

REPRINTED

# Analog Science Fact $\leftrightarrow$ fiction

April 1961 • 50 Cents

JOHN W. CAMPBELL,  
EDITOR



THE FISHERMAN, By Clifford D. Simak

# PICK-A-BOOK

## THE GREAT NEW BOOK PLAN

Now you have the opportunity of a lifetime to build your own library of some of the best science-fiction available. No "reprint edition" . . . these are the original publishers' edition. Over 150 books now available. Just choose from some of the titles listed here.

Each book is \$1.50                      3 books for \$4.00  
 6 books for \$7.50 and 10 books for \$12.00  
 (plus 15¢ per book outside the U.S.)

### SOME OF OUR NEW BOOKS

|                            |                                     |                    |                            |
|----------------------------|-------------------------------------|--------------------|----------------------------|
| Agent of Vega              | <i>James H. Schmitz</i>             | Collision Course   | <i>Robert Silverberg</i>   |
| Vortex Blaster             | <i>E. E. Smith Ph.D.</i>            | Swordsmen of Mars  | <i>Otis Adelbert Kline</i> |
| Invaders From the Infinite | <i>John W. Campbell, Jr.</i>        | Outlaws of Mars    | <i>Otis Adelbert Kline</i> |
| Drunkard's Walk            | <i>Frederik Pohl</i>                | Conquest of Life   | <i>Adam Luken</i>          |
| Philosophical Corp         | <i>E. E. Cole</i>                   | He Owned The World | <i>Charles Eric Maine</i>  |
| Runaway World              | <i>Stanton A. Coblenz</i>           | Hunters of Space   | <i>Joseph E. Kelleam</i>   |
| Wall of Serpents           | <i>L. S. de Camp &amp; F. Pratt</i> |                    |                            |

### SOME OF OUR CURRENT BOOKS

|                           |                               |                        |                          |
|---------------------------|-------------------------------|------------------------|--------------------------|
| Foundation                | <i>Isaac Asimov</i>           | Galactic Patrol        | <i>E. E. Smith Ph.D.</i> |
| Foundation & Empire       | <i>Isaac Asimov</i>           | Second Stage Lensman   | <i>E. E. Smith Ph.D.</i> |
| Second Foundation         | <i>Isaac Asimov</i>           | Children of the Lens   | <i>E. E. Smith Ph.D.</i> |
| Prelude to Space          | <i>Arthur C. Clarke</i>       | Out of This World      | <i>Murray Leinster</i>   |
| Against the Fall of Night | <i>A. C. Clarke</i>           | Operation: Outer Space | <i>Murray Leinster</i>   |
| Sands of Mars             | <i>Arthur C. Clarke</i>       | Forgotten Planet       | <i>Murray Leinster</i>   |
| The Glory That Was        | <i>L. S. de Camp</i>          | Colonial Survey        | <i>Murray Leinster</i>   |
| Tower of Zanid            | <i>L. S. de Camp</i>          | Murder Madness         | <i>Murray Leinster</i>   |
| Solomons Store            | <i>L. S. de Camp</i>          | Interplanetary Hunter  | <i>Arthur K. Barnes</i>  |
| Undesired Princess        | <i>L. S. de Camp</i>          | The Seedling Stars     | <i>James Blish</i>       |
| Lost Continents           | <i>L. S. de Camp</i>          | The Survivors          | <i>Tom Godwin</i>        |
| Invaders From Rigel       | <i>de Camp &amp; Pratt</i>    | The Shrouded Planet    | <i>Robert Randall</i>    |
| Genus Home                | <i>de Camp &amp; Miller</i>   | Dawning Light          | <i>Robert Randall</i>    |
| Black Star Passes         | <i>John W. Campbell Jr</i>    | Starmans Quest         | <i>Robert Silverberg</i> |
| Islands of Space          | <i>John W. Campbell Jr</i>    | All About the Future   | <i>Martin Greenberg</i>  |
| The Moon is Hell          | <i>John W. Campbell Jr</i>    | Coming Attractions     | <i>Martin Greenberg</i>  |
| Sinister Barrier          | <i>Eric Frank Russell</i>     | Two Sought Adventure   | <i>Fritz Leiber</i>      |
| Dreadful Sanctuary        | <i>Eric Frank Russell</i>     | The Kingslayer         | <i>L. Ron Hubbard</i>    |
| Virgin Planet             | <i>Paul Anderson</i>          | Triton                 | <i>L. Ron Hubbard</i>    |
| Earthmans Burden          | <i>Anderson &amp; Dickson</i> | Death's Deputy         | <i>L. Ron Hubbard</i>    |

Write for our free catalog listing dozens of other titles.

**PICK-A-BOOK • P.O. Box 63 • Hicksville, New York**

# Analog Science Fact $\rightarrow$ fiction

## Serial

The Fisherman, *Clifford D. Simak* . . . . 8

VOL. LXVII

NO. 2

APRIL

1961

## Novelettes

Still, Small Voice, *Lloyd Biggle, Jr.* . . . . 59

Next Door, Next World,

*Robert Donald Locke* . . . . . 119

## Short Stories

A Prize for Edie, *J. F. Bone* . . . . . 54

Pandora's Envoy, *Christopher Anvil* . . . . 102

## Science Fact

The Unnatural Light, *John W. Campbell* . . 83

## Readers' Departments

The Editor's Page . . . . . 4

In Times to Come . . . . . 53

The Reference Library, *P. Schuyler Miller* . 166

JOHN W. CAMPBELL

Editor

KAY TARRANT

Assistant Editor

Advertising Manager: WALTER J. McBRIDE

H. A. Staab, Art Director

COVER BY VAN DONGEN

Illustrations by Douglas, Schoenherr and van Dongen

Executive and Editorial offices, 575 Madison Avenue, New York 22, New York

The editorial contents have not been published before, are protected by copyright and cannot be reprinted without publisher's permission. All stories in this magazine are fiction. No actual persons are designated by name or character. Any similarity is coincidental.

Analog Science Fact & Fiction is published monthly by Street & Smith Publications, Inc., 575 Madison Avenue, New York 22, New York. Arthur Z. Gray, President; Robert E. Park, Vice-President and Advertising Director; Thomas H. Kaiser, Secretary-Treasurer. Copyright © 1961 by Street & Smith Publications, Inc. All rights reserved. Printed in the U. S. A. Second-class postage paid at New York, N. Y. and at additional mailing offices. Subscription \$5.00 for one year, \$9.00 for two years, and \$12.00 for three years in the United States, possessions and Canada. Outside United States, possessions and Canada, Analog Science Fact & Fiction is \$7.50 for one year and \$15.00 for two years. When possible allow four weeks for change of address. Give old address and new address when notifying us. All subscriptions should be addressed to Subscription Department, Street & Smith Publications, Inc., Boston Post Rd., Greenwich, Connecticut. We cannot accept responsibility for unsolicited manuscripts or art work. Any material submitted must include return postage.

Send notice of undelivered copies on Form 3579 to: Analog Science Fact & Fiction, McCall Street, Dayton 1, Ohio.



NEXT ISSUE ON SALE

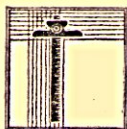
APRIL 13, 1961

\$5.00 per year in U. S. A.

50 Cents per Copy



# COLONIALISM



THE ideas behind many a science-fiction story have revolved around problems of colonizing other worlds; it might be worth while to take a look at the history of colonization efforts here on Earth. We might get some vague idea of what approach to the problem will *not* work.

So many times, history is disappointing to people, because it doesn't tell them what should be, or can be, done—it's almost entirely a record of tries that failed. Sure that's disappointing—but it can save a lot of future disappointment to take a look at the record of what things not to try again!

Actually, of course, history also includes the record of things that did work . . . but because they did, and we use and accept them, we don't see them as "problems to be solved." Who needs answers to "problems" that are no longer troublesome, huh?

We can start with three general situational possibilities; the planet to be colonized may be uninhabitable by any life form not already possessing a high-level technology, it may already be inhabited by subintelligent

life forms, or it may have intelligence already.

The first situation leads normally to a technological station—a research or technical-resource production system—rather than to a "colony" in the normal sense. Antarctica, here on Earth, may have scientific stations, and mining establishments may be installed—but people aren't going to think of Antarctica as "home." The Island of Krackatoa isn't apt to be "home," either, however interesting to vulcanologists and biologists.

