noted their lack of luggage, and said with a sneer, "Married, no doubt?"

Allen spoke indignantly.

"Of course we're married. We've been married for three years."

He was not prepared for the clerk's reaction. The man's face reddened and he sputtered and waved his hands menacingly. Two more clerks came to his aid. The first clerk pointed a finger at them. "Married!" he blurted out.

"You mean they *admit* it?"

"The idea—at a first-class hotel, too. What do they think we are?"

"Call the police."

Allen grabbed Ann's arm and ran. Outside the door a bellhop caught up with them, scribbled something on a piece of paper and handed it to Allen.

"Try this place," he said. "It isn't a bad hotel and they aren't so particular. But it'd be best not to tell them you're married. It doesn't matter what they think, but when you come right out and say it . . ."

"Thanks," Allen said.

"Don't mention it, fellow. I was married once myself."

The hotel was small, clean, almost primly respectable in atmosphere. The room clerk snickered when Allen signed the register, but said nothing. Allen told him they would be staying one night, and fifteen rallods seemed a proper price, and the clerk turned them over to a cheerful-looking bellhop. They entered an elevator and dropped.

"It seems all right," Ann whispered. "What's the matter?"

"I'm trying to figure out how to tip the bellhop."

That worthy escorted them to their room, took a quick turn around it to see that everything was in order, and as Allen self-consciously turned his back to him, he thrust something into Allen's hand on the way out.

"Of all the insults!" Allen exploded as the door closed. "I didn't make any move to tip him, so *he* tipped *me* three rallods!"

Ann took one of the bills. "Pretty good picture of Notgnihsaw," she said. "Do you think this would buy us a meal?"

"Probably not—not a good meal, anyway. And I'm hungry. We could have something sent up and put it on our bill. Maybe there's a menu around here somewhere."

Their food arrived, accompanied by the same grinning bellhop. Allen cringed in embarrassment at the thought of offering the man his own three rallods as a tip, but the bellhop gave him no opportunity. He deftly slipped some currency onto one tray and hurried out.

"He tipped me again!" Allen yelped. "This time it's five rallods!"

"Don't complain," Ann said. "Maybe we can work up enough to pay our hotel bill."

"Nothing doing. Here, I'll put it all on the tray. The least I can do is offer him his money back."

When the bellhop came for the trays, he carefully removed the money and placed it on the desk. And when Allen picked it up later, there were no longer eight rallods, but eleven.

THE day had been exhausting and they slept well. It was after nine when they awoke—not quite three, Kroywen time—and they ate breakfast in the hotel dining room to avoid further insults from the bellhop, having the check transferred to their hotel bill. Then Ann returned to their room, and Allen strolled down to the terminal to change some money and arrange their return to Centralia.

The young man at Boolg, Incorporated, was sympathetic. "The rules are strict," he said, "and we cannot permit any exceptions. Dollars must be changed into rallods at the other end, so I'm afraid I can't help you."

Allen found himself a chair and sat down slowly.

The travel agent was puzzled at his stricken expression. "If it's as important as all that to get rid of the dollars," he said, "why don't you take another trip and spend them?"

Allen brightened. "Yes. That's the thing to do. How many dollars for two tickets to Centralia?"

"As I told you," the young man said patiently, "foreign currency is handled only by our foreign terminals. Here we deal only in rallods. One thousand rallods for two tickets. When would you like to leave?"

"I'll think about it," Allen said.

Back in the hotel room, Allen and Ann sat staring at each other.

"Thanks to the bellhop, I have eleven rallods," Allen said. "Our hotel bill will be fifteen, plus the price of two meals. Twenty-five, at least. And we need a thousand to get back. Got any ideas?"

She shook her head. "It looks as if we'll have a long stay here. And it's not going to be any honeymoon. We'll have to work and earn the money."

"We might as well go up and check out and confess to the manager," Allen said. "Maybe he'll give me some help in getting a job."

"Couldn't we just stay here?"

"Too expensive. Over a hundred rallods a week for the room, and that doesn't include meals. And we'll need clothes. I haven't any idea of how much people are able to earn in this crazy world."

Grimly they descended on the room clerk. "Checking out,

I see," he said. "Accounts settled at that window."

A young lady itemized their bill and read off the items. "Room, one day, fifteen rallods. Dinner, by room service, eleven rallods." Allen winced. "Breakfast, three rallods, Total, twenty-nine rallods. Please receipt this bill."

"How was that again?" Allen asked.

BEFORE he quite knew what was happening, his right thumb had been inked, impressed, and wiped clean. Ann contributed her print, and as Allen was struggling for words to explain that he had only eleven rallods, the young lady briskly counted bills out across the counter to him.

"Twenty, twenty-five, twenty-nine. Thanks very much, sir. I hope you'll stop with us the next time you're in town."

They staggered away from the window, left the hotel, and walked half a block before either of them spoke.

"They paid us," Allen said.

Ann said nothing.

"And the bellhop tipped me."

Ann stopped and pointed at a shop. "Women's apparel. I need a change of underwear."

They entered the shop. Ann made a few modest purchases. The clerk paid her six rallods. They went out.

"Another hotel?" Allen asked.

"Yes. We'll get the most expensive room we can find."

"We might ask for the bridal suite."

"You'd shock them. They might think we were married."

"Isn't there anything more expensive than a hotel suite? Let's find some kind of rental agent and see."

They found a rental agent. He arranged a week's sublease on a luxurious apartment, rent four hundred rallods, paid to them in advance. He also paid them his commission, which was forty rallods. He engaged a maid and a cook for them, and the two servants happily handed their week's wages to Ann when they reported for work.

Allen and Ann went on a reckless shopping tour. They bought luggage, for which they left their thumbprints and were paid a hundred and fifty rallods.

Allen selected a fine new suit and the beaming clerk took his thumbprint and paid him ninety-five rallods. They outfitted themselves completely and returned to their apartment.

"We have our thousand rallods," Allen said. "We can leave any time."

Ann looked about the dazzling living room and gazed sadly at the fountain that bubbled in a far corner. "Yes, I suppose we can."

"We really should be get-

ting back. Doris will have her hands full."

"Yes, I suppose she will."

Allen seized her roughly. "Hang Doris! We never had a proper honeymoon. Let's have it now. Sue can handle things for a week. She won't like it, but she can do it."

"Let's," Ann said happily. "Who can say when we'll be able to afford anything like this again?"

Allen embraced her fondly. "Paradise!"

"No," Ann said. "Esidarap."

THEY made it a week to remember. They flitted from nightclub to nightclub. They ran up staggering bills and exchanged their thumbprints for cash when they left. The waiters tipped them lavishly. They attended the theater and received cash along with their tickets. They shopped, after the first sensation of awe wore off, only for compact expensive items that they could carry back with them. They almost became accustomed to starting a meal with dessert and finishing up with an appetizer. They gradually got used to backward-running clocks, a calendar that worked in reverse, and riding down to their forty-fifth floor. It was, indeed, Esidarap.

At the end of the week they were still in a mood of unrestrained happiness, but reluctantly ready to return to their normal world and go back to work. And on the fateful seventh day a fist descended rudely upon their door, followed by two heavy-set official-looking men who brushed their frightened maid aside and stood looking them over coolly.

"I.B.F.," one of them said, showing his credentials. "We have been reliably informed that you two are unemployed. Is that correct?"

"Yes, we're unemployed," said Allen.

"We've come to talk to you about your employment compensation."

Ann giggled foolishly, and Allen muttered, "All this, and Esidarap too!"

"We are in the process of checking your past record to see if you are paid up to date. But we've established that the compensation is unpaid for the past week and we are here to collect that now. For the two of you, that amounts to seven thousand rallods. Cash or a certified check, please."

Allen choked suddenly on nothing at all and glanced at Ann's white face. "You mean we owe . . ."

"Every now and then people try to slip away and cheat the government," the I.B.F. agent said. "But they soon find out that it's rather expensive not to work. If you'll take my advice, you'll go back to wherever it is you came from, and go to work, and pay

your wages like a good citizen. Right now I want seven thousand rallods."

"My gawd!" Allen groaned. "I wonder what the income tax amounts to!"

The agent was momentarily flustered. "Well, now—that would take some time to check. Better just pay us and let the income tax wait."

Allen got out his wallet and counted. "I have four thousand, five hundred and twenty rallods," he said miserably. "Ann?"

SHE was searching through her purse. "Twenty-one hundred rallods," she said.

"Leaving you three hundred and eighty short," the I.B.F. man said.

"If you'll come with us," Allen told him, "we'll make a couple of purchases and pay you off."

They bought a diamond ring for Ann—her third—and paid the I.B.F. men. Despondently they returned to their apartment, and found the rental agent waiting for them. A quiet, white-haired, fatherly sort of man, his face was mournful.

"You two have disappointed me," he said.

"How so?" Allen asked.

"I hoped you would be able to take this place for the summer. But now . . ." He shook his head. "Why did you do it?"

"Do what?"

"Live so recklessly. I don't know what sort of wages you pay in your normal occupation, but even if it is above average, you've used up your luxury and entertainment allowances for years. You'd have been stopped, of course, if you hadn't done it so fast. But all in one week! The reports are tabulated now and I must ask you to leave."

"How do you know all about it?" Allen demanded.

"My dear young man, why do you suppose your thumbprint is taken with every purchase? All bills go to central accounting and a full statement of purchases is compiled as often as the volume merits it. With due estimates, naturally, for such unreceipted items as tips and the like. Surely you knew that."

"Yeah," Allen said. "Surely I knew that."

"So—you must leave. You'll be living at a mere subsistence level for a long time. But—" he shrugged—"when you get your credit back, come and see me again. Perhaps I can arrange something just as nice as this—if you promise to conduct yourselves reasonably." He left, mumbling over his shoulder that they were to be out by noon.

"There goes four hundred rallods a week," Ann said.

"Yes, and it's a long way to a thousand," said Allen. "We should have left when we had it."

"I hate to think so," Ann said, "but I guess we should have. It has been fun, though."

"What do we do now?"

The answer came in the form of a performance by the beautifully toned door chimes. It was a detective with a summons. An hour later they were in court. An hour and fifteen minutes later they were tried, convicted and lectured soundly by the judge.

The judge's lecture gave them some insight into what Allen called Backward Economics. They were, the judge informed them, a blight poised to strike at the roots of the entire economy and bring it toppling down. Their offense seemed to be: first, that they had received more for purchases than they were spending in wages; and second, that they were unemployed, and therefore not spending anything in wages.

Allen had a sudden inspiration. "But, Your Honor," he protested, "I couldn't find a job."

HIS HONOR flushed angrily and shattered his gavel with one vicious stroke. "This court will not tolerate such a fiction! You know perfectly well that any citizen who is unable to find employment privately can pay wages to the government."

Allen considered informing His Honor that they were not citizens, and thought better of it.

But their sentence did not seem unduly severe. His Honor placed them on probation, banged a fresh gavel, and called for the next case.

A burly police officer let them out of the courtroom and into the small anteroom, where white-robed technicians took charge of them, got them seated at a table, and before they quite knew what was happening had their right thumbs clamped in a small boxlike device.

"The judge said probation," Allen said in indignation. "He didn't say anything about thumb screws."

"Quite a card, aren't you?" the police officer sneered.

Allen felt a sudden stab of pain, nothing more. At the same time Ann winced and looked over at him, puzzled.

"All right," the police officer said. "You can go now." He chuckled. "And don't do it again."

On the steps of the courthouse they stopped to examine their thumbs. Neatly engraved on each was a small P.

"I'll be damned," Allen said. "They've branded us."

They went to the office of their rental agent and that gentleman greeted them with obvious displeasure. "What do you want now?"

"We'll have to live somewhere," Allen said. "We thought perhaps you . . ."

"I don't handle rentals in your class."

"Could you refer us to someone?"

The man sighed and buzzed his secretary. "These people are on probation," he said. "See if you can find them something."

The secretary departed, giving them contemptuous glances over her shoulder.

"This may sound like an odd question," Allen said, holding up his thumb, "but would you mind explaining this probation business?"

"Try and buy something," the rental agent said. "You'll understand it soon enough. You can't make a purchase without receipting it with your right thumbprint. A probation print is not acceptable unless accompanied by a waiver of probation officially certified by the court."

"What do they want to do?" Allen said hotly. "Starve us?"

"Oh, you can buy essentials —the bare essentials. You must register at one store and make all your food purchases there. You can buy clothing, but only such clothing as is necessary for your work, and your employer must furnish a requisition. I don't know the exact amount of your excess, of course, but if you behave yourselves for a few years, the court may take your good behavior into consideration."

"I see," Allen said. "Tell me one thing. Are there any lending institutions around here?"

"I don't understand."

"Banks, loan companies..."

"Oh. You mean *borrowing* institutions. Certainly—there are plenty of them around. Why do you ask?"

"I'd like to borrow a thousand rallods."

"My dear young man! Were you born yesterday? You don't borrow money from those institutions. You lend them money!"

"Why, yes, of course," Allen said. "Naturally."

The secretary returned and handed Allen a slip of paper. "There's the address," she said. "It isn't much. Just a furnished room. The neighborhood is poor and it's a walk-down, but I don't think you can do any better than that."

"Thank you," Allen said, "for everything. Does the government confiscate the things we bought?"

"Certainly not," the rental agent said. "The government merely keeps you from buying more until you have retired the excess."

THEY attempted to transport their belongings by taxi, but the driver took one look at the "P" that registered neatly in the center of Allen's thumbprint and drove off without them. They made four trips by bus, and learned later that they had used up their week's quota. Their new

landlady was fat, owlish-looking, and hideously suspicious.

"One of those, eh?" she said, studying Allen's thumbprint. "Well, all right. But I'll have you know this is a decent house, and if the police start nosing around here, out you go." She paid him for a week in advance—six rallods.

They got settled in their cramped room and Allen sat in the lone chair, feeling miserable, while Ann stretched out on the bed and sobbed.

"We'd better get something to eat," Allen said finally.

"I'm not hungry."

"We'll still have to buy some food. If we don't, we won't have any money to pay our wages with, and we can't go to work. And if we don't go to work, we'll have to pay another seven thousand rallods in unemployment compensation at the end of the week. And where will we get seven thousand rallods?"

She got up wearily. "All right. We'll buy some food, but I won't eat it. And we ought to start looking for jobs."

They registered at a neighborhood grocery store and bought their entire week's allowance of groceries, concentrating on canned goods that would not require cooking. They took their groceries, and seventeen rallods, back to their room.

"Now we have twenty-three rallods," Allen said. "That means we can't afford jobs that cost more than eleven and a half rallods."

"You take thirteen," Ann said, "and I'll take ten."

They found an employment agency and went their separate ways for interviews and classification. Allen's interviewer scowled at the blemished thumbprint, scowled at Allen, and shrugged disgustedly.

"Hardly worth the trouble, bothering with one like you," he said. "You need the lowest-paying job you can find. Some kind of a sales job might do it. You pay a small guaranteed salary and a commission on what you sell. If you don't sell much, you might get along. It better be something that isn't expensive, because one big sale a week would ruin you. This might do it—cemetery plots. Here's the address. And here—" he handed Allen five rallods—"is the agency fee. I hope we won't see you again."

ANN was already back at the room when Allen returned that evening. She was lying face down on the bed and she did not look up when he came in. He seated himself in the chair and put his feet up on the bed.

"I'm a salesman," he said. "I'm selling cemetery plots. They cost a hundred and fifty rallods each—or, rather, the person that buys one is paid a

hundred and fifty rallods. I'm on salary and commission. I pay the boss fifteen rallods a week, and I pay the customer fifteen rallods of that hundred and fifty for every plot I sell. I don't intend to sell any."

She spoke with her face muffled in the pillow. "I'm a filing clerk. It was the best I could do, and it's twenty-five rallods a week. I didn't have the twenty-five, and I have to bring the rest tomorrow or I'm out of a job. All I had was fifteen—ten from the groceries and five from the employment agency. I almost got fired anyway, because using the alphabet backwards confuses me."

"Did you try the new clothes angle?"

She sat up. "What's that?"

"I told my boss this was the only suit I had. He thought it looked pretty good—it ought to, since it cost two hundred rallods—but he agreed that a salesman should have more than one suit. He gave me a requisition and I bought a new suit for forty rallods. That's the most expensive one they'd let me have. So it gives us a little margin. You can pay your other ten rallods tomorrow and then . . ."

"We're getting six rallods a week for this room," Ann said tonelessly. "We're allowed seventeen for groceries. That's twenty-three. And I have to pay twenty-five in wages and you have to pay fifteen. How can we save a thousand rallods, if we go in the hole seventeen every week?"

"You see if your boss will give you a requisition for some clothes and I'll check around. Maybe I can think of some angles. Maybe they'll let me take a prospect out to dinner now and then. I could pick up a few rallods that way. And maybe something will turn up."

Catastrophe struck the next day, when Allen sold a cemetery plot. "Practically took the thing away from me," he moaned. "I tried insulting him, and knocking the location, and everything else I could think of, but I couldn't get out of it. So there go fifteen rallods."

"I bought twenty-five rallods worth of clothing," Ann said, "so we're still a little ahead. My wages are paid for next week. But you'd better not sell any more."

"I won't," Allen promised. "I'll turn and run first."

They started the second week with their wages honorably paid, and enough surplus to carry them a third week, providing Allen sold no plots. Beyond that lay blank despair.

Allen returned to their room in a fretful mood. He had narrowly avoided making a sale that morning. His evasion tactics were so obvious that the prospective customer complained to his boss. The

boss had studied Allen's sales record, which was not impressive, and threatened to discharge him. Allen was tired, discouraged, and nauseated at the thought of another cold meal out of cans. He was homesick for a glimpse of blue sky.

He lurched through the door and halted in amazement.

Ann had a visitor—a bulky, bearded, bald-headed visitor who leaned back in the rickety chair and regarded him quizzically. It was Mr. Gloob, of the Gloob Travel Agency.

Mr. Gloob pointed an accusing finger. "You shouldn't have done it!"

"You're telling me!" said Allen.

Ann leaped up excitedly. "We just got here. I saw him on the street and he almost got away from me. I must have chased him two blocks."

"Three blocks," Mr. Gloob said. "My mother warned me not to pay any attention to strange women, so I tried to ignore her. Unsuccessfully, I might add. I didn't recognize her. But you shouldn't have done it. Do you realize the confusion you've created in our accounting department? Two return trips with no outgoing prints to match with them. The directors have held three emergency meetings and the problem seemed utterly incapable of solution. You'll have to go back, you know. You must promise absolute secrecy and leave at once. I won't have it any other way."

"Neither would I," Ann said fervently.

GLOOB was studying the room critically. "Why are you living in such a queer place? I've often wondered what people from your world would do in our civilization, but this is not at all what I imagined."

"It isn't what we imagined, either," Allen said, and briefly described their week of reckless living, and the depths to which they had fallen.

Gloob raised his arms in horror. "My word! But why did you let them put you on probation and try to live like this? This is terrible! Why didn't you just go back to Centralia?"

"How could we?" Allen demanded. "The I.B.F. men took every bit of our money. We didn't have the thousand rallods for tickets."

Gloob rose slowly to his feet. "My dear friend Allen! Surely you couldn't live in our civilization for over two weeks and have so little understanding of our ways. You do not pay a thousand rallods for tickets. We pay *you* the thousand rallods!"

"But I thought . . ." Allen began weakly. "I mean, you charged at Centralia, and I paid you, so naturally . . ."

"I'll start packing," Ann said.

"I'll help you," Allen told her.

Gloob held up his hand. "Just a moment now. Not so fast. This thing is more serious than you realize. You could have gone back at any time before you were put on probation, just by presenting yourself and giving us a receipt. But now you can't give us a receipt. You've used up your allowance of luxuries and it will be a long time before your thumbprints can be honored."

"You mean we're stuck here?"

"That's exactly what I mean. You have no understanding of our economy, of course, or you wouldn't have gotten into trouble. People keep a very careful record of their purchases. If they want some special luxury, like a Boolg tour, they conserve their allowance ahead of time, or they reduce their luxury expenditures drastically after they return. Conduct such as yours is rare. It's considered a serious crime, which is why the punishment is so severe."

There was a long silence while Allen glared at Gloob and Ann looked quietly at the floor.

"All right," Allen said. "Ann, this nonsense has gone far enough. We'll go down to the authorities the first thing in the morning and tell them what happened and ask them to get us away from here."

"Oh, I say!" Gloob exclaimed. "You can't do that. There'd be all kinds of unfavorable publicity for Boolg, Incorporated. We might lose our franchise. We specifically agreed that our operations would be kept secret in your world."

"Tough," Allen said. "If you'll excuse us, Mr. Gloob, we have some packing to do."

"Look, now. Things are developing nicely and we are getting new terminals set up in Europe and South America. You'd spoil everything. At best we'd have to shut down our United States terminals, and that's the most popular place for tours. You have no idea what those tours mean to our people. To pay a hotel bill instead of being paid, to pay for transportation, to pay for food, to work and have the employer pay them—why, it's positively . . ."

"It's a dirty shame," Allen agreed. "Now if you'll excuse us . . ."

Gloob sighed. "All right. I'll manage it some way. Go ahead and pack."

ALLEN reached for a suitcase. "I don't see why you make such a problem out of it. All you have to do is smuggle us away from here. You don't have to pay a thousand rallods to us. What would we do with them?"

"Mmm—yes," said Gloob. "Perhaps it can be done without any official record made of it. We'll see."

A heavy fist rattled their door and the landlady's rancorous voice called, "Phone call for Mr. Allen!"

Allen started. "I don't know anybody here. Who'd be calling?"

"Why don't you answer it and find out?" said Ann.

Allen plodded up three flights of stairs and apprehensively picked up the telephone. "Hello."

"This is Agent Senoj of the I.B.F. You'll remember our discussion a week or so ago on unemployment taxes."

"For your information," Allen said, "I am now employed."

"I know. At that time you mentioned income tax. We've conducted an investigation and we find that you have received no income taxes for the past five years. The statute of limitations permits no claims of more than five years to be made against the government, but as long as we've definitely established this five-year delinquency, we would like to make a settlement with you."

"Well, that's nice of you," Allen murmured.

"We don't know how this could have happened, but it did happen, and I'd like to have you sign the necessary papers and accept a check in final payment."

"How large a check?"

"With interest and penalties, it comes to twenty-five thousand rallods."

"You don't say. Give me your office address and I'll look you up in the morning."

"What's wrong with this evening?" the agent said.

"I'm busy right now," Allen said. "Meal time, you know."

"How about an hour from now?"

"Make it two hours." Allen glanced at his watch and counted on his fingers. "Four o'clock."

"That's a little late, but—all right, expect me at four."

Allen hurried back down the stairway. "I.B.F.," he said. "They want to give us twenty-five thousand rallods in back income tax."

"Good heavens!" Gloob breathed. "You aren't serious?"

"Absolutely. He's coming at four."

"We'll have to get you out of here. If the government gives you that much money, it will also have to give you jobs to let you spend it, and that means high executive positions, and you'll never get away. Here, I'll help you pack."

They left in a rush, dashing up the stairs and waiting on the porch while Gloob hurried out into the street to hail a taxi. The landlady charged out of a hallway.

"Just what I expected of

scum like you!" she shrieked. "Trying to sneak out on me. Just what I expected. But I been keeping my eyes open, I have. Here—one week's rent for leaving without notice."

She handed Allen six rallods.

THEY returned to Centralia, and the Globe Travel Agency, and the rambling California redwood ten-room ranch house with a rustic lake view, and settled down to a peaceful existence. They never bothered to explain their mysterious absence, and in time their friends tired of asking. And if their friends thought it odd that they named their son Kroywen, none of them mentioned it within their hearing. Not even the boy's godfather, Mr. Gloob.

The business of the Globe Travel Agency expanded at a rate that was absolutely indecent. Allen chartered buses, trains and planes, planned guided tours, and applied all of his ingenuity in the arrangement of colorful itineraries for visitors from another world. Centralia accepted the tourist boom philosophically and credited it to Allen's genius for travel management.

There were no more visitations from strangers requesting accommodations for tongue-twisting places. Mr. Gloob explained that this unfortunate confusion resulted when travelers already on tour attempted to locate the new Centralia terminal and were misled by the similarity in names.

A warm friendship developed between Mr. Gloob and the Allens. Mr. Gloob was frequently a visitor in their home and they had delightful conversations upon all subjects except the world of Mr. Gloob's origin. Only once did Allen tactfully refer to his and Ann's strange pilgrimage.

"I wondered when I was there," he said, "but I never got around to investigating. But the Empire State Building—you call it just the opposite, of course, but I won't try to pronounce that—is a hundred and two stories deep, and yet there's an observation gallery at the bottom."

Gloob, rocking peacefully, smoking his pipe, and watching his godson kick fretfully in a playpen, nodded. "Why, yes, I believe there is."

"Just what do people observe from that observation gallery?"

"They observe more or less the same thing people observe when they look out the windows of the buildings."

"But there weren't any windows in the buildings!"

Merriment flashed in Gloob's eyes. "Weren't there?" he said.

END

Worlds of if

Book Reviews by Frederik Pohl

"THE boy was odd," begins Gordon R. Dickson in *The Genetic General* (Ace), and at once we can expect that the boy will somehow survive—not only survive but win success—not only succeed but, ultimately, rule. We can expect all this because this is the way of mutant stories for many a year; what we get instead is a fine, moving, exciting book.

Gordon Dickson is an uneven writer, sometimes matchless, sometimes trite. He has a queerly complicated way of thinking, his best story ideas amounting to long-chain, highly polymerized thoughts. We put down many of his stories and know that the man was saying something interesting . . . but what?

In *The Genetic General,* however, originally a three-part serial, he has space and time, and he uses them well. His "odd boy" starts out as a sketch, but with a trait shown here, an opinion there, Dickson dexterously fills in the outline until at the end of the book we see the man in three dimensions, standing clear; and when we come to the last lines and the true majesty of his difference, we are surprised—yes, and gratified, because Dickson has played fair with us all the way.

The galactic culture Dickson paints as a backdrop to his story must rank low in the hierarchy of future probabilities—surely a feather's touch would knock over its rococo customs! Dickson's agility is equal to the problem, though; by sleight of hand he tricks us into suspension of disbelief.

All in all, *The Genetic General* is Dickson at the top of his form, and a credit to his publisher; and it is recommended almost without reservation.

The "almost" is because unfortunately Ace has, according to its custom, made a double volume of the book. The upside-down story is *Time to Teleport*—also by Gordon R. Dickson, also about a mutant threat to a highly developed future society. But here the piece falls apart in our hands. It is only

about half as long as *The Genetic General* . . . and it is far less than half as good.

WE HAVE five other novels this month, of which about the most interesting is a curiosity piece.

That is A. Conan Doyle's *The Lost World,* back in print presumably as a tie-in with the recently released movie. Here Professor Challenger takes us to a great mountain-locked plateau on the upper reaches of the Amazon, where dinosaurs frolic and apemen fight them for survival. Well, there have been so many imitations, but all the same, it's good fun.

Doyle's science is orthodox, or even advanced, by turn-of-the-century standards. (He had scientific training, of course. He was a practicing London physician for nearly a decade before Sherlock Holmes set him free of pill-pushing.) His story is excellent adventure and his characters are fascinating because they seem to loom out of a past almost as remote as the monsters chasing them.

The thing is, Doyle was a writer of the pre-Freudian school—not only pre-Freud, but pre-Joyce, pre-Hemingway, pre- almost all the great seminal influences of this century which have given us new insights into the personality, but not entirely without cost. Doyle's characters are all very sure of themselves, very individual. We have little of that sort of thing today in writing—perhaps because we don't have a great lot of it any more in life. It makes a refreshing change to meet them here.

On balance, there are fifty books coming at once to mind, written by our own special pioneers, which are better science fiction and better art than *The Lost World.* But they don't have what Doyle had—and it's a pity.

MARK Clifton's *Eight Keys to Eden* (Doubleday) is a mildly told, ambitious and confusing novel. It touches everything and covers very little. He starts out by telling us that the human race has got itself into so serious a pickle that it has had to create a new social class to haul it out.

These super-thinkers are the "E's" (for "Extrapolators"), who are "outside all law, all frameworks, all duty, all social mores." They are trained from youth to use their minds in ways the ordinary human clod cannot manage; they are so absent-minded that they have special attendants (when Swift invented them for his floating island of Laputa, he called them "flappers") to keep them from getting hurt. They are resented by many ordinary humans, who go so far

as to try to encroach on their privileges in McCarthy-like inquisitions, and they are envied by practically all. Says one jealous commoner: "Boy, something. Imagine. Take any dame you want. Nobody can squawk. Take any money, riches you want. Nobody can stop it." How this would work out in practice we are not going to know because, as Clifton tells them, no E ever *does* any of those things.