What we're really interested in, of course, is the situation involving a planet with intelligent, but sub-technical indigenous life. (The super-technical inhabitants mean that we won't do any colonizing, naturally!)

First, of course, we need a definition of "intelligent inhabitants." This question is about as easily answered as the one "What do you mean . . . 'human'?" As of now, it seems to me that one way to distinguish the merely anthropoid from the humanoid—whether they have tentacles or sixteen legs!—comes down to the question of whether they have a society which acts as a quasi-conscious selective

breeding system. If a tribe selects its own young—as early humans did in their “manhood rites” ceremonies—the critical step toward true intelligence has been taken. They have at that point, taken responsibility for their own fate upon themselves—they have started to determine their own destiny, right, wrong or indifferent, none the less the fate they are to have is determined by their own acts.

We'll assume a series of planets having humanoid tribes, which are definitely beyond the beginnings of intelligence, and have already developed their own language, verbal traditions and co-operative cultural systems. There's a range of possibilities in such a situation.

In simplified terms, the Terran-native relationship established can be:

1. The Terrans simply push out the natives, destroying them completely.

2. The Terrans enslave the natives, and force them to work on the Terrans' projects—dig their mines, tend their fields, build their roads, et cetera.

3. The Terrans move in with the natives, start building roads, digging mines, and sowing fields, hiring natives who work side by side with the Terrans.

These are three extremes—three pure-state descriptions. None of them ever has been—or ever can be!—actually applied in its pure form. But each technique has been tried on Earth, and studying the results is most interesting indeed!

System #1, pushing out and destroying the natives, is almost inevitable, do what you, with all good heart and intent, will under certain circumstances. If the cultural-evolutionary gap is too great, it becomes literally impossible to bridge the gap between primitive and highly technical cultural types.

Human beings *evolved*. They didn't suddenly *be* human beings. Adam and Eve is a lovely legend—but there never was a First Man who was a Man in the modern sense, Homo sapiens, who sprang, full-evolved, from some anthropoid mother. Eve's mother was not a hairy-hided, bandy-legged, knuckle-walking gorilloid creature.

Cultures evolve, after the humanoid inventors of culture have themselves evolved; cultures aren't born full-blown either.

Genetics *does* count. It is perfectly true that there is a distribution of talents among individuals in any humanoid group—that, in any humanoid group you will find some individuals brighter than the stupider individuals of a more highly evolved group. But that doesn't mean that the two groups have the same mean distribution!

Studies of the Australian aborigines have shown that when the aborigines encounter the high-level technical culture of the European colonists, their own cultural pattern disintegrates. Even when there is no effort whatever made to break down their primitive culture. The aborigines, however, had a culture so primitive,

when white men first came there, that they had not yet evolved the nomad herdsman culture—they were, still, strictly wandering food-gatherers. The economic basis of their culture was still essentially identical with that of gorilla bands. For a period variously estimated as up to fifty thousand years, the aborigines had been isolated from the main stream of human cultural development and pressures.

Curiously, the nearby Maori of New Zealand had a highly evolved Polynesian-type culture, with highly developed governmental systems, and a well-developed technology.

What happened when European colonists moved into the two areas is most interesting. Note that the colonists coming to the two areas were, essentially, of one type—English cultural rebels. Many of the Australians were “colonists-by-request”—people deported for being too much of a headache to the home culture. (Like the Irishman who was deported to Australia by order of the Queen . . . and whom Queen Victoria had to greet in full formal State honors, when he returned twenty-five years later, as the Prime Minister of Australia!) The New Zealand colonists and the Australians were much of the same type, however. Middle-class English, Irish and Scotch, largely.

In Australia, the colonists pushed the aborigines out of their way, destroying the native culture, taking the land, and driving the natives into the desert lands.

The same type of colonists, in

New Zealand, developed Colonization Pattern #3—they moved in with the Maoris, worked with them side by side, and have developed New Zealand on a fully co-operative, communal basis.

It's worth considering, at least, that the difference was not in the attitudes of the colonists . . . but the abilities of the natives. The Australian aborigines could not bridge the immense gap between their food-gathering by turning over rocks and logs level, and the technological culture of the Europeans. The Maori could, and very promptly did.

It is of interest in the current United Nations wrangles about “colonialism” and “colonial powers” that neither the Maori nor the Australian aborigines are making any complaints.

The complaints are coming loudest from Africa; the complaints from Asian nations are far less vocal. And, incidentally, the Polynesians generally seem to have little feeling of being victims of “colonialism”—Hawaii might be taken as an example!

Africa represented, almost entirely, a Type #2 colonization program—where the Europeans moved in and enslaved the natives. The Europeans moved in, and sought to work the natives—*not work with them*. In New Zealand, the Europeans worked *with* the Maori—shoulder to shoulder, building a new culture beneficial to both peoples.

In Africa, a very different situation arose. There was the White, who was

Noble, and did no manual work, and then there was the Black who was Inferior and did menial jobs. The characteristic of the system is that *there must be no middle class*. When the British in Kenya took over the highlands area, because of its favorable climate and rich soil—it became known as the “White Highlands”—they first drove the natives out, dispossessing them entirely, so that no African was allowed to own land in the White Highlands. But then they found that they had an acute shortage of labor to work their fields. They had fine broad and fertile acres . . . but no labor. The Africans, dispossessed of the best lands, nevertheless had more than enough land in the rest of Kenya, and had settled down to working their own very adequate lands elsewhere. Why, then, should they bother to serve the British landholders as laborers, when they could work their own lands?

The British solution to this was to limit the amount of land Africans could own arbitrarily. If the African couldn't have lands of their own, then they would have to work the estates of the noble land-holders.

(Given a few generations of this system, and you develop a nice, stable Feudalism . . . if you make very sure no Middle Class arises.

Why didn't the land-rich, but labor-poor British of the White Highlands invite the several million land-hungry British farmers, and ex-farmers who'd been crowded into cities, to come to Kenya and help work the vast, rich lands?

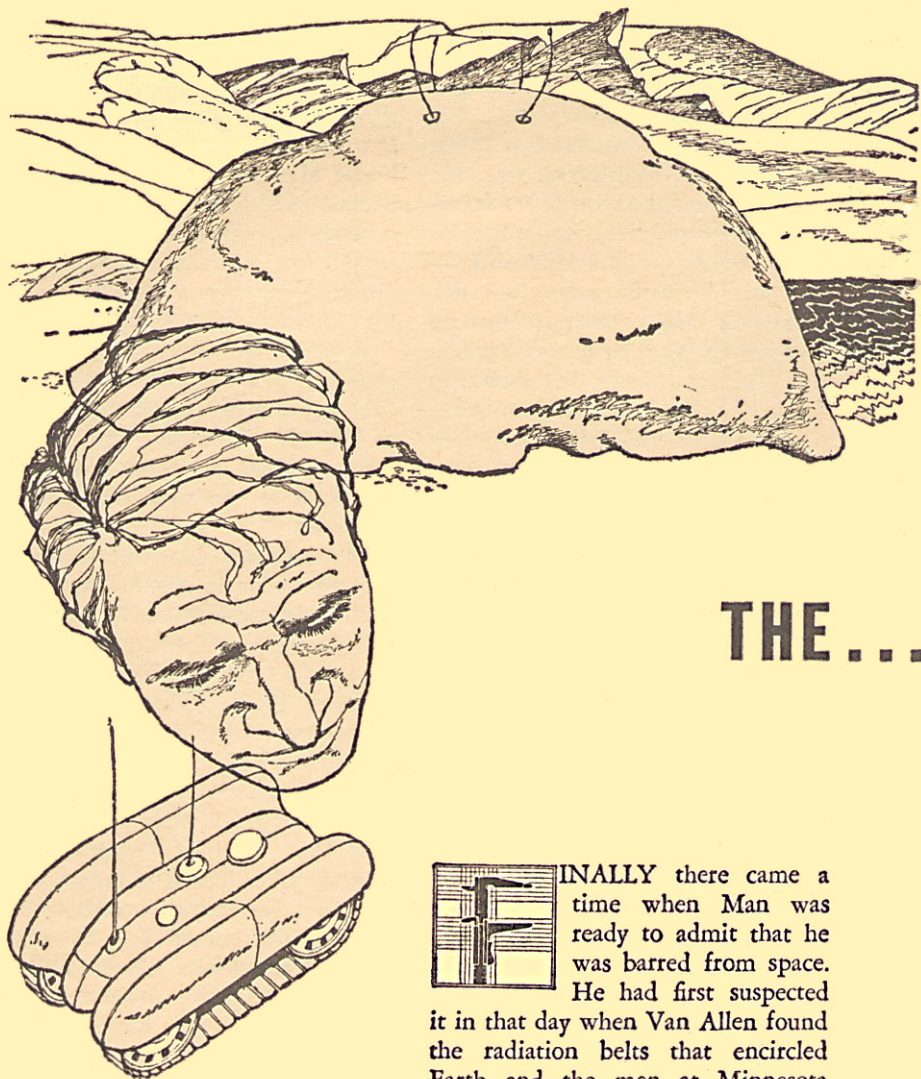
Impossible! It would have meant that Whites would have been doing the same kind of menial digging-in-the-Earth that was fit only for Blacks! It would have meant introducing the horrid idea that a man is a Man not because of his skin, or his racial background, but because of what *he* is. It would have meant importing a middle class—creating a mixed-up situation like that in New Zealand!

But . . . the difficulty is that the problem was not all so one-sided. Certainly the British fell into a trap of folly in acting as they did. But, at the same time, the problem was *not* the same as the situation in New Zealand.

The Africans were not culturally evolved as far as the Maori. There was a real problem on both sides; the gap between European and African culture was not as great as that between European and Australian Aborigine—but it wasn't as small as that between European and Polynesian. Polynesians, when the Europeans first arrived, had already worked out a very high level of “constitutional monarchy,” with wise, and thoroughly workable democratic procedures for selecting their rulers.

The Africans were, when the Europeans arrived, still in the level of pure ritual-tabu tribalism—with the exception of a Moslem-influenced fringe at the borders of the Sahara, and some of the Zulu tribes in South Africa.

When it's recognized that the same  
(Continued on page 175)

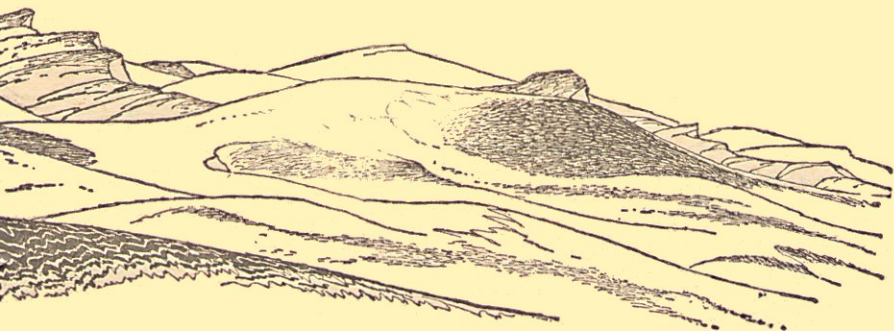


# THE...

**F**INALLY there came a time when Man was ready to admit that he was barred from space. He had first suspected it in that day when Van Allen found the radiation belts that encircled Earth and the men at Minnesota used balloons to trap the solar protons. But Man had dreamed so long that even in the face of this he could not forsake the dream without giving it a try.

Illustrated by van Dongen





*First of Four Parts. If Science is the cultural hero today . . . what happens if Science, just once, fails the Superman role? How do people react, when the Hero slips a little . . . ?*

# FISHERMAN

By **CLIFFORD D. SIMAK**

So he went ahead and tried—and he kept on trying even after astronauts had died to prove he couldn't do it. Man was too frail for space. He died too easily. He died either of the primary radiations hurled out by the sun or of the secondaries to which the metal of his ship gave birth.

At length Man knew the dream had failed and there was a bitterness and a disillusion in looking at the stars, for the stars were farther now than they had ever been.

After many years, after great thundering in the sky, after a hundred million heartbreaks, Man finally gave up.

It was just as well he did.  
There was a better way.

## II

Shepherd Blaine sensed that he was in some sort of house, or, if not a house exactly, in something's dwelling place. For there was an or-

derliness and a sense of proportion and of form which did not occur in nature, even in an alien nature on the planet of an unknown star far removed from Earth.

His treads left no tracks upon the floor as they had left tracks upon the sand dunes before he had come upon this dwelling place, if that was what it was. The wind was a whisper only as compared with the howling of the desert storm through which he'd forged for hours.

The floor was hard and smooth and of a bright blue color and very easy for him to roll along. There were forms scattered here and there that might have been furniture or equipment or artifacts of some aesthetic value and they all were blue as well and the shape of them was not the wild, haphazard shape of a surface carved by wind or sun or weather, but the clean-cut lines, straight or curved as they might be, of functional apparatus.

And yet the stars still shone and the distant sun was there, dim as it might be, and so this place he had stumbled on was certainly no enclosure.

Blaine moved forward slowly, with all his sensors out, turned up to full capacity, and the sense of *hous*e persisted and a little after that, the sense of life as well.

He felt a thin thread of excitement mount inside himself. For it was not often that one found life at all. It was a memorable occasion when one found intelligence. And here, from the smoothness of the

bright blue floor, from these artifacts, was intelligence.

His pace slowed to a crawl, his treads whispering on the floor, his sensors out and working and the whirring of the tape that sucked up sight and sound and shape and smell and form, recording temperature and time and magnetics and all the other phenomena which existed on this planet.

Far off he saw the life—the thing that sprawled limply on the floor, as a lazy man might sprawl, not doing anything, not expecting to do anything, but just lying there.

Blaine moved toward it, still keeping his slow pace, and the sensors gathered in the knowledge of this sprawling life and the recorders sucked it up.

It was pink; an exciting pink, not a disgusting pink as pink so often can be, not a washed-out pink, nor an anatomical pink, but a very pretty pink, the kind of pink the little girl next door might wear at her seventh birthday party.

It was looking at him—maybe not with eyes—but it was looking at him. It was aware of him. And it was not afraid.

Finally he reached it. He came up to within six feet of it and there he stopped and waited.

It was a fairly massive thing, twelve feet high or so in the middle of it, and it sprawled across an area twenty feet or more in diameter. It towered above the smallness of the machine that happened to be Blaine, but there was no menace in it. Nor a

friendliness. There was nothing yet. It was just a lump.

And this was the tough part of it, Blaine reminded himself. This was the moment when you could make or break. The move that he made now might set the pattern for all his future relationship with this thing he faced.

So he stayed perfectly still and did not a single thing. The sensors pulled back in and barely kept alive, the tape scarcely moved at all.

And it was tough to wait, for he was running out of time. There was very little left.

Then he sensed the flutter, picked up by the sophisticated electronic innards of the machine which for the moment was his body. The flutter of the being that sprawled pinkly on the floor—the flutter of a thought half-formed, the beginning of communication, the breaking of the ice.

Blaine tensed, fighting down the elation that surged inside of him. For it was foolish to become elated yet—there was no certain indication of telepathic power. Although the flutter had the feeling of it, a certain connotation—

Hang on, he told himself, hang on!

Hold onto that time!

Just thirty seconds left!

The flutter stirred again, louder and sharper now, as if the creature squatting there before him had cleared its mental throat before attempting speech.

It was not often that one contacted a telepathic creature. Other abilities and traits and idiosyncrasies

that made telepathy seem a pallid thing, but very seldom as useful as plain, old-fashioned telepathic art.

And the creature spoke.

"Hi, pal," it said. "I trade with you my mind."

Blaine's mind screamed soundlessly in outraged surprise that came very close to panic. For, suddenly, without warning, he was a double thing—himself and this other creature. For one chaotic instant he saw as the creature saw, felt as the creature felt, knew what the creature knew. And in that same instant he was likewise Shepherd Blaine, Fishhook explorer, a mind from out of Earth and very far from home.

And in that same instant, as well, his time clicked to an end.

There was a sense of rushing, as if space itself might be thundering past at a fantastic rate of speed. Shepherd Blaine, protesting, was jerked across five thousand light-years into one specific spot in northern Mexico.

### III

He crawled upward from the well of darkness into which he had been plunged, groping his way with a blind persistence that was almost driven instinct. And he knew where he was—he was sure he knew—but he could not grasp the knowledge. He had been in this well before, many times before, and it was familiar to him, but there was a strangeness now that had never been before.

It was himself, he knew, in which the strangeness lay. Almost as if he were another, as if he were only half himself, and the other half of him were tenanted by an unknown being that was backed against a wall and spat in overriding fear and mewled in loneliness.