However, this is not what the book is about. A fledgling E is confronted with the problem of a planet called Eden which is perfectly wonderful in all respects except that it will not tolerate the existence of machines or, indeed, of anything made by man. Machines disappear; men's structures, even men's clothing, revert to their primitive state as tree or vegetable, and will not allow themselves to be reconstructed.

There is then a surprise ending which, according to house rules, we will not discuss; but it seems tacked on. It may be what Clifton was aiming at from the beginning; if so, he took an awfully roundabout way of arriving there.

Clifton, employing such devices as spotlighting minor characters in a choppy series of blackouts, makes the story move pretty rapidly. But it doesn't really go anywhere.

THE Climacticon, which is both title and principal gimmick of the Ballantine novel by Harold Livingston, is a pocket-sized machine which radars the emotional attitudes of girls. Its meters tell you when a willing girl is nearby, and its compass needle points her out. It sounds, indeed, like a handy enough gadget for a young fellow just starting out in life, but it's a thin sort of peg to hang a novel on.

Livingston, whose previous works have been outside the field of science fiction (e.g., *The Coasts of Earth*, a story of the Israeli-Arab war), does little delving beneath the surface of the notion. What he does is to set it on Madison Avenue and people it with advertising-agency types, and although they are over-familiar they are good for a few laughs. Sketchy, fast and entertaining, the story has enough moments of shrewd observation to make one wish it had more.

ACE has abridged (but not enough) *The Dark Destroyers*, Manly Wade Wellman's pre-war account of the Cold People from Space and their predictable attempt to invade the Earth. The second novel in the double volume is *Bow Down to Nul*, which has to do with Earth writhing under the lash of still another set of alien conquerors from

space, the Nuls. Well, things are pretty tough under the Nuls, all right, but reading the story is tougher. The jacket accuses Brian W. Aldiss of writing this, but he has a clean record elsewhere and should be able to cop a plea.

As a better example of what Aldiss can do, consider his newest, Signet short story collection, *Galaxies Like Grains of Sand.* Here he offers eight stories arranged in a series to picture eight epochs in the future of mankind. The stories are quite uneven, but they all have strengths and the best among them are excellent. Aldiss peoples his *The Robot Millennia: Who Can Replace a Man?* almost entirely with machines—bulldozers, automatic typewriters and so on—and tells the story through their eyes (or photo-receptors). The machines find that the men who command them have disappeared; they debate the question, then elect to trek to the mountains to start a new, manless life for themselves. When they talk, they *talk* like machines, every thought a neat computer's syllogism of major premise, minor premise and conclusion. They *are* machines, instead of men wearing tin suits, and it is all quite rewarding.

In *The Dark Millennia: O Ishrail!* Aldiss starts with a familiar theme (an alien, marooned on Earth, is thought mad because of his talk of Galactic civilizations), but he invests it with thought and illuminating detail and makes it come alive. *The Megalopolis Millennia: Secret of a Mighty City* is again routine in concept, a parody laid in the future of the familiar yes-man conferences of Hollywood producers of an extinct age, but by main strength Aldiss manages to administer a few bites with those dulled old teeth.

These are the best of the eight and a credit to any writer, but even the least of them has an unexpected gift or two for the reader. It is that lagniappe, the baker's dozen delivered when he is only paid for twelve, that marks Aldiss as a writer worth watching.

ONE dozen stories by Robert Sheckley have been collected by Bantam into a book called *Notions: Unlimited.* Sheckley almost never writes the scientific parts of his stories. In fact, about the only *science* fiction story in the book is *A Wind Is Rising,* concerning problems in navigating a twelve-ton tank with a chain-link sail across the rocky, hurricane-swept soil of an alien planet. (Sheckley is an amateur yachtsman of great passion.) Still, he writes so briskly that we never miss the hard parts, at least not until the story is

over. His great attraction is his original and unorthodox point of view.

It is the soft spots in the future that interest him. Nothing goes right for his luckless heroes; their inventions work all too well; their fraudulent plots fail because the disaster they aim to simulate really happens; they make compacts with monsters but neglect to read the fine print. It's too bad for his heroes, but it's fun for the rest of us.

Isaac Asimov has written so much so well for so long that no one is very excited when another Asimov book comes out and turns out to be good. Like the rising of the sun it is a daily miracle, dimmed by familiarity. Here the dawn breaks in *Nine Tomorrows* (Doubleday & Bantam). These nine are not the best stories he ever wrote, but then they don't have to be in order to deserve our attention.

TWO regrettably less attractive short story collections appear now to show us that even the best may falter in form. We expect great things, for example, from Basil Davenport. We cannot conclude that we have quite got them here.

Invisible Men is the title of his new Ballantine anthology of stories about invisible men (and invisible women, invisible boys and invisible things), and although the stories are all right, eleven of them are too many. Some would be fine in any surroundings, however—*The New Accelerator* (Wells), *Love in the Dark* (Gold), *Shottle Bop* (Sturgeon)—and the chief thing that puts this book a cut under Davenport's usual high standard is that he has shirked his duty. The best part of a Davenport anthology is his useful and entertaining program notes, and here he has not given us any.

A fine-tooth comb passed over the works of Theodore Sturgeon has extracted yet another collection of his shorter pieces, but not one which does him sufficient credit.

In *Beyond* (Avon), we are given four ancient stories (*Abreaction, Nightmare Island, Largo* and *The Bones*—all originally published in the forties, and all showing their age), one recent reprint, *Like Young,* and one story so new that it has never before been published. This one is entitled *Need.* It is a long story, almost half the size of a book; if it were up to Sturgeon's elevated plane of accomplishment, its inclusion here would be all the recommendation this volume needs. But it isn't. There are a lot of words in the piece, but the story itself is a slight and unresolved fantasy, characters

queer without being compelling, plot hanging on air. There is, says the story, a man living in Nyack who can detect what people need. He gives it to them. That's it. That's all.

Sturgeon can, should and often does give us so much more than this. Of all the writers practicing science fiction today, there are only about a dozen true leaders. The others are excellent craftsmen, surely—their contributions are considerable and welcome—but they are the infantry troops who occupy and consolidate the gains of the advance party. Sturgeon is one of the leaders. The disappointment is that in this book he leads us nowhere we have not already been. Derivative, minor and rather weary, it does not do justice to a man who, at the peak of his form, simply cannot be matched.

AT THE last we come to a look at what the publishers are providing for us in the way of non-fiction. If you like mathematics, for example, you will be interested in Constance Reid's *From Zero to Infinity*, a new revised edition of which is now available from Crowell.

Mrs. Reid does not intend to tell you how to add and subtract, but to inform and entertain you with some of the properties and curiosities of numbers themselves. See, for example, if you can make any sense of this arrangement of the digits from 0 to 9:

8 5 4 9 1 7 6 3 2 0

They are arranged according to system, but what is the system? "Secretaries usually outwit mathematicians on this one," says Mrs. Reid. The reason for this is that the arrangement is not a mathematical one; and if you wonder why then it is relevant to this mathematical book, it is because the attractions of number study are not confined to its mathematical aspects. There is something grand and terrible about the properties of numbers and their subtle, unexpected relationships, something which for thousands of years has caused amateurs of number study to assign metaphysical or superstitious properties to the various integers.

It is the triumph of mathematics that *all* of its laws are true *always*—in every case—not only in the case of the numbers and quantities we know, but in the case of every number and quantity that anyone can ever know. A mathematical proof does not rest on a series of test observations, but on a statement of general laws which can be shown to be universally, necessarily true. Mrs. Reid points up the difference:

"In sciences other than mathematics a sampling must often serve as verification of a hypothesis. Mathematicians, who by the nature of their science can prove or disprove a hypothesis with complete finality, have a smug little joke that they call 'The Physicist's Proof that All Odd Numbers Are Prime.' The physicist, so the story goes, starts out by classifying one as prime because it is divisible only by itself and one. Then three is prime, five is prime, seven is prime, nine—divisible by three? Well, that's just an exception—eleven is prime, thirteen is prime. Obviously all odd numbers with the exception of nine are prime!"

From Zero to Infinity is a catch-all, and as it is quite short there is much that has not been caught. By and large, though, it is the best brief, popular introduction to number lore on the market, accessible to those with no mathematical training but rewarding even for those who have.

Oh, and that arrangement of the digits? Spell out the list and you will see the answer at once:

They are in alphabetical order.

IT WOULD be hard to find a better popular history of astronomy than Rudolf Thiel's *And There Was Light* (New American Library.) Some five thousand years of star-gazing need to be covered. In less than 400 pages Thiel encompasses the lot.

Just about everything is here. Thiel outlines for us all the major theories of past and present and describes for us the observations from which they sprang; he even finds time for human sidelights like Tycho Brahe's youthful dueling accident (which forced him during all his adult life to wear a gutta-percha nose) and the fussy housewifery of the founder of Greenwich Observatory (he spent endless hours lettering the word "empty" on boxes from which equipment had been removed). Admirably organized, well illustrated, the book has only one serious flaw. That lies in its closing pages where, in an attempt to keep it "up to the minute," some of its conjectures are outdated and already nearly forgotten. **END**

Don't Think About It

It isn't much of a secret, but it's the only one. The trick is . . .

By WILLIAM W. STUART

TOMMY wasn't really a timid child. Sometimes he didn't understand things and was puzzled. More often, grown-ups couldn't or wouldn't understand things that were perfectly clear to him and he was more puzzled. Occasionally such things worried and even upset him a little. Then Momma and sometimes Daddy would translate bafflement into silly adult terms and think that he was afraid.

It was that way about the hole in the closet when Tommy was just a bit over three. Tommy wasn't really afraid. Mr. Bear was afraid and the thing did puzzle Tommy. So he asked about it, but he never did get any sensible or satisfactory answers, and that did worry and perhaps even upset him a little.

But he wasn't afraid, even before Daddy finally told him, "Now, Tommy, boy. Don't think about it and it won't scare you. Really, there is nothing there to hurt you, if you just don't think about it. So don't you think about it any more—there's Daddy's big boy."

This certainly was not any sort of explanation. But still Tommy did try hard not to think about it, as Daddy said. And now he really doesn't think about it at all any more. Or about Aunt Martha, either.

The hole was in the closet in Tommy's room. Tommy and Momma and Daddy lived in a not very big, not very new frame house on the edge of the city and Aunt Martha lived with them. Tommy didn't—at least not yet, although there were promises—have any brothers or sisters. But he did have his own room and a family of his own, too. It was the extra bedroom and it had a closet that was cramped and with no light. Tommy liked his room. It was small, with a small bed, and it belonged to him, along with his family of Mr. Bear and Old Rabbit and Kokey Koala. It was also in easy crying range of Momma and Daddy's room and Aunt Martha's room, so if Mr. Bear, who was the timid one, got frightened in the night, Tommy could cry—purely in Mr. Bear's behalf—to bring help. Or at least company.

Tommy and his family all liked the closet well enough too, except for the shelf that was out of reach even from the "don't climb" stool. The closet was good to hide in or play bear cave or rabbit hole and fine for finding missing toys after Momma had a spell of playing cleaning house.

The day Tommy found the hole in the closet was the week after his third birthday. Daddy was at work. Momma was out shopping. It was a rainy afternoon. Aunt Martha was sitting with Tommy and the afternoon television.

HE WAS in his room with his family and they all agreed as soon as they heard the television coming on strong that it would be a very poor afternoon to waste on a nap. Besides, Mr. Bear's feelings had been hurt by having been somewhat left out of things recently in favor of new birthday presents, now largely broken or tiresome. To make it up to him, Tommy and Old Rabbit and Kokey all agreed to play bear cave in the closet. It was a nice game and going well enough, except for some grumbling from Kokey Koala, who always wanted to argue and claimed that bears lived in trees, not caves.

But then—and it was Mr. Bear's fault for wanting it darker, so he could hibernate—the closet door shut tight. That didn't seem so serious at first. It would only mean a scolding for being out of bed when Aunt Martha would come to open it after Tommy hollered loud enough. And then there was the hole in the closet, back in the corner next to the broken drum. They all

saw it and they heard the Ugly Thing talking or thinking at them. It stretched out a part of itself at Mr. Bear, who was the closest.

It didn't grab Mr. Bear, but he was terrified just the same. And none of them liked it. They didn't like it at all. The Ugly Thing couldn't come out of the hole because the hole wasn't big enough yet, but it tried and it was making the hole bigger. And it kept thinking at them, red thoughts, and hungry, as it tore at the edges of the hole. The family all looked to Tommy, so Tommy cried and yelled.

Finally Aunt Martha heard him and came to open the door. Then the afternoon sunlight streamed across the floor into the closet and the ugly red thoughts from the Thing pulled back, far back, so you could barely notice them, and you couldn't see the hole any more, even though you knew it was still there. At least Tommy and Mr. Bear and Old Rabbit and Kokey Koala knew.

After she opened the closet door and carried Tommy from the closet to the living room, Aunt Martha scolded. She wasn't really mad because she had waited until a commercial interrupted her television program before answering the cries from the closet. But she scolded because she was Aunt Martha and scolding was what Aunt Martha did. A really good cry, even one worked up strictly as a service for a companion, takes a little time to turn off. Then, after a few settling gulps, Tommy tried to explain.

"Auntie. Aunt Martha, there's a hole in the cave—in the closet—and there's a Thing inside of it."

He looked at Mr. Bear whom he was holding by one foot and at Kokey, dropped by Aunt Martha on the sofa, for confirmation. Then, quickly, he wriggled down from Auntie's lap. Old Rabbit!

BRAVELY, Tommy ran to the closet and was relieved. The door was open and, in the gray afternoon light, the hole was still not to be seen. Old Rabbit, who always had a bad temper, was annoyed and snappish at having been left behind. But he was there and all right. Tommy rescued him and ran back to Aunt Martha.

"It was hungry," he continued his explanation.

Aunt Martha, as always, was difficult. "Who is hungry? You shouldn't be hungry, Tommy. You just had your lunch an hour ago. Do you want a glass of milk?"

"Not me hungry." Tommy was impatient. Aunt Martha never seemed able to grasp any idea more complex than a glass of milk or wet pants. Little boys, in her mind, near-

ly always either wanted the one or had the other. Such things she could and did attend to with a virtuous sense of duty done. But anything else was beyond her.

"Tommy! Are your pants wet?"

Tommy sighed in resignation and wet his pants. It was the only thing to do. Otherwise Auntie would fuss and fume, accomplishing nothing, understanding nothing, for the rest of the afternoon.