He clawed his way upward from the well and his mind fought in frantic urgency against the mewling strangeness in him even as he sensed that it was no use to fight, that the strangeness was a thing that had come to live with him and be a part of him so long as he existed.

He rested for a moment from the climbing and tried to sort out himself, but he was too many things and in too many places and it was utterly confusing. He was a human being—whatever that might be—and he was a scurrying machine and he was an alien pinkness sprawling on a bright blue floor and he was a mindlessness that fell through aeons of screaming time which finally figured out, when one nailed down the mathematics of it, to the fraction of a second.

He crawled out of the well and the blackness went away and there was soft light. He was lying flat upon his back and he finally was home and he felt the old, old thankfulness that he'd made it once again.

And finally he knew.

He was Shepherd Blaine and he was an explorer for Fishhook, and he went far out in space to nose out stranger stars. He went out many light-years and at times he found

certain things of some significance and other times he didn't. But this time he had found a thing and a part of it had come back home with him.

He sought for it and found it in the corner of his mind, rolled tight against its fear, and he tried to comfort it even as he feared it. For it was a terrible thing, he told himself, to be caught inside an alien mind. And, on the other hand, it was a lousy deal to have a thing like this trapped inside his mind.

*It's tough on both of us*, he said, talking to himself and to this other thing which was a part of him.

He lay there quietly—wherever he was lying—and tried to put himself in order. He had gone out some thirty hours before—not he, himself, of course, for his body had stayed here—but his mind had gone out, and with it the little scurrying machine, to this unguessed planet that spun an unknown sun.

The planet had been no different than a lot of other planets, just a howling wilderness, and that was what a lot of them turned out to be when you came stumbling down upon them. This time a howling wilderness of sand, although it could just as well have been a jungle or a desert of ice or a bare and naked place of nothing but primeval rock.

For almost thirty hours he had roamed the sand and there had been nothing there. Then suddenly he had come upon the great blue room with the pinkness sprawling in it, and when he had come home the pink-

ness, or a shadow of the pinkness, had come back with him.

It crawled out from where it had been hiding and he felt the touch of it again, the knowing and the feeling and the knowledge. His blood crawled like icy slush gurgling in his veins and he went rigid with the musty smell and the slimy feel of alienness, and he could have shouted in pure terror, but he did not shout. He lay there, quite unstimulating, and the pinkness scurried back to its nook once more and lay there tightly curled.

Blaine opened his eyes and saw that the lid of the place in which he lay had been tilted back and the glare of brightness that was a hooded light bulb was stabbing down at him.

He took inventory of his body and it was all right. There was no reason for it not to be all right, for it had lain here for all of thirty hours.

He stirred and raised himself so that he sat up and there were faces, staring at him, faces swimming in the light.

"A tough one?" asked one face.

"They all are tough," said Blaine.

He climbed from the coffinlike machine and shivered, for he suddenly was cold.

"Here's your jacket, sir," one of the faces said, a face that surmounted a white smock.

She held it for him and he shrugged into it.

She handed him a glass and he took a sip of it and knew that it was milk. He should have known it

would be. As soon as anyone got back they gave him a glass of milk. With something in it, maybe? He had never thought to ask. It was just one of the many little things that spelled out Fishhook to him and to all the others like him. Fishhook, in its century or more, had managed to accumulate an entire host of mouldy traditions, all of them fuddyy-duddy in varying degrees.

It was coming back—familiar now as he stood there sipping at his glass of milk—the great operations room with its rows of glistening star machines, some of which were closed while the rest stood open. And in the closed ones lay others like himself, their bodies left behind and their minds far out in space.

"What time is it?" he asked.

"Nine p.m.," said a man who held a clip board in his hand.

The alienness was creeping in his mind again and the words were there once more: *Hi, pal. I trade with you my mind!*

And now, in the light of human reason, it was crazier than hell. A form of greeting more than likely. A sort of shaking hands. A shaking of the minds. And when one thought of it, a lot more sensible than the shaking of the hands.

The girl reached out and touched him on the arm. "Finish up your milk," she said.

If it were a mind-shake, it was a lasting one, for the mind was staying on. He could feel it now, an alien dirtiness, lurking just below the level of his consciousness.

"The machine got back O.K.?" he asked.

The man with the clip board nodded. "Not a bit of trouble. We sent down the tapes."

Half an hour, Blaine thought calmly, and was surprised that he could be so calm. Half an hour was all he had, for that was the length of time required to process the tapes. They always, he knew, ran through the exploratory tapes as soon as they came in.

It would all be there; all the data would be down, telling all the story. There would be no question of it, no doubt of what had happened. And before they read it, he must be out of reach.

He looked around the room and once again he felt the satisfaction and the thrill and pride that he had felt, years ago, when he'd first been brought into this room. For here was the heart throb of Fishhook itself; here was the reaching out, here the dipping into distant places.

It would be hard to leave, he knew. Hard to turn his back upon, for much of him was here.

But there was no question of it—he simply had to go.

He finished up the milk and handed the waiting girl the glass. He turned toward the door.

"Just a minute," said the man, holding out the clip board. "You forgot to sign out, sir."

Grumbling, Blaine pulled the pencil from beneath the clip and signed. It was a lot of foolishness, but you went through the motions. You

signed in and you signed out and you kept your mouth tight shut and all of Fishhook acted as if the place would fall into a heap of dust if you missed a single lick.

He handed back the board.

"Excuse me, Mr. Blaine, but you failed to note when you would return for evaluation."

"Make it nine tomorrow morning," Blaine told him curtly.

They could put down anything they wished, for he wasn't coming back. He had thirty minutes left—less than thirty minutes now—and he needed all of it.

For the memory of that night of three years ago was becoming sharper with every passing second. He could remember, not the words alone, but the very tone of them. When Godfrey Stone had phoned that night there had been a sound of sobbing in his breath, as if he had been running, and there had been a sense of panic.

"Good night, everyone," said Blaine.

He went out into the corridor and closed the door behind him and the place was empty. The flanking doors were closed, although lights burned in some of them. The corridor was deserted and everything was quiet. But even in the quietness and the emptiness there was still a sense of massive vitality, as if all of Fishhook might have stood on watch. As if all the mighty complex never slept at all—all the laboratories and experimental stations, all the factories and

the universities, all the planning boards and the vast libraries and repositories and all the rest of it never closed an eye.

He stood for a moment, considering. And it all was simple. He could walk out of here and there was not a thing to stop him. He could get his car out of the parking lot just five blocks away and head northward for the border. But it was, he told himself, too simple and direct. It was too obvious. It was just the thing that Fishhook would figure him to do.

And there was something else—the nagging thought, the clinging, monstrous doubt: Did he really need to run?

Five men in the three years since Godfrey Stone—and was that evidence?

He went striding down the corridor and his mind was busy sorting out the doubts, but even as he sorted he knew there was no room for doubt. Whatever doubt might rise, he knew that he was right. But the rightness was an intellectual rightness and the doubt emotional.

He admitted to himself that it all boiled down to a single factor: He did not want to flee from Fishhook. He liked being here; he liked the work he did; he didn't want to leave.

But he had fought that out with himself many months ago. He'd reached a decision then. When the time came, he would go. No matter how much he might want to stay, he'd drop everything and run.

For Godfrey Stone had known

and in his desperate fleeing he had taken out the time to make one desperate call—not a call for help, but a cry of warning.

"Shep," he had said, sobbing out the words as if he had been running. "Shep, listen to me and don't interrupt. If you ever should go alien, take it on the lam. Don't wait around a minute. Just take it on the lam."

And then the receiver had crashed down and that was all there was.

Blaine remembered how he'd stood there, with the phone still in his fist.

"Yes, Godfrey," he had said into the silence at the other end. "Yes, Godfrey, I'll remember. Thank you and good luck."

And there'd not been word again. He had never heard from Godfrey Stone again.

If you ever should turn alien, Godfrey Stone had said. And now he had turned alien, for he could feel the alienness, like a lurking second self crouched inside his brain. And that had been the manner in which he had turned alien. But what about the others? Certainly not all of them had met a pinkness, five thousand light-years distant. How many other ways might a man turn alien?

Fishhook would know that he was an alien. There was no way to stop their knowing. They'd know when they processed the tapes. Then they'd have him in and turn a peeper on him—for while the tapes might say that he was alien, they could not tell in what manner or to what extent he might have turned an alien. The

peeper would talk very friendly to him, even sympathetically, and all the time he would be rooting out the alien in his mind—rooting it out of hiding to find out what it was.

He reached the elevator and was punching at the button when a door just down the hall came open.

"Oh, Shep, I see it's you," said the man standing in the door. "I heard you going down the hall. I wondered who it was."

Blaine swung around. "I just got back," he said.

"Why don't you come in for a while," Kirby Rand invited. "I was getting ready to open up a bottle."

There was no time to hesitate, Blaine knew. He either went in and had a drink or two or he gave a curt refusal. And if there was a curt refusal, Rand would become suspicious. For suspicion was Rand's business. He was section chief of Fishhook security.

"Thanks," said Blaine, as unruffled as he could. "For a short one only. There's a girl. I shouldn't keep her waiting."

And that, he told himself, would block any well-intentioned invitation to take him out to dinner or to go out and see a show.

He heard the elevator coming up, but he walked away from it. There was nothing he could do. It was a dirty break, but there was no help for it.

As he walked through the door, Rand thumped him on the shoulder in round good fellowship.

"Good trip?" he asked.

"Not a bit of trouble."

"How far out?"

"About five thousand."

Rand wagged his head. "I guess that's a foolish one to ask," he said. "They all are far out now. We've just about finished off all the nearby ones. Another hundred years from now, we'll be going out ten thousand."

"It makes no difference," Blaine told him. "Once you get going, you are there. Distance seems to be no factor. Maybe when we get way out we may pick up a lag. Halfway across the galaxy. But I doubt it even then."

"The theoretical boys think not," said Rand.

He walked across the office to the massive desk and picked up the bottle that was standing there. He broke the seal and spun the cap.

"You know, Shep," he said, "this is a fantastic business we are in. We tend to take it in our stride and it becomes at times a bit humdrum to us. But the fantasy is there."

"Just because it came so late to us," said Blaine. "Just because we passed up the ability so long. It was in us all the time and we never used it. Because it wasn't practical. Because it was fantastic. Because we couldn't quite believe it. The ancients grabbed the edge of it, but they didn't understand it. They thought that it was magic."

"That's what a lot of folks still think," said Rand.

He rustled up two glasses and got



ice out of the wall refrigerator. He poured out generous helpings.

"Drink up," he said, handing Blaine a glass.

Rand lowered himself into the chair behind the desk.

"Sit down," he said to Blaine. "You aren't in that much of a rush. And you lose something in the drinking when you stay standing up."

Blaine sat down.

Rand put his feet up on the desk, settled back in comfort.

*No more than twenty minutes left!*

And sitting there, with the glass clutched in his hand, in that second of silence before Rand should speak again, it seemed to Blaine once more that he could hear the throbbing of the huge thing that was Fishhook, as if it were one great sentient being lying here against the nighttime mother earth of northern Mexico, as if it had heart and lungs and many throbbing veins and it was this throbbing which he heard.

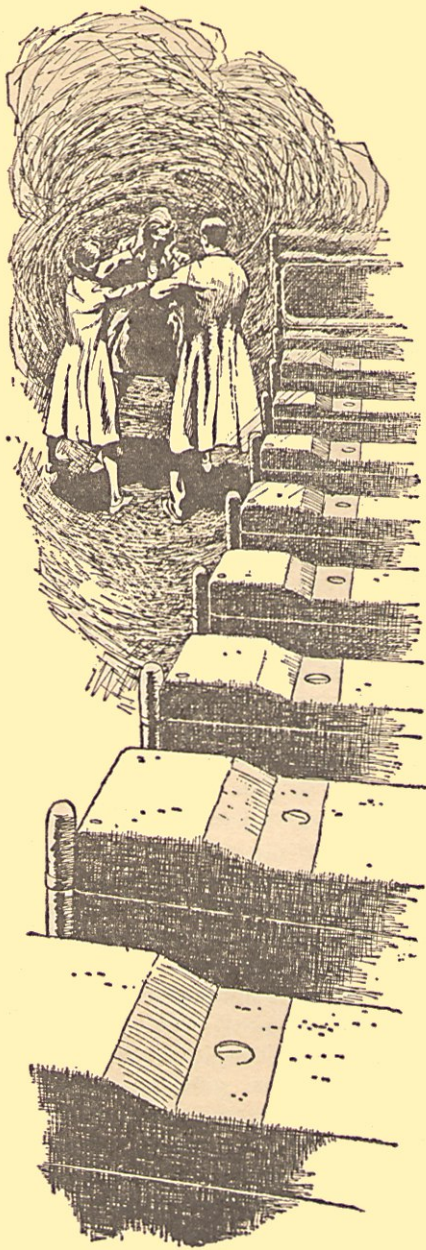
Across the desk Rand crinkled his face into a gracious mask of geniality.

"You guys have all the fun," he said. "I sometimes envy you."

"It's a job," Blaine told him carelessly.

"You went out five thousand years today. You got something out of it."

"I suppose there was some satisfaction," Blaine admitted. "The intellectual thrill of knowing where you were. Actually, it was better than the



usual run. I think I rustled up some life."

"Tell me," said Rand.

"Not a thing to tell. I found this thing when time was running out. I didn't have a chance to do anything at all before I was jerked back home. You've got to do something about that, Kirby. It can get embarrassing."

Rand shook his head. "I'm afraid that's out," he said.

"You should give us some discretion," Blaine insisted. "The time limit should not be so arbitrary. You keep a man out the total length of time—the entire thirty hours—when there is no earthly reason for him staying on. Then you yank him back when he's on the very verge of something."

Rand grinned at him.

"Don't tell me you can't do it," said Blaine. "Don't pretend that it's impossible. Fishhook has cords of scientists, stacked up in solid rows—"

"Oh, I suppose it's possible," Rand told him. "We just like to keep control."

"Afraid of someone staying?"

"That's possible," said Rand.

"What for?" demanded Blaine.

"You're not a man out there. You're nothing but a human mind caged in a smart machine."

"We like it as it is," said Rand.

"After all, you guys are valuable. We must take safety measures. What if you got into a jam five thousand years from home? What if something happened and you were unable to exercise control? We would lose

you then. But this way it's automatic. When we send you out, we know you're coming back."

"You value us too highly," Blaine told him dryly.

"Not at all," said Rand. "Do you realize how much we have invested in you? Do you realize how many men we sift through before we find one that we can use? One who is both a telepath and a rather special kind of teleporter, one who has the mental balance to stand up to the impact of some of the things he finds out there, and, finally, one who is capable of loyalty to Fishhook."

"You buy the loyalty," said Blaine. "There is no one of us who ever claimed he was underpaid."

"That," Rand told him, "is not what I am talking about and you know it isn't."

And you, Blaine asked inaudibly—what are the qualifications for security? Peeping could be one of them—the ability to look into another's mind—but there'd never been any evidence in all the years he had known Rand that the man actually was a peeper. If he were a peeper, then why should he use men in his department whose sole purpose consisted of their ability to peep?

"I can't see what all this has to do," said Blaine, "with not giving us some time control. We could—"

"And I don't see why you should fret yourself," Rand countered. "You'll be going back to your precious planet. You can pick up where you left off."

"Of course, I'm going back. I

found it, didn't I? That sort of makes it mine."

He finished off the drink, put the glass down on the desk.

"Well, I'm off," he said. "Thank you for the drink."

"Of course," said Rand. "Wouldn't think of keeping you. You'll be back tomorrow?"

"Nine o'clock," said Blaine.

#### IV

Blaine walked through the massive, ornate entrance that fronted on the plaza and under ordinary circumstances he would have stopped there for a moment to soak in this best part of the day. The street lamps were soft blobs of light and the fronds were rustling in the evening breeze. The strollers on the walks seemed disembodied shadows and the cars went sliding past in a sort of breathless haste, but quietly, very quietly. And over all of it hung the magic haze of an autumn night.

Tonight he did not stop. There was no time to stop.

Eight minutes now. Eight little lousy minutes.

Five blocks to get his car out of the parking lot and he didn't have the time. He couldn't take the chance. He had to leave the car.

And there was something else—there was Kirby Rand. Why, on this of all nights, had Rand popped out his door and asked him in to have a drink?

There was nothing that he could put his finger on, but he felt a vague

disquiet at his talk with Rand. It was almost as if the man had known he was stealing time from him, as if he might have sensed that there was something wrong.