Ten minutes later, in dry pants, he finished an unwanted glass of milk. Aunt Martha, conscience appeased, returned to soap opera. Tommy and his family, nap safely forgotten, played away the afternoon—but not in the closet or even, as was usual on rainy days, in Tommy's room. Instead, finding Daddy's old briefcase full of papers, they played office in the family room, with Old Rabbit grumbling about having to be Miss Wicksey, who drove the electric typewriter in Daddy's office.

Momma and Daddy came home together at a bit after five. Tommy took his scolding about messing up Daddy's papers in good part. He had expected it. But Aunt Martha was angry about the scolding she got for letting him, mild though it was.

In retaliation, she said, "Tommy, you were a naughty, naughty boy. And for being so naughty you must take your big bear and your rabbit and the little bear or whatever the thing is and put them away in the closet. And leave them there till tomorrow."

"No! No, no, no, I won't! It isn't fair. They weren't bad. And the Ugly Thing is in the hole and it might come out and it's hungry and—and my family is all afraid."

"Tommy!" Aunt Martha's voice was sharp. "You stop that nonsense and put your toys—"

"Wait. Wait up now," said Daddy, who also lived in the grown-up world, but who sometimes tried to understand things. "What is this about a hole in the closet? What about something being hungry?"

"That's all," said Tommy. "The Ugly Thing in the hole in the closet. It *is* hungry."

There was more to it than that, of course, but how could a thing like that be explained through a wall of grown, closed minds? There was the hole in the closet. You couldn't exactly see it. You could only sort of feel seeing it and the hairy Thing—at least it seemed hairy and shapeless, or having many different shapes and a mouth and sharp teeth —and it had reached out with something and touched Mr. Bear and would have eaten him too, if he had blood. But then it had pulled back from Mr. Bear and red hunger thoughts came stronger and

stronger. Even now, stretching out from the hole where it was hidden there in the closet, Tommy could feel the reaching, greedy thoughts. But he couldn't explain all that.

"There is a hole in the closet," Tommy said again.

BUT he knew that not even Daddy would understand. Of course Momma wouldn't. Not Momma, who was loving but very busy and just sat so often, dreaming or listening to baby sister that they said was in her stomach, so big and fat now as to leave little lap room. Momma was too occupied looking inward to look out much at Tommy. Daddy, to give him credit, was nearly always willing to look, but there were so many things he couldn't see. Still Tommy had to try.

"The Ugly Thing in the hole. It wants something to eat."

"Oh, Tommy! Such horrible nonsense!" That was Momma. She wasn't even going to think about it. It is a question sometimes whether baby sisters are worth all the bother and trouble.

"Now, Tommy." Daddy was being helpful. "You say there is a hole in your closet? And that there is something in the hole?"

"Well-ll. Sort of." Really, the Ugly Thing wasn't so much in the hole as on the other side of it. But that was close enough.

"All right then, Tommy. Suppose you show it to me."

"What?"

"Show me the hole, Tommy."

"Now?"

"Yes."

"The hole in the closet?"

"Tommy!"

"Yes, Daddy." This wasn't going to work out to anything good and Tommy didn't want to go back to the closet and close the closet door anyway. The Thing didn't eat Mr. Bear because Mr. Bear didn't have blood. But Daddy had and . . . "Tommy!"

They went to the closet. At least, if he was risking a Daddy, Tommy thought, he was protecting Mr. Bear and the others.

"Now where is this hole, Tommy?"

"Over there by the corner." Tommy pointed.

Daddy went into the closet to look. Tommy started to close the door. In the black dark, Daddy would see what Tommy meant about the Thing in the hole. From the outside, Tommy started to close the door. It was a small closet and hardly big enough for both of them.

"Tommy! What are you trying to do? Open that door."

"But—" After all, the hole wasn't there, or scarcely seemed to be there, except in the dark.

"Open it up wider. Hm-m. I believe I do see. Wait till I get my lighter . . . Say, by George, I believe you're right. There *is* a little hole there. Looks like a mouse hole."

There it was, as Tommy might have known. Grown-ups will always avoid seeing the important things. Of course there was a mouse hole there, the home of the little old Mr. Mouse with the wiggly nose and the gray whiskers. He had been nice. But he wasn't there any more and Tommy had a pretty clear idea of what had happened to him. That poor little old Mr. Mouse had had blood.

"But, Daddy—"

It was hopeless. "Dorrie! Martha!" Daddy's hunting instinct was aroused. "Have we got a mouse trap? Any cheese? There is a hole in that closet, a little old mouse hole and I'm going to—"

Well, perhaps this would be better than if he hadn't found anything.

Tommy followed Daddy about as he finally located a mouse trap. No cheese? He cut a little piece of meat for bait. Of course Tommy knew no trap would catch the Ugly Thing.

"What in the world happened to my lighter?" Daddy wanted to know. Tommy didn't answer that. But at least everybody, even Aunt Martha, had forgotten about shutting Tommy's family up in the closet. For now that was enough.

But later, after supper, after bath, after the shooting picture on the TV, it was time for bed.

"Daddy?"

"Get on to bed now, son. Past bedtime. Hop to it."

"Daddy, I want to sleep with you and Momma tonight."

WELL, it was a mighty dark night. The afternoon rain had built up into a real storm. Mr. Bear was terrified. Kokey was scared and even tough Old Rabbit didn't want to sleep in Tommy's room with the Ugly Thing in the hole so hungry and waiting to rip its way out of the hole when it got dark enough —and only the street light outside the room to keep away the dark because they would never let Tommy keep his light on at night.

"My family and me don't want to sleep in my room tonight."

"Now, Tommy, just because it's a little stormy—Daddy's big boy isn't afraid of a little wind and rain?"

"I'm not afraid, Daddy. It's my family. You know how families are. You always say about Momma—"

"Never mind that now. To bed. Your own bed."

"But, Daddy, there's the Ugly Thing in the hole! And it's hungry!"

"The mouse?"

Daddy went to look at his trap, switching on the light in Tommy's room. He came back in a minute.

"The little devil!"

Did Daddy know? No.

"The little devil got away with the bait, clean as a whistle. Only a little plaster dust or something left in the trap where I put the meat."

Mr. Bear shivered. "Now don't be foolish, Bear. You don't *have* blood. The Ugly Thing won't get you," Tommy told him softly. But Mr. Bear wouldn't listen. He was a crybaby, a scaredy-cat. But to tell the truth—the real, honest truth—the whole family and even Tommy didn't feel too good about it.

"Tommy? What was that you were saying?"

"Daddy! I wanna sleep with you and Momma. Me and my family. We're scared of that Thing." Tommy knew it was no less than his duty to protect them all.

"Oh, now, Tommy! You don't mean to say you're afraid of a little old mouse? A big boy like you?"

"Well, Mr. Bear is—I don't —Daddy! It is there, honest it is, in that hole and it's hungry and it'll come out in the dark and—"

"Tommy! A little mouse! Get on into your room now and no more argument."

Tommy's face began to crumple. If he had to, he would fight this one out all the way—tears, tantrum, kick, scream, gasp, hold his breath and turn blue—

"Now, now, Tommy-boy." Daddy did mean well and sometimes he was even right and so Tommy always did try to do what Daddy said. "Tommy, you mustn't let things like that bother you. If we can't catch the little mouse, forget it. There's nothing more we can do, so just don't think about it. You see?"

Sniff. "No."

"Don't think about it, that's all. There is nothing there that can hurt you, if you just don't think about it. So don't think about it—that's Daddy's big boy."

"Well-ll . . . And then can we sleep with you and Momma?"

Aunt Martha rang in her nickel's worth. "A boy ought to be ashamed to be afraid of a little mouse."

"It's not—"

"Not what?"

"Uh—it's Mr. Bear that's afraid. Of the—"

"And you just stop that nonsense about those ridiculous stuffed animals, you hear me? Nobody should make such a fuss about a little mouse."

"Momma does. Momma!" Tommy let two fat tears trickle down his cheeks, a warning, but he meant them too. "Momma-a-a, can't we—"

"All right, all right! Stop this stupid wrangling! You

know how it gets on my nerves. For goodness' sake, let him sleep with us tonight. Anyway, *I* don't blame him. I wouldn't sleep a wink in the same room with a mouse. Be sure you shut our door tonight. Tight."

"You're spoiling the child," said Aunt Martha sourly.

"Auntie," said Tommy, "I bet you're chicken to let your door stay open."

"Well!" huffed Aunt Martha. "The impertinence! I certainly *shall* keep my door open. No mouse is going to keep me from getting good, fresh air."

TOMMY was a very bright little boy. Now, with the door shut in Momma and Daddy's room, and Aunt Martha's door open, he wouldn't think about the Ugly Thing in the hole—waiting for dark, real dark—to come out—and eat.

"All right, Tommy. This once you can sleep with your mother and me. Get on to bed and mind you sleep quiet. And don't spread those stuff—your family all over the bed either."

"Yes, Daddy. And, Daddy—"

"What?"

"I won't think about it now, the Thing in the hole."

Tommy said his good nights. Tonight he even kissed Aunt Martha as if he meant it. And he took his family and he went to bed in Momma and Daddy's room.

He did not think about the Ugly Thing. He went right to sleep, lying at the edge of the big, big bed. Tommy, and Old Rabbit, and Kokey Koala, and even Mr. Bear went right to sleep.

Outside the wind blew hard and harder and the rain drove down and it was dark. The television reception was bad. Everyone went to bed early. Good night. Lights out.

In Tommy's room it was quite dark with only the faint, watery rays of the street light on the corner swimming in through the rain. In the closet there was a stirring, a fumbling, a tearing and the hole in the blackness grew, was forced, bigger, wider, as the Thing pushed and ripped at whatever was barring it from the warm, red, oozing food it craved; it must have; it would have.

And, in a sudden gust, the wind blew harder still. Somewhere in town, blocks away, a wire fell and blue sparks flashed and crackled in the dripping night. In Tommy's house the refrigerator went off, the electric clocks stopped. The street light blinked once and was gone and in Tommy's closet there was a sudden, mighty surge of effort, a break, and something, not a sound, but something, a harsh and bloody sense or feel of rending greed flowing out-

ward from the closet in a wave.

Aunt Martha, in her sleep, said, "No. Oh, no!"

Daddy interrupted a snore with a strained grunt. Momma whimpered softly and hugged to herself her swollen stomach.

Tommy blinked and was awake. Soothingly, he patted Kokey and Old Rabbit. He squeezed Mr. Bear's paw. Then he slipped his hand into the opening in Mr. Bear's overalls and took out Daddy's cigarette lighter. He knew how to work it. But first he waited.

"Don't think about it," Daddy had told him and he didn't think about it, really. But he couldn't help feeling it. The Ugly Thing was out, clear out of the hole now, and moving. He could feel that and the awful hunger moving with it. Aunt Martha's room was closest and her door was open. Momma and Daddy's room was closed. The Ugly Thing moved fast, faster, and reached out, thirsting, hungering . . .

From Aunt Martha's room came the quavering wail and from the Thing there flowed a sense of vicious, evil joy.

There it was, but was it enough?

Tommy hugged Mr. Bear once, tightly, and slipped noiselessly from the bed. He wasn't thinking about it, he couldn't, he wouldn't think about it. But he knew what he had to do. He had the lighter. At the bedroom door he worked it. Opened the door a crack; thrust it out. And then, in a little rush, back to bed where he lay quietly, and he didn't think about it, he and Mr. Bear and Old Rabbit and Kokey Koala.

AFTER a little, the sense of feeding hunger was gone and the feel of the Ugly Thing was gone, back into the hole in the closet, forced back by the flickering yellow light of the flames started by the cigarette lighter. Then, when the smell of smoke grew thick in the room and he could hear the crackling of the fire burning the house, Tommy shook Daddy awake.

It wasn't hard to get out through the bedroom window, except for Momma. But she made it all right. And Tommy had a little trouble holding tightly to each member of his family as Daddy lifted him out of the window, but they made it all right too. Of course Aunt Martha didn't make it—how could she? But it was fun watching the firemen in the rain from the Krausmeyer's porch next door as the house and the closet with the hole in the closet all burned up together.

Aunt Martha?

"Funny thing," Tommy heard one fireman say to another the next day, in the sunshine, as they looked over the

smouldering ash, "the old bat must have been as dry as dust inside. Twenty years in the department and I never did see a body so completely consumed—teeth, a little bone... Hey, get on away from here, son! Get along on home with you!"

Daddy and Momma said Aunt Martha had gone away on a trip. Tommy might have known pretty well where she had gone, if he had thought about it, but he didn't think about it. None of his family did. What for? Aunt Martha had had to go away, sure. She went. All right, who missed Aunt Martha?

Anyway, there were lights in all of the closets in the new house they moved to and lots of room for everyone, even baby sister. And there were no holes, not even mouse holes, in any of the closets.

END

WHAT'S THE GOOD WORD?

Non-readers of science fiction boggle at such place or name inventions as, say, Rxxl for either the future or alien worlds, yet Earth itself is a very good example of alphabet-gargling and sense-mangling, not to mention telescoping. Considers these instances:

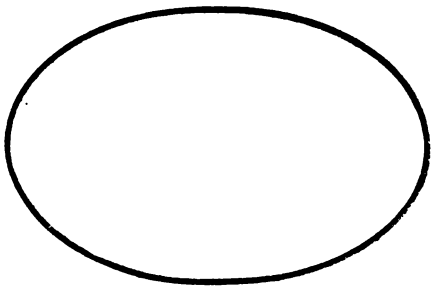
Lyon was once Lugdunum. Cameracum and Mediolanum (the latter meaning "In the middle of the plain") have been time-abbreviated to Cambrai and Milan. If you can connect the Spanish Zaragoza and the French and English Jersey with Caesarea Augusta, you have an aptitude that the U. S. Department of the Interior would welcome—its toponomy section, in its search for the origins and meanings of place names, has a rough task, for many of the names have come down in just as unrecognizable forms and the meanings lost.

Torpenow Hill, in England, doesn't sound incredible until translated. Each syllable was added by invaders or settlers, and each means the same thing—so that the translation is Hillhillhill! Hill! Greenwich Village is almost as bad, for *-wich* is from the Latin *vicus*, meaning "village." The Sicilian town of Linguaglossa is "tongue-tongue" in Latin and Greek. Yucatan was not the name the Indians called their country; it was an uncomprehending "What do you say?" to the queries of the Conquistadores.