But all of that was past, Blaine told himself. It had been hard luck, of course, but it was not disastrous. In fact, there might even be some advantage to it. If he had got his car, Fishhook would have known exactly where to look for him. But forced to stay within the city, he could vanish in a matter of ten minutes.

He strode swiftly down the walk and turned in a direction away from the parking lot.

Give me ten minutes more, he told himself, almost as if it were a prayer. With a ten-minute start, there were a dozen places he could hide himself—hide himself to gain a little breathing space, to do a little thinking and to make some plans. For now, without a car, he simply had no plans.

He'd get those ten minutes, he was sure, if he only could be so lucky as to meet no one who might recognize him.

He felt the terror welling up as he strode along, a terror rising like a froth foaming in his skull. And it was not his terror; it was not human terror. It was abysmal and black, a screaming, clawing terror that had its origin in a mind that could hide no longer from the horrors of an alien planet, that could no longer huddle inside an alien brain, that finally found it unbearable to face up

to a frightening situation that was made almost unendurable by a total lack of background.

Blaine fought against the terror, teeth gritted in his mind, knowing with one thin undulled edge of understanding that it was not himself who had tripped the terror, but this other, this lurker in the brain.

And realized, even as he thought it, that he could scarcely separate the two of them—that they were bound inexorably together, that they shared a common fate.

He started to run, but forced himself to stop with the last ounce of resolution in him. For he must not run; he must in no wise attract attention to himself.

He lurched off the walk and collided with the trunk of a massive tree and his hands went out to grasp and hug it, as if by the mere act of contact with something earthly he might gain some strength.

He stood there against the tree, hanging on as best he could—and hanging on was all. Slowly the terror began to drain back into some inner recess of his skull, crawling back into its hole, hiding again.

*It's all right, he told the thing. You stay right where you are. Don't worry. Leave everything to me. I will handle this.*

It had tried to get away. It had tried its best to burst free of where it was and, having failed, now was pulling back into the one safe corner of the pen in which it found itself.

No more of this, Blaine thought. I can't afford another one like this.

I couldn't stand another. If another came, he knew, he could not stand against it. He could not keep himself from running from the terror, slobbering and screaming in horror as he ran. And that would be the end of it. That would be the end for him.

He let loose of the tree and stood stiff and straight beside it, forcing himself to stand stiff and straight against his weakness and rubber legs. He felt the chill dampness of the perspiration which had started out on him and he was panting like a man who had run a race.

How could he run and hide, he asked himself; how could he get away with this monkey on his back? Himself alone was bad enough. He could not hope to do it if he had to drag along a frightened, whimpering alien.

But there was no way to lose the alien, no way he knew of at the moment to shake it loose of him. He was stuck with it and he must get along with it the best way that he could.

He moved out from the tree and went on down the walk, but more slowly and less surely, trying to still the shaking in him, trying to pump some strength into his wobbly legs. And through it all, he suddenly realized that he was ravenous with hunger. The wonder was, he told himself, that he had not sooner been aware of it, for except for the glass of milk, he had had no food for more than thirty hours. Rest—rest that had amounted to a deep, unbroken sleep—but not a bite of food.

The cars went sliding past, whispering on their airjets, with the soft, low murmur of the nuclear engines like an undertone.

One pulled to the curb just ahead of him and a head stuck out.

"Shep," said the head, "how lucky! I was hoping I would find you."

Blaine stood in panic for an instant and he felt the alien terror rising once again, but he crammed it back into its corner with every shred of mental power he had.

He made his voice calm and fought to keep it even.

"Freddy," he said. "It's a long time since I've seen you."

For it was Freddy Bates, man of no apparent occupation, although it was vaguely understood that he represented someone or other in this place where almost every other person was a lobbyist or representative or petty diplomat or undercover agent.

Freddy opened the door.

"Hop in," he said. "We're going to a party."

And this might be it, thought Blaine. This might be the way to start where he was going. It was better, certainly, than anything he had in mind. Fishhook would never in a million years think to find him at a party. And another thing: A party would be an easy place to slip away from. There would be so many people that none of them would notice when or where one of them might go. There would be, he was almost certain, at least one car with the key left carelessly in its ignition lock.

There would be food—and he needed food.

"Come on," said Freddy. "It is one of Charline's parties."

Blaine slid into the car and sank into the seat. The door hissed shut and Freddy swung the car into a traffic lane.

"I told Charline," said Freddy, settling down to chatter, "that a party simply could not be a party without a soul from Fishhook. I volunteered to go out and snare a Fishhook personage."

"You goofed," Blaine told him shortly. "I am no personage."

"Except," said Freddy, "you travelers have such horrendous tales to tell."

"You know," said Blaine, "that we never tell them."

Freddy clicked his tongue. "Secrecy," he said.

"You're wrong," said Blaine. "It's rules and regulations."

"Of course. And that's the reason rumor is a rampant wildfire in this town. Let something happen in the afternoon up here on the hill and by evening it is being told in the finest detail in the lowest dives."

"But usually not correct."

"Perhaps not in its more lurid and exact description, but at least in principle."

Blaine did not answer. He settled back in the seat and turned his head toward the window, watching the lighted streets slide past and above the streets the massive, terraced blocks of buildings that were Fish-

hook. And marveled at the unflinching wonder of this sight which after all the years never failed to thrill him. Knowing as he thought it that it was not the sight itself, for there were grander in the world, but the fabulous significance which fell like a mantle on the city.

For here, he thought, in fact, if not in name, was the capital of Earth. Here lay the hope and greatness of the future, here was the human link with other worlds deep in outer space.

And he was leaving it.

Incredible as it seemed, with all his love of it and all his devotion to it and all his faith in it, he was running from it like a frightened rabbit.

"What are you guys going to do with all of it?" asked Freddy.

"All of what?"

"All the knowledge, all the secrets, all the concepts that you are raking in."

"I wouldn't know," said Blaine.

"Regiments of scientists," said Freddy, "working happily away. Corps of technologists dopping out new angles. How far ahead of the rest of us are you—a million years or so?"

"You're talking to the wrong man," said Blaine. "I don't know a thing. I just do my job. And if you're needling me, you should know that I don't needle."

"I'm sorry," said Freddy. "It's an obsession with me."

"You and a million other people."

"Look at it my way," said Freddy, earnestly. "I'm sitting on the out-

side. I'm not even looking in. Here I see this great monstrosity, this human paragon, this superhuman project, and I feel an envy of everyone who's in it and a sense of not belonging and distinctly second rate. Do you wonder the world hates Fishhook's guts?"

"Do they?"

"Shep," said Freddy, solemnly, "you should get around."

"No particular need. I hear enough of it without going anywhere. My question was: Do they hate Fishhook really?"

"I think they do," said Freddy. "Maybe not right here. All the talk in this town is mostly fashionable. But get out in the provinces. They really hate it there."

The streets now were not so closely hemmed nor the lights so bright. There were fewer business places and the residences were thinning out. The traffic had diminished.

"Who'll be at Charline's?" asked Blaine.

"Oh, the usual crowd," said Freddy. "Plus the usual zoo. She's the crazy sort. Without any inhibitions, scarcely with a social sense. You might bump into almost any one."

"Yes, I know," said Blaine.

The thing stirred inside his brain, almost a sleepy stir.

*It's all right, Blaine told it. Just settle down and snooze. We have got it made. We are on our way.*

Freddy swung the car off the main road and followed a secondary that went winding up a canyon. The air took on a chill. In the dark outside

one could hear the trees talking back and forth and there was the smell of pine.

The car turned an abrupt curve and the house was shining on a bench above—a modernistic cliff dwelling plastered in the canyon's wall like a swallow's nest.

"Well," said Freddy, joyously, "here we finally are."

## V

The party was beginning to get noisy—not boisterous, but noisy. It was beginning to acquire that stale air of futility to which, in the end, all parties must fall victim. And there was something about it—about the sour smell of too many cigarettes, the chill of the canyon breeze through the open windows, the shrill and vacant sound of human chatter—that said it was getting late—late and time to go, although it really wasn't. It wasn't midnight yet.

The man named Herman Dalton stretched his long legs out, slumping in the chair, the big cigar thrust into one corner of his mouth and his hair like a new-built brush-pile from his running hands through it.