Want to bet on how Baseball, Ohio, got its name? You'll lose. The two towns of Basil and Baltimore decided to merge, with each contributing its first syllable to the joint name.

Brimaquonx was seriously suggested—and not in science fiction—as a name for New York that would combine those of all five boroughs. The future name may make that seem reasonable and perhaps even attractive.

Rxxl does sound unlikely because of its lack of vowels. But if the Yugoslavs can call Trieste *Trst* and "a hill full of fog" in Czech comes out *vrch pln mlh*, why not Rxxl?



EGG AND

A Siukurnin is so becoming!

FOR a week now the Siukurnin had hung above the hunters' camp disguised as a pine cone. One of the ropes holding their tent fly passed within inches of it, and when the cold evening wind blew, as it was doing now, the rope hummed. This created a masking harmonic that had to be filtered out (along with many other "noises") before the Siukurnin could concentrate on the vibrations coming from the figures around the fire.

Already imprinted and stored in the Siukurnin's subcellular structure was a long catalogue of light-reflected *shapes* and vibration meanings from this place and the other places. It knew that when one of the carbon lifeforms moved to the nearby flowing liquid, the creature was going to the *water*. (And that was one of the vibrations for the great heaving expanse of liquid beyond the mountains to the east.) And it knew that when one of these creatures became dormant for the night (low vibration period), that was *sleep*.

Oh, there were so *many* vibration meanings.

The Siukurnin tried reproducing the vibrations for *sleep* and *water* at a subaural level, gloried in its growing mastery of these subtleties.

An aroma of coffee and broiled meat arose from the fire. The Siukurnin listened

to these for a moment, savoring the full roundness of the vibration spectrum in this enchanting place. As yet it had not thought of the necessity for a non-*chilitigish* vibration to refer to itself.

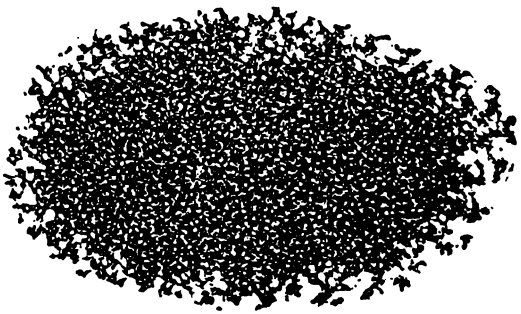
(You must understand that when it thought of itself at this stage (which was seldom), it did not think: "I am a Siukurnin." In the first place, a natural mechanism inhibited prolonged introspection. In the second place, "Siukurnin" is a make-do vibration—a limited auditory approach to the actual "term" that is used only in communicating with creatures who do not hear into the visual spectrum, and who are not yet able to detect the *chilitigish* spectrum. Since this is only a start at communication, it's perfectly all right for you to think of this creature as a "Siukurnin," but you should keep in mind that there's a limitation.)

BEFORE coming to this hunters' camp, the Siukurnin had spent two weeks as a false rivet head in the wardroom of a long gray warship. It had left the warship as a coating of "film" on a garbage container, and had arrived here in the pine glade as a length of "wire" in the trunk lid of a used car that had been sold to one of the hunters.

Between the garbage container and the used car there had been several other shape-aliases, all characterized by

ASHES

By FRANK HERBERT



solid color and smoothness and all difficult to reproduce. The Siukurnin looked on its present pine cone form almost as a rest.

Once started on its repertoire of new vibration meanings, the Siukurnin was like a *lilim* with a new *arabeg*, or, as you might say, like a child with a new toy. Presently, it recalled the period on the warship. "Now hear this! Now hear this!" it chanted to itself at a level too low to be detected by the figures beneath it.

Darkness folded over the camp in the pine trees and the fire flickered low. The upright creatures retired into their tent. (To *sleep*, you understand.) Among these creatures was one identified by the primitive (non-*chilitigish*) vibration: "Sam."

Now the Siukurnin listened to the soughing of the wind through the branches around it, to the scrabbling of night creatures—and once there was a figurative scream of skunk odor nearby. Much later, the Siukurnin defied its inhibitions, tried to recall a time before the awakening at the warship. Only faint fog memory came: a sensation of swimming upward through dark *water*.

The effort of memory brought the inhibition mechanism into action. Destructive hunger gnawed at the Siukurnin. It sensed changes going on within its structure —a maturation of sorts.

To put down the hunger, the Siukurnin imagined itself as one of the flying creatures to be *seen* in the delightful harmonics of sky above it—soaring . . . soaring . . .

But this, too, became disturbing because its self-image insisted on resolving into a giant red-gold winged thing unfamiliar to these skies (but feeling disquietingly familiar to the Siukurnin).

Dawn crystalled the peaks to the east, brought stirrings that aroused the Siukurnin from its reverie. A figure emerged from the tent, yawned, stretched. The Siukurnin matched light vibrations and sound vibrations for the figure and, in its own way, "recognized" the hunter, Sam. There were checkered harmonics with merging of long and short olfactory-visual waves punctured by great sound-meaning vibrations.

"Chilly this morning," said the hunter. "Wish I could stay in the sack like you bums."

From the tent came another voice: "You lost a fair and square toss, Sam. Get that fire goin'."

A connoisseur sense within the Siukurnin came to full alert. It felt that this crude creature carried some supremely desirable element. In a sense, the Siukurnin "crouched."

The hunter put a hand on the fly rope, glanced at the false pine cone. "Yeah," he said. "You'll burn like pitch." He reached up, touched the "cone," felt sudden warmth, then nothing. The "cone" was gone. He shook his hand, looked around the ground, back to the tree. Nothing. "I'll be danged," he muttered. He scratched the palm that had touched the "cone."

"That fire goin' yet?" demanded the voice from the tent.

Sam shook his head. "No. I was going to pick a pine cone to help start the fire and the darn thing disappeared."

"You're gettin' old, grampaw," came the voice from the tent. "Better buy some glasses when we get back to town."

Another voice intruded from the tent: "Will you guys quit your yakking? I'm trying to sleep!"

For the Siukurnin there had been an instant of exquisite languor. Then it had felt itself changing uncontrollably, spreading out over the hand of the carbon lifeform, seeping immediately through pores, between cells, into a vein. It stretched out —no more than six cells in diameter—reaching . . . reaching . . .

A long, thin thread explored the length of the vein. (You'll appreciate that the vibrations here were magnificent in their contrapuntal relationship: little hissings and squealings and lappings played against a superb background throb. There were also a few moments of delicate adjustment before the leucocytes ceased their ravening attack.)

IN ITS own way, the Siukurnin danced for joy. Its hunger became only a faint beckoning: a dim sort of knowledge that end-of-hunger was at hand.

And there came a trickle of memory from before the upward swimming and those first moments of awareness on the warship. There was not enough recollection to frighten it with the thought that its own little egg of ego might be overwhelmed . . . just enough to whet its curiosity.

(All Siukurnin are fully endowed with a curiosity that cannot be inhibited, you know. And *chilitigish* awareness makes this faculty even more potent.)

The Siukurnin swam, crawled, wriggled, elongated and squeezed. Down, outward, upward. It had to filter out part of the "music" around it now: wheezings in the great air sacs, gurglings and sloshings, cracklings and swishings. All *so* distracting. One of its elements enwebbed the host's vocal cords ("great vibrators" to a Siukurnin).

Another part interfingered the speech centers of the brain. Cilia reached out to the eye surfaces and the eyelid veins, contacting the exterior.

It was distracting at first to discover how all the vibrations were separated by different sense organs; then temptation became irresistible. (Who can hurl blame for this?) The Siukurnin coordinated its contact with speech centers and vocal cords.

Across the pine glade a human voice shouted: "Now hear this! Now hear this! Water! Sleep! Fire! Eat!"

Oh, it was an exhilarating sensation!

Two of the upright creatures, the other hunters, tumbled from the tent. One called: "It's about time you got . . ." It broke off. There was no fire. Only Sam standing terror-eyed beside the firepit, left hand to throat, right hand outthrust as though to push something away.

Then Sam swayed, collapsed.

In the hospital room, gross vibrations had been dampened to a remote hush. Slatted blinds were closed against raw morning sunlight. The bedside lamp had been turned off. But there still was a soft harmonic reflection from cream-colored walls that mingled with the even hiss of sleep breathing.

Sam lay on his back in the room's single bed, eyes closed. His chest under a green humming of blanket rose and fell gently. Somewhere, a pumping motor throbbed its obbligato. Distantly, stiff little shuntings and pantings and screechings told of city traffic. Ether trailed its solo virtuosity through the air, riding on a wave of disinfectant. A nurse's heels along the hall added an abrupt random rhythm that wove back and forth . . . back and forth through the other vibrations in a way that excited the connoisseur sense of the figure on the bed.

(After all, the long, virtual silence of the migration had now been recalled. In a sense, it was *starved* for these wonderful "noises.")

Outside the half-opened door of the room, a doctor could be heard talking to Beverly, Sam's wife. The doctor was tall, a beak-nosed shape: pink and blond with white on white on white echoing across the image. Acrid little shouts came from his hands, clinkings from his pockets, and a buzzing of tobacco rode his breath.

There had been a strange *dual* recognition of Beverly: a sense of familiarity with her dark hair, soft curve of cheeks, alert gray-green eyes. (The Sam-memories, of course.) And there had been

added to this a pungent explosion of perfume-base powder (still familiar, yes, but heightened to an indescribable pitch), plus a glissando of gold necklace on green coat on green suit, all played against a bright beating of gold-bronze buttons. (And there was much more, but without *chilitigish* awareness in the reader, the effects are meaningless.)

The doctor's voice carried a drum quality as he uttered cautious reassurances. "There is no doubt that it's some type of narcolepsy," he said. "But there's no enlargement of the lymphatic glands. His pulse and respiration are normal. Temperature's up, but not dangerously. I'm inclined to suspect this may be a reaction due to nervous strain. Has he been working very hard?"

"Narcolepsy, narcolepsy, narcolepsy," whispered the Siukurnin with its Sam-lips.

Well . . . they weren't exactly Sam-lips now. They were much more accurately Sam (to the Siukurnin power) lips.

You just have to understand that single-ego orientation sets up difficult problems in communications here. What you would consider odd and irresistible things had been happening to Sam and Siukurnin. Cilia of Siukurnin had gone creeping and seeking of their own volition. It was now a great thin net spread throughout the host. Wherever it touched nerve cells—in brain and elsewhere—subtle displacements occurred at the subcellular level. New memories (Sam-memories) filtered into Siukurnin. And Siukurnin memories, of course, filtered back to Sam. (This is one of those processes that just cannot be confined to a one-way circuit.)

THINGS had gone so far that Siukurnin had displaced the temporary migration-ego. And Sam—"he" now thought of himself as a kind of "needle" at the end of an extremely long thread. You *see*, the "thread" was the Siukurnin ego-memory-chain, its past so ancient that the Sam-ego was staggered.

(If you open up a Siukurnin-past you find that it is other creatures stretched out to a virtually meaningless number. This is a fascinating infinity process in which a quite satisfactory internal relationship has been worked out.)

Fully awakened, Siukurnin now understood the necessity mechanism that had blanked out ego-memory-chain awareness. There is such a temptation in the migration period to turn inward upon the merged multiplicity, encyst all distracting processes, and just think and think and think and . . .

You can see how this would be a kind of death.

(Strictly speaking, Siukurnin do not fear death, although they are vulnerable during the "flight-of-joy" vector in their life cycle.)

Both Sam and Siukurnin were completely merged now. Sam-Siukurnin (ego-memory-chain $+^{x}$) lay in the meaningful vibration core of the hospital room. Neither "unit" could now undo what had happened —nor wanted to undo it. Oh, there had been some Sam-resistance at first. Quite natural.

But Siukurnin revealed how a reluctant host's flesh could be incinerated without stopping the merging process. (And there were all those memories laid out in the open to prove this!) The other capture memories were a compelling argument, too.

The process is so *drearily* repetitive—except for the new life with its fascinating vibration meanings, of course.

And now you know how it happens. Not painful (except for some initial shocks). Not harmful to the host-ego. And not to be resisted.

In fact, this is being written in the hope that the rest of you will *see* (what an *odd* sensory division) how foolish it is to resist.

There's no point in resistance.

You cannot fight the inevitable.

Besides, you will find the merging a very rewarding experience. And if you stop to think about it, this is not the first time your kind has encountered us (although never before in such numbers as our present migration). You do have your legend of the Phoenix. According to your legend, this was a great red-gold "bird" that returned to Heliopolis in ancient Egypt every five hundred years (a reasonable Siukurnin-host life span), there to be reborn from its own ashes.

Naturally, the flesh of a dead host has to be incinerated to free the Siukurnin web for its "flight-of-joy." To think of the Phoenix as a "bird" was somewhat of an oversimplification, you understand. But we're sure you'll enjoy the flying sensation and the act of creating your new egg—especially when you view the experience with full *chilitigish* awareness. **END**

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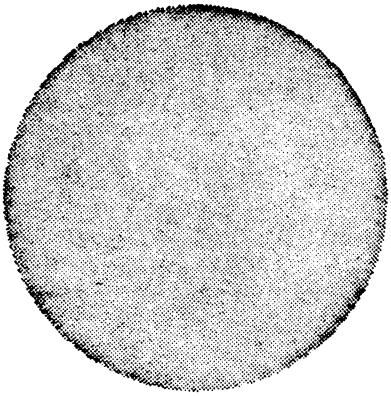
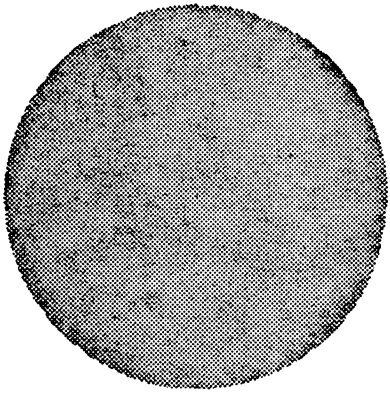


By ROBERT WICKS

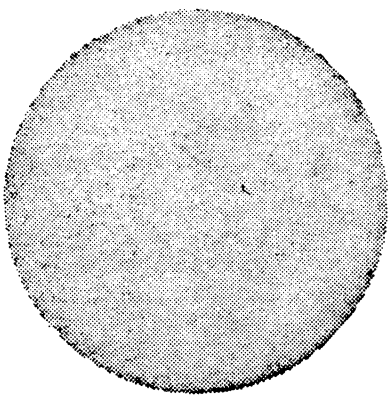
Illustrated by DICK FRANCIS

First he had to know what he was, then who he was and why he was—but who was relying on the answers?