"But I tell you, Blaine," he rumbled, "there's got to be an end to it. The time will come, if something isn't done, when there'll be no such thing as business. Fishhook, even now, has driven us flat against the wall."

"Mr. Dalton," Blaine told him wearily, "if you must argue this you should find someone else. I know

nothing about business and even less of Fishhook despite the fact I work there."

"Fishhook's absorbing us," said Dalton, angrily. "They're taking away our very livelihood. They're destroying a fine system of conventions and of ethics built very painfully through the centuries by men deeply dedicated to the public service. They are breaking down the commercial structure which has been built so carefully. They're ruining us, slowly and inexorably, not all of us at once, but surely, one by one. There is the matter, for example, of this so-called butcher vegetable. You plant a row of seeds, then later you go out and dig up the plants as you would potatoes, but rather than potatoes you have hunks of protein."

"And so," said Blaine, "for the first time in their lives, millions of people are eating meat they couldn't buy before. That your fine, brave system of conventions and of ethics didn't allow them to earn enough to buy."

"But the farmers!" Dalton yelled. "And the meat market operators. Not to mention the packing interests—"

"I suppose," suggested Blaine, "it would have been more cricket if the seeds had been sold exclusively to the farmers or the supermarkets. Or if they were sold at the rate of a dollar or a dollar and a half apiece instead of ten cents a packet. That way we'd keep natural meat competitive and the economy sound. Of course, then, these millions of people—"

"But you do not understand," protested Dalton. "Business is the very life blood of our society. Destroy it and you destroy man himself."

"I doubt that very much," said Blaine.

"But history proves the position of commercialism. It has built the world as it stands today. It opened up the new lands, it sent out the pioneers, it erected the factories and it—"

"I take it, Mr. Dalton, you read a lot of history."

"Yes, Mr. Blaine, I do. I am particularly fond of—"

"Then, perhaps, you've noticed one other thing as well. Ideas and institutions and beliefs in time outlive their usefulness. You'll find it in page after page of all our history—the world evolves and the people and their methods change. Has it ever occurred to you that business as you think of it may have outlived its usefulness. Business has made its contribution and the world moves on. Business is just another dodo—"

Dalton came straight out of his slump, his hair standing straight on end, the cigar dangling in his mouth.

"I believe you actually mean it," he cried. "Is that what Fishhook thinks?"

Blaine chuckled dryly. "No, it's what I think. I have no idea what Fishhook may be thinking. I am not in Policy."

And that was the way it went, Blaine told himself. No matter where you went, that was the way

it was. There was always someone who tried to root out a hint, a clue, a tiny secret that might pertain to Fishhook. Like a group of hopping vultures, like a bunch of peeping Toms—a thirst to know what was going on, suspecting, perhaps, much more was going on than was actually the case.

The city was a madhouse of intrigue and of whispering and of ru-





mor—filled with representatives and operatives and pseudo-diplomats. And this gent in the chair across from him, Blaine speculated, was here to place a formal protest against some new outrage perpetrated upon some proud commercial unit by some new Fishhook enterprise.

Dalton settled back into his chair. He got a fresh and deadly grip upon the big cigar. His hair fell back again, it seemed, into some semblance of once having known a comb.

"You say you're not in Policy," he said. "I believe you told me you are a traveler."

Blaine nodded.

"That means that you go out in space and visit other stars."

"That covers it," said Blaine.

"You're a parry, then."

"I suppose you'd call me that. Although I'll tell you frankly it is not a name that is regularly employed in polite society."

The rebuke was lost on Dalton. He was immune to shame.

"What's it like?" he asked.

"Really, Mr. Dalton, I cannot begin to tell you."

"You go out all alone."

"Well, not alone. I take a taper with me."

"A taper?"

"A machine. It gets things down on tape. It is full of all sorts of instruments, highly miniaturized, of course, and it keeps a record of everything it sees."

"And this machine goes out with you—"

"No. I told you. I take it out with me. When I go out, I take it along with me. Like you'd take along a brief case."

"Your mind and that machine?"

"That's right. My mind and that machine."

"Think of it!" said Dalton.

Blaine did not bother with an answer.

Dalton took the cigar out of his mouth and examined it intently. The end that had been in his mouth was very badly chewed. The end of it was shredded and untidy strips hung down. Grunting with concentration, he tucked it back into his mouth, twirling it a bit to wind up the shreds.

"To get back to what we were talking about before," he announced pontifically. "Fishhook has all these alien things and I suppose it is all right. I understand they test them rather thoroughly before they put them on the market. There'd be no hard feelings—no sir, none at all—if they'd only market them through regular retail channels. But they don't do that. They will allow no one to sell any of these items. They've set up their own retail outlets and, to add insult to injury, they call these outlets Trading Posts. As if, mind you, they were dealing with a bunch of savages."

Blaine chuckled. "Someone, long ago, in Fishhook must have had a sense of humor. Believe me, Mr. Dalton, it is a hard thing to believe."

"Item after item," Dalton raged,

"they contrive to ruin us. Year by year they take away or cancel out commodities for which there was demand. It's a process of erosion that wears away at us. There's no vicious threat, there's just the steady chiseling. And I hear now that they may open up their transportation system to the general public. You realize what a blow that would strike at the old commercial setup."

"I suppose," said Blaine, "it would put the truckers out of business and a number of the airlines."

"You know very well it would. There isn't any transportation system that could compete with a teleportive system."

Blaine said: "It seems to me the answer is for you to develop a teleportive system of your own. You could have done it years ago. You've got a lot of people outside of Fishhook who could show you how it's done."

"Crackpots," said Dalton viciously.

"No, Dalton. Not crackpots. Just ordinary people who have the paranormal powers that put Fishhook where it is today—the very powers you admire in Fishhook, but deplore in your own people."

"We wouldn't dare," said Dalton. "There's the social situation."

"Yes, I know," said Blaine. "The social situation. Are the happy little mobs still crucifying them?"

"The moral climate," conceded Dalton, "is at times confusing."

"I should imagine so," said Blaine.

Dalton took the cigar from his

mouth and regarded it with something like disgust. One end of it was dead and the other badly frayed. After considering for a moment, he tossed it into a potted plant. It caught on the lower part of the greenery and dangled there obscenely.

Dalton leaned back and stared up at the ceiling.

"Mr. Blaine," he said.

"Yes?"

"You're a man of great discernment. And of integrity. And a great impatience with fuddy-duddy thinking. You've brought me up short on a couple of matters and I liked the way you did it."

"Your servant," Blaine said, coldly.

"How much do they pay you?"

"Enough," said Blaine.

"There's no such thing as enough. I never saw a man—"

"If you're trying to buy me, you're out of your ever-loving mind."

"Not buy you. Hire you. You know the ins and outs of Fishhook. You know a lot of people. In a consultive capacity, you'd be invaluable. We'd be very willing to discuss—"

"Excuse me, sir," said Blaine, "but I'd be entirely useless to you. Under the present circumstances, I'd be no good at all."

For he'd been here for an hour and that was much too long. He'd eaten and he'd had a drink and he'd talked with Dalton—he'd wasted a lot of time on Dalton—and he must be getting on. For the word that he was here would filter back to Fish-

hook and before it did he must be far away.

There was a fabric rustle and a hand fell on his shoulder.

"Shep," said Charline Whittier, "it was nice of you to come."

He rose and faced her.

"It was good of you to ask me."

She crinkled impish eyes at him.

"Did I really ask you?"

"No," he said. "Leave us be honest. Freddy dragged me in. I hope that you don't mind."

"You know you're always welcome." Her hand tightened on his arm. "There's someone you must meet. You'll forgive us, Mr. Dalton."

"Certainly," said Dalton.

She led Blaine away.

"You know," he said, "that was rather rude of you."

"I was rescuing you," she told him. "The man's a frightful bore. I can't imagine how he got here. I'm sure I didn't ask him."

"Just who is he?" asked Blaine. "I'm afraid I never did find out."

She shrugged bare and dimpled shoulders. "The head of some business delegation. Down here to cry out their broken hearts to Fishhook."

"He indicated that much. He's irate and most unhappy."

"You haven't got a drink," said Charline.

"I just finished one."

"And you've had something to eat? You're having a good time? I have a new dimensino, the very latest thing—"

"Maybe," said Blaine. "Maybe later on."

"Go and get another drink," said Charline. "I must say hello to some other of my guests. How about staying after? It's been weeks since I have seen you."