THE



HE OPENED his eyes. He couldn't remember having ever seen humans before, but he recognized them instantly. Nor could he remember having seen anything before, yet he felt a warm familiarity with all that fell into view—the light panels set flush with the ceiling, the gleaming laboratory paraphernalia erected around the table on which he lay, electronic scanners probing his mind with invisible beams—but, most of all, the two men in white lab coats bending over him.

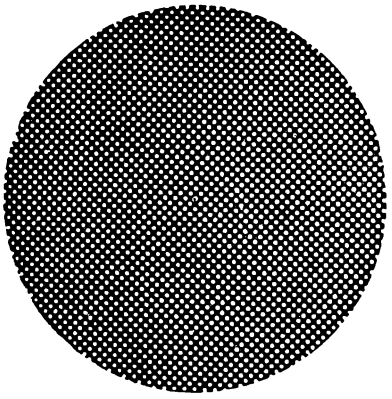


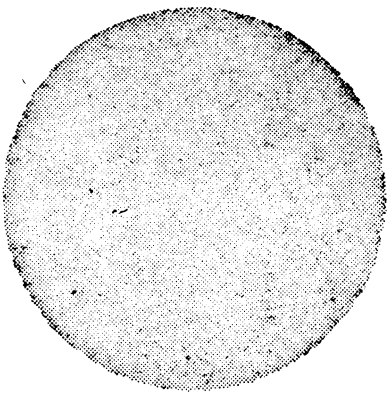
"Clench your fingers," ordered the shorter of the two humans.

Muscles tightened. Fingers clenched.

"Blink your eyes."

A quick reflex action.





IMPERSONATOR

The taller man leaned closer. "What is your name?"

Something tripped deep inside. "Paul Chandler."

The tall man smiled, but somehow the smile never reached his eyes. "Occupation?"

Again something tripped. "Geophysicist."

"And your specialty?"

"Glaciology."

"Your present assignment?"

"I have been appointed by the President of the World Council to head up Project Ice Thaw."

"Which is?"

"A program of weather control to combat the extensive glaciation threatening to plunge the Earth into another ice age. We meet next month in New San Francisco to get final approval on a plan of action."

"And if the project fails?" asked the tall man.

"Catastrophe."

"Clench your fingers," said the shorter man.

Chandler could feel the energy pulse from his brain to his fingers.

"Blink your eyes."

He did so.

"Sit up."

Stiffly he obeyed.

"What manner of creature are you?" asked the tall man.

Something whirred deep in the recesses of Chandler's mind. "A man," he said at last. But he knew he was not.

The tall man depressed a series of buttons on a master control panel. There was a rushing in Chandler's ears, a blurring before his eyes.

The voice of the shorter man floated across a gray void.

"Clench your fingers," it said. "Blink your eyes."

The odd sensation passed and Paul Chandler found himself looking into the eyes of Marta Neilson. She half stood at the far end of the conference table.

"Are you sure you're all right?" she asked.

"Just a moment's dizziness," he said. "It's gone now."

Marta, partially reassured, sat down again.

AS CHANDLER poured himself a glass of water, he studied her clean features as he would a mathematical problem in topology. Add in her blue eyes and white skin, subtract her hair pulled back in a severe bun and her lack of makeup, and she approached the Swedish ideal of beauty.

Her natural magnetism and physical attractions had always stirred an emotion in Chandler, but, strangely enough, not now. She smiled and, automatically, he returned the smile.

"Mr. Chairman." The delegate from Canada frowned at Chandler. "We've debated the problem of causes for nearly two hours and seem to have reached an impasse."

A lean Britisher pushed his chair back. "If you were to solicit my opinion, I'd say we'd reached an impasse before we entered this room."

A stocky Russian with weathered features shot a glance at the Englishman. "Was that remark directed at me?"

"I was under the impression," returned the Englishman, "that we were here to determine an immediate course of action. My government instructed me to work to that end. I do not know what your instructions were."

"My dear Dr. White—" the Russian began, but Chandler's gavel rapped firmly on the table.

"Surely," he said, "Professor Kotenko is willing to concede that a cold climate is not enough in itself to cause glaciation."

"I did not mean to imply that it was."

"There must be snowfall, and snowfall demands a source," Chandler continued.

"And that source is the Arctic Ocean," the Britisher threw in.

The Russian stood up. "Gentlemen," he said, "would you undo a century and a half of Soviet weather control? Would you destroy the Bering Strait Dam and the North Atlantic pumping stations?"

Dr. White stood up to face Kotenko. "If it would stop that infernal ice sheet, yes, by God!"

"It is easy for you to talk,"

the Russian fired back. "It is not British science that is being impugned."

"And it's not Soviet territory that's being threatened."

"A tribute to Soviet science," the Russian replied, smiling.

The Englishman's neck reddened.

CHANDLER rapped his gavel again. All eyes turned his way.

"We want Soviet and British science working hand-in-hand with the rest of us on this project. Anything less might spell disaster."

A murmur of approval greeted his words and the Englishman sat down. Professor Kotenko remained standing.

"You have the Soviet plan before you," he directed at Chandler.

"I've read it," said Chandler, glancing down at the document neatly bound in manuscript covers. "An interesting idea—increasing the greenhouse effect by adding carbon dioxide to the upper atmosphere. But the amount that could be added would only raise the temperature by a few degrees. Since snowfall increases considerably at the warmer temperatures close to the freezing point, we would only be compounding our problem."

Kotenko's features stiffened. "The plan also includes changing the albedo of the ice by coating it with coal dust. Not only would this raise the mean temperature, it would melt the—"

"What happenes when it snows over your precious coal dust?" the Britisher cut in.

"We are suggesting a continuous dusting program." The Russian took his seat.

"The plan is not without merit," Chandler said. "However, we've received almost as many plans as there are members on this commission."

"Why not try all of them?" asked the Indonesian delegate.

"Or, at least, a program involving several," Marta Neilson modified. "Atomic heat and possibly infra-red radiation."

"We can't spread our efforts that thin," Chandler explained to the young woman. "Any one of these plans demands a concentration of money and effort such as the world has never known."

"And one thing strikes me," Dr. White put in. "None of these plans hits at the basic cause. They all treat symptoms, save for the Canadian proposal, which is quite out of the question."

"Are you getting back to freezing the Arctic Ocean again?" Kotenko challenged.

"One X-bomb on the Bering Strait Dam," the Englishman said.

"My dear Dr. White," returned the Russian, "the

X-factor is best left under international ban."

THE Englishman turned to the Canadian delegate. "Is it? Perhaps this is the time to screen your stop-motion studies of the destruction of Ottawa."

"What purpose could that possibly serve?" Kotenko protested. "We've all seen the glacier first-hand."

"It might well underscore the need for more action and less talk."

"Then," said the Indian delegate, "by all means, let's see them." Again there was a murmur of approval.

As the delegates rearranged their chairs to face the view-wall at the far end of the conference room, the Canadian pushed a button on a control console in front of him. The room lights dimmed.

"This study was recorded at the rate of one frame a day by the Canadian Glacial Control Commission. Tonight it will be released over the World Video Network. While everyone has seen pictures of what is happening in Ottawa, nothing quite so dramatic as this has been shown." He pushed another button.

The wall disappeared and Chandler felt he was actually looking across the rooftops of Ottawa, once the capital of Canada. At the edge of the business district loomed a massive wall of gray ice. It was pushing a ridge of boulders and dirt before it as it bore down on the city.

The scene dissolved to a closer view of the glacier. As Chandler watched, fascinated, the glacier ground the city under like a huge bulldozer. And still it came on and, for a moment, looked as if it might flow right into the conference room.

The lights came up and the wall became whole again. A few delegates swiveled their chairs back to the table; others continued gazing at the wall.

"Now," said the Canadian, "you can see why our plan calls for a dramatic approach."

"Tilting the Earth on its axis is quite out of the question," Dr. White said. "But freezing the Arctic and removing the source of the snow *is* practical."

"And time-consuming," the Canadian added.

But Chandler wasn't listening. A sudden dizziness swept over him. He felt strangely detached.

"I don't think we're capable of reversing the warm currents flowing into the Arctic," he found himself saying. "The Bering Strait Dam is one thing, but a dam across the North Atlantic . . ."

"Then what have you in mind?" asked the Russian.

"How would you react to a little suggestion of my own?"

Again all eyes were on him. "Suppose we were to tap the heat right from the Earth's core?"

The reaction was dead silence. Finally the Englishman spoke.

"Mr. Chairman, in one breath you suggest the impracticability of damming off the waters of the Atlantic, and in the next you suggest drilling into the depths of the Earth!"

"Surely you are jesting," the Russian added. "Why not tilt the Earth, as the Canadians suggest, if we must lean to the sensational?"

"If I were not acquainted with your reputation, Dr. Chandler," the man from India said, "I would not for a moment entertain such a thought."

"Possibly," said the Englishman, "you mean pockets of magma near the surface."

"I mean the core itself," Chandler insisted.

"Gentlemen," Marta Neilson said. "As you know, I have been working rather closely with Dr. Chandler on the plans that have been suggested. However, tapping the core comes as a surprise even to me. But because I am acquainted not only with his reputation"—she acknowledged the Hindu with a nod—"but with his ability as well, I move that we allow Dr. Chandler to pick a committee to consider the feasibility and the consequences of such a plan."

"And what sort of magical drill is going to accomplish this?" the Russian demanded.

"The edge of the core is 1,800 miles down—" the Englishman started to say.

Chandler rapped his gavel once. "I believe there is a motion before us," he said.

UNLIKE the days before the threat of avalanches, the tubeway over the Sierra Nevada range was not heavily traveled. Twice in the past year avalanches had dislodged the tube, once resulting in a number of deaths—something that hadn't happened on American highways for nearly fifty years. But it was the most direct route to the Detroit Glacier Control Center.

"I'm not sure you made a wise choice in Kotenko," Marta said. She sat next to Chandler on the rear observation deck, occupying Professor Kotenko's seat while he chose to mingle with the passengers in the main lounge.

"Why?" asked Chandler.

"Well, I'm not much of a politician." She glanced around before continuing. "It'll be another century before Europe forgets World War III. Maybe you thought Kotenko's selection would appease the Eastern Union or maybe you were simply trying to get him out of the role of principal opponent, but—"

"I picked him because I needed him."

Marta frowned slightly. "Now it's my turn to ask why."

"Kotenko isn't just another glaciologist or meteorologist," Chandler said. "His forte is pure science—creative science."

"But he's impractical." Marta sat back in her chair. "You were the first to point out the weaknesses of his greenhouse plan. In fact, you were rather vehement about it before the conference. What happened to change your mind?"

Chandler didn't answer. Instead, he stared disinterestedly at the snowy moonlit peaks distorted by the curvature of the transparent tubeway walls. Marta touched his arm.

"I don't mean to get personal," she said. "But you seem to have changed a great deal quite suddenly. You're colder, as if you had lost your sense of humor somehow."

Chandler met Marta's gaze. "In a way, I suppose I did."

"Paul," she started to say, but Professor Kotenko strode down the aisle and plopped into the seat on the other side of Chandler.

"I'm afraid these were the best cigars they had in the lounge," he said, holding one out for Chandler.

"They'll do," Chandler said.

The two men lit up. Kotenko, through a haze of blue smoke, started picking at Chandler's brain like a surgeon undertaking an exploratory operation.

"Now then, my dear Dr. Chandler, what will this magic drill be?"

"I was thinking of superdense metals from Pluto and, maybe later, from the depths of the Earth itself."

"You are thinking in terms of conventional drilling?"

"I have been, yes."

Kotenko settled back in his chair, his bull neck against the padded head rest. "I don't wish to insult your intelligence by asking if you have any idea of the pressures at those depths."

Chandler rolled his cigar in his fingers but said nothing.

"The drill cores we've removed from the crust under the Pacific bear out our mathematics on pressures," Kotenko continued. "But heat is something else again. There will be hot pockets, semi-molten strata, finally molten material of great density. We can only guess at the temperatures. Your drill casing must not only stand up against fantastic pressures but also temperatures that will make the toughest alloys run like quicksilver."

"There have been lab experiments removing heat-conductivity entirely from metals," Marta offered.

"What is to keep the pressure from blowing the casing

right out of the molten rock?" Kotenko asked.

"Pressure traps built into the solid strata wherever we find it," Chandler said.

Kotenko digested this thought for a moment. "Then your drilling must be fully automated and not physically directed from the surface."

"It can be done," countered Chandler.

"And I suppose you will use some sort of thermocouple or heat transfer pump to direct the heat against the ice."

CHANDLER nodded. "And pump it into the air to raise the mean temperature in the glacial areas."

"That will cause some unusual weather aberrations," mused Kotenko.

"Nothing that the weather control boys can't handle."

"Are you sure," said Kotenko, drawing on his cigar, "that the core of the Earth is made of molten metal?"

"I've been working on that assumption."

"There are those who feel it might consist of compacted hydrogen atoms."

"Would it make much difference as long as we can use the heat?" Marta asked.

"If we are not careful in tapping such a core—" Kotenko paused for a moment, considering the consequences —"we could turn the Solar System into a binary system."

"I doubt that," Chandler said. "Besides, I don't plan to set off an X-bomb in the core."

"The immediate problem," said Kotenko, "is to drill such a hole."

"It will take some real engineering," Chandler admitted.

"It will take more than engineering." Kotenko looked directly into Chandler's eyes. "Will you listen to a suggestion of mine?"

"That's why I singled you out for the committee."

"Forget a drill of superdense metal." He leaned forward. "Use a device that will melt anything it comes into contact with, fuse the material into a casing and remove the heat conductivity from it so that it will remain solid. This device would sink toward the center of the Earth on a gravity drive principle. Your pressure traps would be force fields—controlled to allow surplus debris to spew out the top like an oil gusher." Kotenko settled back against the head rest.

"Where would we get the energy to drive this device?" Chandler asked.

"Thermo-nuclear power developing heat and thermo-electricity."

"Then I would be taking a fusion bomb into the core of the Earth."

"Yes, you would. You would have to maintain careful control from the surface."

"And suppose the core is made of compacted hydrogen atoms?" Marta asked.

Kotenko blew a long ribbon of smoke. "I doubt if there would be any danger unless we add the X-factor to the device."

Marta started to speak, but an insistent electronic chiming interrupted.

"Emergency deceleration," Chandler said calmly.

Even before the "Fasten Your Seatbelts" sign flashed on, Chandler, Kotenko and Marta had the buckles clamped tight and were braced against the head rests of their chairs. Light beam generators whirred. The tubecar shuddered and lurched to a stop. The lights went out and a woman screamed somewhere.

"There is no danger," the reassuring voice of the driver said over the speaker system. "There seems to be some trouble ahead." The lights flickered on dimly.

"We are on our own power," Kotenko said. "The tube must be out up ahead."

"Another avalanche?" asked Marta.

A private car pulled up behind them and cushioned to a stop on their force field bumper. Chandler swiveled his chair around and looked through the front viewdome at the scene ahead. The tubeway was illuminated with faint emergency light panels for about two hundred feet. A Greyhound Tubecar and several private cars were stalled at that point. Beyond was blackness.

Marta unbuckled her seat belt and stood up to see better. Chandler gazed up the slope of a towering peak alongside them. Deep snow glistened in the soft reflected light of the tube.

"We have just received word of an avalanche," the voice of the driver reported. "There is no immediate danger. However, we may be forced to turn back to—" A sound as of rolling thunder drowned him out.

"What—" Kotenko started to say, and then a gigantic mass of snow shuddered down the side of the mountain and broke against the tube like a foaming tidal wave engulfing the shore. Marta screamed and fell into Chandler's arms as the tubeway lifted, twisted, then slid with the snow into the valley below.

IT WAS like the dissolve on the video screen. Marta's terror-filled eyes were replaced by the penetrating eyes of the short man in the gleaming laboratory.

"Clench your fingers."

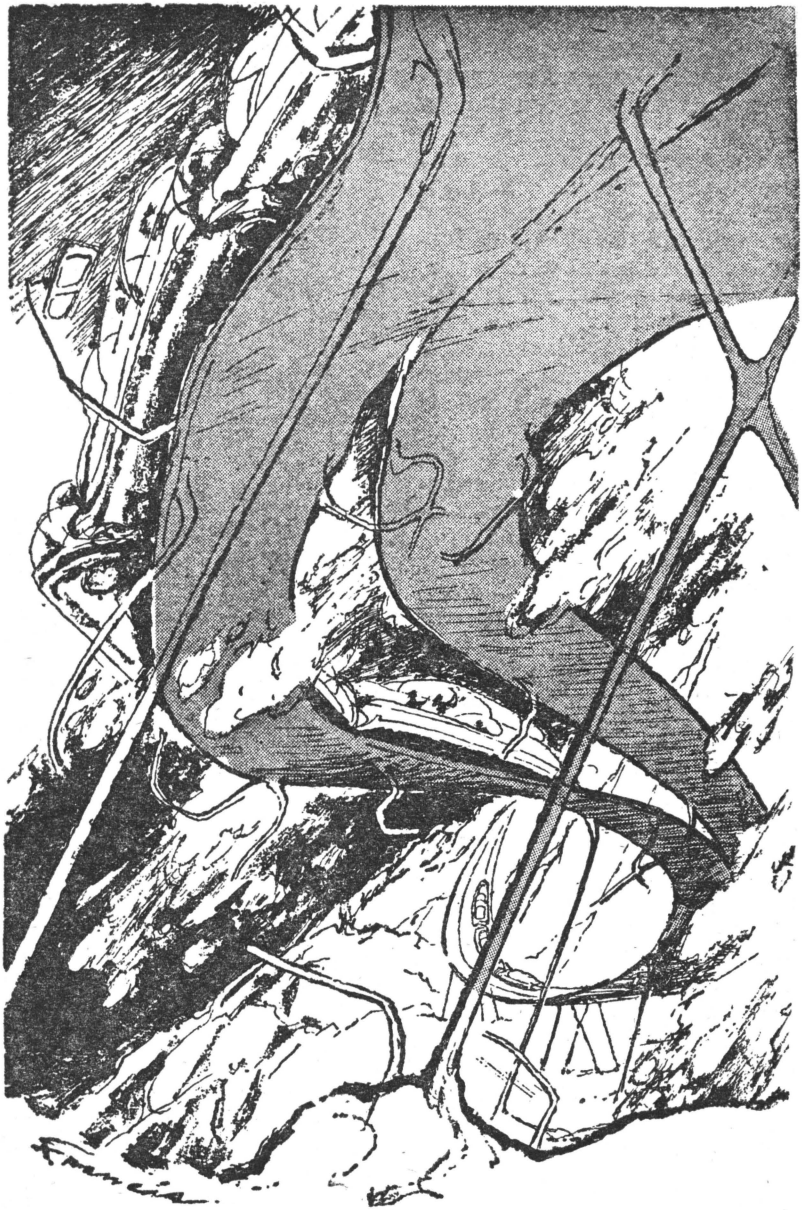
Paul did.

"Blink your eyes."

Paul did that, too.

The tall man turned from the control panel and looked down at Chandler.

"That was close," he said.



"Everything could have been lost in that one moment."

"Marta," Chandler murmured. "What happened to Marta?"

The short man looked up at the taller one. "Let's skip-time him three or four hours to avoid the possibility of losing him in the avalanche."

"If that doesn't work," the tall man returned, "we'll have to go all the way back to the conference and start again."

"I don't know what this is all about," Chandler said.

"How could you?" said the tall man. "Under your present programming, all memories have been canceled out."

"What is my purpose?"

"You know that." The tall man fingered a series of switches.

"Think we'll have to clear him?" Chandler heard the short man ask.

"No, I think we're just under the critical level."

The short man leaned over Chandler and watched closely. There was another dissolve. The man's eyes were replaced by Professor Kotenko's, sparkling with alertness.

"You fainted," Kotenko said. "Like a woman, you closed your eyes and fainted."

"What about Marta?" Chandler asked.

Kotenko smiled. "*She* didn't faint."

"Then she's all right?"

"Everyone in the last three cars lived—a few broken bones, that's all. The tube separated and the front cars and some of the other vehicles were carried down into the valley. This would not be permitted in the Soviet Union."

Chandler sat up. He was on the floor of a gymnasium. A brightly painted poster on the wall extolled the virtues of the Reno Union High School basketball team. Perhaps thirty others were on the floor covered with blankets and tended by doctors and nurses.

"We were brought in by verti-plane," Kotenko explained.

"How long has it been?" Chandler asked.

"Three or four hours. A long time to be unconscious. They want to X-ray that skull of yours."

CHANDLER frowned. "No need of that."

Again Kotenko smiled. "That's what I told them, but medical men sometimes get carried away with their importance in these emergencies."

Chandler tossed the blanket from his legs and stood up. "I feel fine," he said.

He led Kotenko down a makeshift aisle between the rows of injured. At the front entrance, he was intercepted by Marta.

"Where do you think you're going?" she demanded.

"To the center."

"But—"

"No arguments. We've got a lot of work to do."

"You make it sound as though there's no time," she said.

"There's much less than most people think."

"What do you mean by that?" asked Kotenko.

Chandler hesitated. There was something filed away in the back of his mind, but he knew he'd have difficulty explaining how he knew what he knew.

"You saw the video tapes of Ottawa," he said. "Montreal will be next, then Toronto, Chicago, Buffalo, Detroit, Toledo and, at the same time, Norway, Sweden, Ireland and eventually all of northeastern Europe."

"Ah," the Russian grinned. "Excellent strategy. Set a deadline. Let everyone know you are working against time and you'll have much less opposition and much stronger backing."

"What sort of a deadline?" Marta asked Chandler.

"A month to test the feasibility, then one year to develop the drill."

"I can hardly wait to see the faces of the committee when we tell them that," said Kotenko.

BUT Kotenko showed little interest in the surprised faces of the committee when Chandler announced his deadline one month later in Detroit. Chandler knew that it was another aspect of his report that deeply concerned the Russian.

Marta supported Chandler's contention that the job could be done—and in a year. She produced carefully detailed studies of non-conductive metals that she had painstakingly prepared.

Finally it was Kotenko's turn.

"Yes, Dr. Chandler, with his rather remarkable mental resources, has clearly shown that the drill can be produced by modern technology. And I believe that Dr. Neilson—" he smiled at Marta—"can lead the way to a system of non-conductive conduits to pump the heat anywhere it is needed. Only the one hole with its inexhaustible supply of heat will be necessary. On only one point do I disagree with Dr. Chandler."

Paul Chandler was doodling unconcernedly on the edge of his notepad.

"And that," continued Kotenko, "is on the need for the X-factor."

Dr. White demanded the floor and Chandler acknowledged him without looking up from his notepad.

"For years," the Englishman said, "the Russian government has steadfastly refused to agree to the use of the X-factor. I can appreciate their feeling, since it was the X-factor that tipped the

scales in favor of the West during World War III."

"Tipped the scales?" Kotenko said. "I was a very young boy, but the sight of the vaporized cities of Russia is burned into my memory."

"I believe I have the floor." Dr. White looked from one face to another as he addressed his remarks to each delegate seated at the conference table. "If we had been free to use the X-factor, we could now have reached the stars with no need to concern ourselves with the time barrier. Instead we are virtually confined to the barren planets of the Solar System. Right here on our own planet, the X-factor could have rebuilt the world almost overnight following the war."

"There is an ancient saying," Kotenko interrupted. "Those who play with fire—"

"The time has come," Dr. White pushed on, "to reappraise our position with regard to the X-factor capsules lying unused in the Swiss stockpile."

"We are hardly in a position to act on that matter," said the delegate from Greater Germany. "This is a matter for the Council itself."

Chandler tossed his pencil aside and stood up. "Nor is there any need to get a decision at this moment. The drill —with or without the capsule —will be basically the same. I'd like to see a motion for work to proceed on the drill. The matter of the X-factor can be decided later."

"I make such a motion," said the Canadian.

The motion was passed.

It was Marta who selected the site. She chose a grassy meadow in northern Michigan that stood directly in the path of the advancing glacier. But long before the first fingers of the glacier could search out the site, searing billows of heat would spread like a spider web across the mountain heights and northern reaches of North America, the north Atlantic and northwestern Europe.

Only Marta's stubborn insistence that this was the most central location had worn down a number of European delegates who had wanted operations to begin on their side of the Atlantic.

Kotenko, with a green light from Chandler, ordered three long-abandoned automotive plants into action in Michigan. Scientists and technicians from many nations of the World Council were brought together in the old General Motors Technical Center in Detroit. Plans were drawn, models constructed and a test vehicle sent to the center of Saturn's moon, Mimas.

CHANDLER carefully studied Kotenko's report of the Mimas probe, then met

with the Russian in the latter's office.

"I know why you're here," said Kotenko, offering Chandler a black Russian cigar. "You must take into consideration that this was only a scale model."

"But it had full power," Chandler argued.

"The initial descent was held to fifty miles an hour." Kotenko lit Chandler's cigar. "A fast start and we would have done it with power to spare. And remember that we haven't licked the heat problem. The test drill was softened by friction heat."

"You still couldn't have made it to the center of Rhea, let alone to the core of the Earth," Chandler said.

"It can be done," Kotenko insisted, "and without resorting to your X-factor."

"I've requested a special meeting of the World Council together with the committee to clear the way for using the X-factor."

"I'll oppose it. Since I am in full charge of constructing the drill, my words will bear some weight."

"I doubt if you will object," Chandler said. "I've just received a report from the State Department. They have good reason to believe that your government will back the release of one capsule."

Kotenko stared at Chandler. Finally he rotated his cigar in his fingers and studied the burning end. "Then I'll resign."

"No, you won't. Your government wouldn't permit it." He smiled at the Russian. "And neither would I. You're too valuable a man."

Kotenko was still studying his cigar as Chandler left.

THE X-factor capsule arrived under an international guard with the blessings of slightly over half of the member nations. Kotenko didn't resign, but his friendliness vanished.

That same day, Marta broke in on Chandler and, to the consternation of his secretary, hugged him.

"We've done it!" she cried.

"Here, here, take it easy." He held her at arm's length. "All right, what have we done?"

"Remember the things you said to me about slowing down the molecular activity of metals?"

Chandler nodded.

"Well," she continued, "we've just had a major breakthrough in the metallurgical lab, once you showed us the way. We can practically remove all of the heat conductivity. In less than a month we can start manufacture of the conduits."

Chandler smiled. The last obstacle was over.

"And more than that," Marta said, "we can build a test drill that will go down

into one of the big moons—one with a molten core."

"The next drill," said Chandler, "will be the *real* thing to tap the core of the Earth."

Marta kissed him.

The drill took less than the projected year to build. On the grassy Michigan meadow, as several hundred dignitaries, reporters and curious spectators in wind-whipped overcoats were held in check by armed troops, the giant device was lowered toward a concrete basin. Sizzling arc lights mounted on the control ring, a circular concrete building surrounding the basin, illuminated the scene against the growing darkness of night.

The Soviet press was lauding the drill as a Russian achievement. Most Western papers gave the credit to Dr. Paul Chandler. But Chandler knew it was Kotenko's idea, made possible by his own mental resources, surprising even to himself.

Chandler felt a deep pride as he gazed at the drill, complete with the controversial capsule.

"EXCUSE me, Dr. Chandler." A reporter with dry, unkempt hair stepped up. "I still don't see how that thing will work."

"In simple words, the rock is drawn into the bottom something like air into a jet engine," said Chandler. "The rock is vaporized and expelled out the top where the vapor together with the device itself presses the molten material into the walls of the shaft. Because the rock has had its heat conductivity removed, it hardens and remains permanently solid. A tubular force field keeps the shaft from collapsing."

"I understand that much." The reporter took out a folded square of paper and a pencil. "But what makes the thing go?"

"It has a gravity drive, giving it many times its normal weight." Marta Neilson had moved up to Chandler's elbow. "It simply sinks toward the center of the Earth like a pebble sinking in a pond of water."

"What is your reaction to Senator Caldwell's remark that the administration is at last returning all of the nation's gold into a hole in the ground?"

Chandler laughed. "Don't get me mixed up in politics."

"Are you disturbed by the Interplanetary Council of Churches' charge that any attempt to stop the glacier is defying the will of God?"

"Nor religion, either, please."

"Then maybe you'll discuss your own field," the reporter said. "Are you aware of the petition signed by thousands of African and Middle Eastern scientists?"

"I've read about it," Chandler admitted.

"Do you feel that taking an X-bomb into the center of the Earth is completely safe?"

"Nothing is completely safe." Chandler pointed to the reporter's feet. "The ground may give way under your feet right now, but I'd bet my life that it won't."

The reporter studied the ground under his feet, then scribbled a few words on his paper. A moment later, he spotted Kotenko and excused himself.

Marta gave Paul's hand a firm squeeze and he squeezed back. Dr. White stepped up and offered his congratulations, adding the suggestion that perhaps now they should turn their attention to destroying the Bering Strait Dam. Chandler parried the question and the Englishman left to exchange pleasantries with the Indian delegate, who was engaged in an animated conversation with several committee members.

"Well," said Marta, smiling up at Chandler, "tomorrow's the big day."

"Worries me," Chandler said.

"You mean the composition of the core?"

Chandler nodded at the drill. "Basically, that thing is an X-bomb. If fusion were to occur in the core and that core *were* made up of compacted hydrogen atoms, I think the Earth might crack apart along the fault lines surrounding the Pacific Ocean basin."

"What could cause fusion?" Marta asked.

"Losing control from the surface."

"How do you mean?"

"Well, it'll tax the abilities of the controllers every minute," Chandler explained, "to compensate for variations in density and gravity. If that thing got away from them, even for a few moments, its velocity could build to a point where it would hit the center of the Earth's gravity at the speed of a meteor."

Marta's eyes opened wide. "And, of course, it would stop almost instantaneously."

"Most of the energy of its forward motion would be converted to heat, which would develop a temperature far more than enough to trigger the thing," Chandler said.

"But it's made of non-conductive alloys," Marta said.

"Which would only make it happen quicker by reflecting the heat back in on itself."

THE press photographers' strobe lights began to flicker as the drill was lowered into the center of the control ring. Someone was making a speech, thin sounds wavering across the meadow, as Chandler and Marta started walking toward the VIP geodesic dome, where most of

the top scientists were quartered.

Marta stared at Chandler for a moment. "Why didn't you say something about this to me, Paul? Now I know why Kotenko favored hydrogen fusion without the X-factor."

"It wouldn't have done the job," Chandler said. "Just not enough controllable power."

"Kotenko thought so."

"He was wrong."

"Then why did you insist upon the drill? Surely some of the other methods were workable. What about India's suggestion to set off a number of H-bombs underground to produce pockets of magma? That would have produced plenty of tappable heat."

"I don't know," was Chandler's honest answer. "Call it a hunch or a premonition, but I think it's the drill or nothing. Once the core is tapped, the danger is over; we won't have to drill any more holes. We'll have an unending source of heat, and non-conductive conduits to pump it anywhere on Earth."

"Paul," Marta said, "I've always gone along with you on just about everything. Maybe the fact that I'm a woman has been outweighing the fact that I'm also a scientist. But let's talk now about the moral obligation of a scientist."

"I'm interested in one thing—the best method to save civilization from certain destruction."

"But have you the right to gamble like this? Which is worse, the destruction of civilization or the destruction of the Earth?"

"Marta," he said, "man at last stands at the brink of fulfilling his destiny. He is already establishing colonies on two planets and within a hundred years will have a firm foothold in the Solar System. In the millennia that follow, the Galaxy will be his."

Marta stopped in horror. "That sounds like Colonial talk!"

Chandler smiled reassuringly. "In this case, what's best for the Colonies is also best for the Mother Planet."

"But surely there's time to halt operations long enough to try some of the other methods first."

"If we were to falter now," said Chandler as they began walking again, "politicians would have most of us replaced inside of twenty-four hours. Would you like to see that drill start its plunge to the core without someone on hand who knows how to handle it?"

"No, I wouldn't," Marta said. "I'm not sure I want to see it start at all." She touched his arm. "Paul, this is a side of you I've tried hard not to see. You're—you're almost obsessed with the belief that the drill is the only answer.

And you're battling ruthlessly against counter-ideas and time. After all, even the most radical estimates give us at least two more centuries. Granted there'll be a southern migration, but—"

"Don't ask me how I know," Chandler said, "but we don't have two or even one century. *We don't have ten years!* When the ice cap at the South Pole was at its peak, it exerted tremendous pressures on the continental land masses."

"The old shifting crust theory?"

"Yes. A theory tossed into discard when the big thaw came at the South Pole. Now, at an almost unbelievable rate, the ice is building in the north. This same seesawing effect has gone on throughout the Pleistocene. The stresses go one way against the crustal blocks of land, then the other way. It might be likened to bending a wire one way, then the other, until fatigue causes it to snap."

"And you're convinced that the crust is about to let go?"

"With catastrophic consequences."

"You're asking me to accept a great deal on faith."

"When you stood by me back in New San Francisco," Chandler asked, "did you honestly think we could tap the core?"

"I don't know," Marta answered.

"Would you have supported me if I had backed the Canadian plan for tilting the world on its axis?"

MARTA seemed lost in deep reflection for a few moments. "I don't really know," she said as they reached the VIP quarters.

At Marta's door, Chandler asked, "Will you stand by me for another twenty-four hours? By that time, the drill will be cushioning to a stop exactly two thousand miles down."

"Unless we lose control," Marta said. "Then, in less than an hour, it could be smashing into the center of the core."

"Will you wait?"

For an answer she kissed him on the cheek, then said softly, "Now we better both get some rest. We start operations in less than six hours." She closed her door.

Chandler entered his room and stretched out on his cot without taking his clothes off. He thought about the plans he had ignored. Some of them might have done the job. He thought of Kotenko, who distrusted him, and Marta, who trusted him. Finally he drifted into sleep.

He dreamed of great cracks snaking their way down city streets, of violent earthquakes, foaming tidal waves, of people trapped in crumbling buildings and, finally,

the Earth blooming into another sun.

And as the fireball expanded into oblivion, the shimmering face of the short man appeared. His mouth moved, but Paul sensed rather than heard his words.

"Chandler. Kotenko and the drill."

The face faded to nothing.

Chandler sat bolt upright on the cot. He was dripping with perspiration. The drill! Something was wrong at the drill.

He ran down the hall to Marta's room and rapped on the door.

"Who is it?" Marta's voice called out.

"Paul."

There was a pause. Then the door opened, revealing Marta fastening a negligee.

"Did I oversleep?" she asked, yawning.

"Have you seen Kotenko?"

"No, but I heard him talking to someone in the hall just after you left. It sounded like that reporter."

"Did Kotenko go into his room?"

"I don't know."

Chandler, followed by Marta, continued down the hall to Kotenko's room. He knocked loudly. There was no answer. He knocked again and shouted Kotenko's name. Other doors opened and people stared out.

"The drill," Chandler said, and ran out of the building. As the door swung closed, he heard Marta calling after him. He was conscious of someone pushing through the door behind him as he bounded across the meadow toward the drill.

A small Army verti-plane swung down alongside him.

"Halt!" an amplified voice boomed.

Chandler stopped and faced the plane. "It's me, Dr. Chandler."

The plane settled down beside him. "Oh, yes, sir," the voice apologized. "We saw you running and—"

"Quick, take me to the drill," Chandler said.

"Yes, sir," said the voice.

The verti-plane floated down beside the massive control ring and Chandler, followed by two armed soldiers, raced through the main doors.

"Halt."

Guards surrounded them.

"Has Kotenko been here?" asked Chandler.

"Yes, sir," replied one of the guards recognizing Chandler. "He took a team of technicians to the Gismo."

"Follow me," Chandler ordered, and pushed through the inner door.

Hesitantly, the guards followed.

DOWN in the basin, Chandler saw the yellow glow of a work light. Figures were silhouetted against it. He took the spiral stairs two at a time.

The soldiers clambered down behind him.

"Stay where you are, Chandler," said the voice of Kotenko, his stocky figure back-lighted at the base of the drill.

"What're you doing, Kotenko?" Chandler demanded.

"Removing the X-factor capsule."

"You're tampering with government property," Chandler said, primarily to orientate the confused guards.

"I am not going to permit the drill to go down there with the X-factor," Kotenko said firmly.

"It'll never get beyond the thousand-mile level," Chandler warned, moving toward the shadowy figure.

"I am armed," Kotenko warned.

CHANDLER stopped. Marta, clad in an overcoat, came down the stairs. Several others followed.

"Those techs will never do it now that they know the situation," Chandler said, moving still closer.

"My dear Dr. Chandler, they are citizens of the Soviet. They will do as I say."

"Put down your gun," the soldier at Chandler's side ordered.

"I have already set up the drill for descent," Kotenko said. His shadow hand touched a black lever on a portable field control unit. "As soon as the X-factor capsule is withdrawn, down it goes."

"But you can never maintain control without a full crew," Marta said.

"I have crew enough," Kotenko told her. "Without the X-factor, complete control is not so important."

Chandler leaped for Kotenko, but the Russian's gun blasted white flame. A searing pain ripped into Chandler's chest. He fell to his knees.

The soldier's rifle cracked and Kotenko's silhouette crumbled against the control lever. Electro-mechanisms whirred and the drill suddenly plunged into the depths of the Earth, carrying most of Kotenko's crew with it.

"Good God!" someone cried.

Marta was kneeling beside Chandler, tears streaming down her face. "Paul!" she sobbed. "Oh, Paul!"

Chandler could taste the warm saltiness of blood in his mouth. "Get the control crew here—quick," he gasped.

Someone moved for the stairs while someone else leaped for the field control unit.

Chandler's foggy mind touched reality for brief moments, condensing time into a montage. A doctor was working on him, then shaking his head at the sobbing Marta. Lights were thrown on and control posts manned. Someone yelled, "Throw in force

fields behind it!" And all the time Chandler's chest pulsed with pain.

"Can't stop it!" someone shouted. Then chaos broke loose; men were running, blindly bumping into one another.

Even though few of them knew quite what could happen, they wanted to get as far away from the hole as they could.

Marta was rocking Paul gently in her arms and crooning something Swedish. The ground trembled under them, then lurched violently. Sheets of broken plate glass rained down on them from the control ring windows. Chandler knew the same thing was happening everywhere as the shock waves from the drill reverberated around the globe.

He looked around. They were alone on the basin floor except for the contorted body of Kotenko. Paul looked up at Marta.

"How—much—time?"

Marta, her face close to his, smiled faintly. "No more time for you and me." Her eyes were dry.

A sound as of millions of giant rocks grating together welled up from the bowels of the Earth. He was looking into Marta's eyes when suddenly everything vaporized into blinding white heat.

"Clench your fingers."

"Blink your eyes."

THE short man in the gleaming laboratory was leaning over Chandler. "We did our best," he said.

The pain was gone in Chandler's chest. "Marta," he called.

"I'm afraid she's gone," the tall man said. "She and the entire Earth."

The short man pulled off his lab coat. "Over a thousand years ago."

"A thousand years?" Chandler's mind fumbled with the thought. "What's this all about?"

The tall man snapped a series of switches off. "You ask the same question every time."

"*Every* time?"

"We've sent you back three times now." The tall man traded his lab coat for a tunic. "Once you tried to X-bomb the Bering Strait Dam, but the crust shifted, wiping out the whole population. On the second time pass, you tried to tilt the Earth on its axis, but it was thrown out of orbit and plunged into the sun. This time—you still have your memories of that."

"Makes you wonder about fate," the short man said.

"But what am I?" Chandler sat up with an effort.

"You," explained the short man, "are a mind developed here in a Venus laboratory and sustained in a host body. You see, we can't send solid matter back in time, only

waves moving at the speed of light. So we send your mind matrix to meld with Chandler's."

"But why?"

"To help him save the Earth," the tall man said. "When it was destroyed originally, small colonies of us were stranded on inhospitable planets. We're still trying to crawl out of the decline that set in. But if we can send you back and save the Earth—well, you will remain with Paul Chandler. And we—?" He walked to a bank of controls near the door and put his hand on one. "Who knows? None of this will have happened. We might not even exist."

"Now," said the short man, joining the taller one, "we will have to wipe out all memories for you and tomorrow we will start programming you for another try. Maybe this time we'll try moving the Earth's orbit closer to the sun."

"Wipe out my memories?"

"Of course. We want you to function with a clear mind. Besides, it's kinder to you."

"I see." The mind named Chandler looked at the two men. "But please leave me with my memories just for tonight."

The tall man turned off the light. "You always ask that and we always do."

END

"I NEVER CARRY MONEY!"

Any extrapolations on the future must take into account the financial revolutions in the past and present. Checks (or cheques, to give their originators their due) eliminated the flow of great amounts of cash. Credit cards of all sorts have brought the process down from industry and business and household to all but practically the pay telephone—and science fiction writers have extended the system even to that, with fingerprint and retinal identification, to remove the possibility of fraud and incorrect billing.

But less noticed is the immense job done by B. T. Babbitt, who, in 1851, stopped selling soap by weight from slabs, and wrapped a lithograph in each package, thus making two important innovations. In not much over a century, packaging has become an incalculable huge industry—and premiums give away or sell at less than cost more than one billion dollars' worth of merchandize a year!

Thirty per cent of all china ware, 15% of all enamel ware and 10% of all aluminum ware manufactured in the U. S. are sold or given away annually as premiums, and the figures are rising steadily!

Let's hope it never happens again, but cigar-store coupons and scrip were used as legal tender in many towns during the depression.

It seems like humor right now, but the time actually may come when cash will become a museum oddity!

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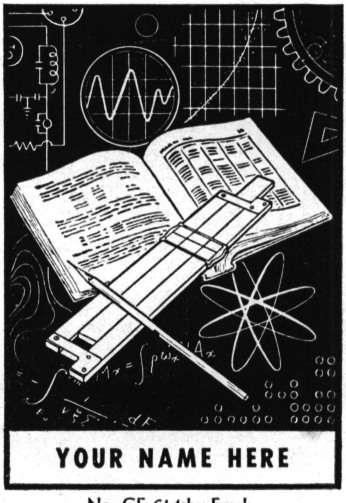

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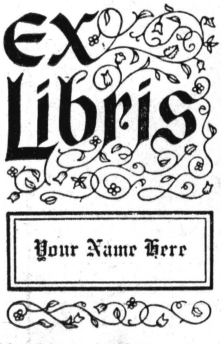

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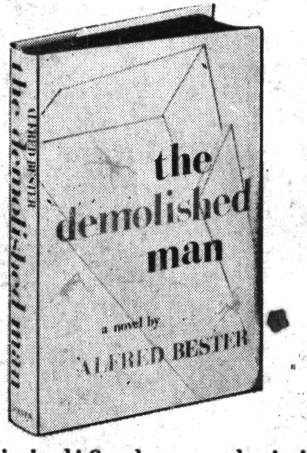

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