He shook his head. "I'm more sorry than I can tell you. It was nice of you to ask."

"Some other time," she said.

She moved away, but Blaine reached out and stopped her.

"Charline," he said, "did anyone ever tell you you're an awfully good egg."

"No one," she told him. "Absolutely no one."

She stood on tiptoe to kiss him lightly on the cheek.

"Now run along and play," she said.

He stood and watched her move away into the crowd.

Inside him the pinkness stirred, a question mark implicit in its stirring.

*Just a while*, Blaine told it, watching the crowd. *Let me handle it a little longer. Then we'll talk it over.*

And he felt the gratitude, the sudden tail-wag of appreciation for being recognized.

*We'll get along*, he said. *We've got to get along. We're stuck with one another.*

It curled up again—he could feel it curling up, leaving things to him.

It had been frightened to start with, it might become frightened again, but at the moment it was accepting the situation—and to it the situation, he knew, must seem

particularly horrific, for this place was a far and frightening cry from the detachment and serenity of that blue room on the far-off planet.

He drifted aimlessly across the room, skirting the bar, pausing a moment to peer into the room which contained the newly-installed dimensino, then heading for the foyer. For he must be getting on. Before morning light he either must be miles away or be well hidden out.

He skirted little jabbering groups and nodded at a few acquaintances who spoke to him or waved across the room.

It might take some time to find a car in which a forgetful driver had left the key. It might be—and the thought came with brutal force—he would fail to find one. And if that were the case, what was there to do? Take to the hills, perhaps, and hide out there for a day or two while he got things figured out. Charline would be willing to help him, but she was a chatterbox, and he would be a whole lot better off if she knew nothing of the matter. There was no one else he could think of immediately who could give him any help. Some of the boys in Fishhook would, but any help they gave him would compromise themselves, and he was not as desperate as all that. And a lot of others, of course, but each of them with an ax to grind in this mad pattern of intrigue and petition which surrounded Fishhook—and you could never know which of them to trust. There were some of

them, he was quite aware, who would sell you out in the hope of gaining some concession or some imagined position of advantage.

He gained the entrance of the foyer and it was like coming out of some deep forest onto a wind-swept plain—for here the surflike chatter was no more than a murmuring and the air seemed clearer and somehow a great deal cleaner. Gone was the feeling of oppression, of the crowding in of bodies and of minds, of the strange pulse beat and cross current of idle opinion and malicious gossip.

The outer door came open and a woman stepped into the foyer.

"Harriet," said Blaine, "I might have known you'd come. You never miss Charline's parties, I remember now. You pick up a running history of all that's happened of importance and—"

Her telepathic whisper scorched his brain: *Shep, you utter, perfect fool! What are you doing here? (Picture of an ape with a dunce cap on its head, picture of the south end of a horse, picture of a derisive phallic symbol.)*

"But, you—"

*Of course. Why not (a row of startled question marks). Do you think only in Fishhook? Only in yourself? Secret, sure—But I have a right to secrets. How else would a good newspaperman pick up (heaps of blowing dirt, endless flutter of statistics, huge ear with a pair of lips flapping loosely at it).*

Harriet Quimby said, sweetly, vocally: "I wouldn't miss Charline's

parties for anything at all. One meets such stunning people."

*Bad manners*, said Blaine, reprovingly. For it was bad manners. There were only certain times when it was permissible to use telepathy—and never at a social function.

*To hell with that*, she said. *Lay bare my soul for you and that is what I get. (A face remarkably like his with a thin, trim hand laid very smartly on it). It is all over town. They even know you're here. They'll be coming soon—if they're not already here. I came as fast as I could immediately I heard. Vocalize, you fool. Someone will catch on. Us just standing here.*

"You're wasting your time," said Blaine. "No stunning people here tonight. It's the poorest lot Charline has ever got together." *Peepers!!!!*

*Maybe. We have to take our chance. You are on the lam. Just like Stone. Just like all the others. I am here to help you.*

He said: "I was talking to some business lobbyist. He was an awful bore. I just stepped out to get a breath of air." *Stone! What do you know of Stone?*

*Never mind right now. "In that case I'll be going. No use to waste my time." My car is down the road, but you can't go out with me. I'll go ahead and have the car out in front and running. You wander around a while, then duck down into the kitchen (map of house with red guide line leading to the kitchen).*

*I know where the kitchen is.*

*Don't miff it. No sudden moves,*

*remember. No grim and awful purpose. Just wander like the average party-goer, almost bored to death. (Cartoon of gent with droopy eyelids and shoulders all bowed down by the weight of a cocktail glass he held limply in his hand, ears puffed out from listening and a frozen smile pasted on his puss). But wander to the kitchen, then out the side door down the road.*

"You don't mean you're leaving—just like that," said Blaine. "My judgment, I can assure you, is very often bad." *But you? Why are you doing this? What do you get out of it? (Perplexed, angry person holding empty sack.)*

*Love you. (Board fence with interlocked hearts carved all over it.)*

*Lie. (Bar of soap energetically washing out a mouth.)*

"Don't tell them, Shep," said Harriet. "It would break Charline's heart." *I'm a newspaperman (woman) and I'm working on a story and you are part of it.*

*One thing you forgot. Fishhook may be waiting at the mouth of the canyon road.*

*Shep, don't worry. I've got it doped out. We'll fool them yet.*

"All right, then," said Blaine. "I won't say a word. Be seeing you around." *And thanks.*

She opened the door and was gone and he could hear the sound of her walking across the patio and clicking down the stairs.

He slowly turned around toward the crowded rooms and as he

stepped through the door, the blast of conversation hit him in the face—the jumbled sound of many people talking simultaneously, not caring particularly what they said, not trying to make sense, but simply jabbering for the sake of jabber, seeking for the equivalent of conformity in this sea of noise.

So Harriet was a telly and it was something he would never have suspected. Although, if you were a newshen and you had the talent, it would make only common sense to keep it under cover.

Close-mouthed woman, he thought, and wondered how any woman could have managed to keep so quiet about it. Although Harriet, he reminded himself, was more newsman than she was woman. You could put her up there with the best of the scribblers.

He stopped at the bar and got a Scotch and ice and stood idly for a moment, sipping at it. He must not appear to hurry, he must never seem to be heading anywhere, and yet he couldn't afford to let himself be sucked into one of the conversational eddies—there wasn't time.

He could drop into the dimensino room for a minute or two, but there was danger in that. One got identified with what was going on too quickly. One lost one's sense of time; one lost everything but the situation which dimensino created. And it often was disturbing and confusing to drop into the middle of it.

It would not be, he decided, a very good idea.

He exchanged brief greetings with a couple of acquaintances; he suffered a backslapping reunion with a slightly inebriated gentleman he'd seen no longer than ten days before; he was forced to listen to two off-color stories; he went through a mild flirting routine with a simpering dowager who came charging out of ambush.

And all the time he moved steadily toward the door that led down to the kitchen.

Finally he arrived.

He stepped through the doorway and went casually down the stairs.

The place was empty, a cold, metallic place with the gleam of chrome and the shine of high utility. A clock with a sweep second hand hung upon one wall and its whirring sound hung heavy in the room.

Blaine placed his glass, still half full of Scotch, on the nearest table, and there, six strides away, across the gleaming floor, was the outside door.

He took the first two steps and as he started on the third a silent shout of warning sounded in his brain and he spun around.

Freddy Bates stood beside the huge refrigerator, one hand jammed deep into a jacket pocket.

"Shep," said Freddy Bates, "if I were you, I wouldn't try it. Fishhook has the place tied up. You haven't got a chance."

## VI

Blaine stood frozen for a second

while wonder hammered at him. And it was surprise and bafflement, rather than either fear or anger, that held him frozen there. Surprise that, of all people, it should be Freddy Bates. Freddy, no longer the aimless man-about-town, the inconsequential mystery man in a town that was full of such as he, but an agent of Fishhook and, apparently, a very able one.

And another thing—that Kirby Rand had known and had allowed him to walk out of the office and go down the elevator. But grabbing for a phone as soon as he had reached the corridor to put Freddy on the job.

It had been clever, Blaine admitted to himself—much more clever than he himself had been. There had never been a moment that he had suspected Rand felt anything was wrong, and Freddy, when he picked him up, had been his normal, ineffectual self.

Anger soaked slowly into him, to replace the wonder. Anger that he had been taken in, that he had been trapped by such a jerk as Freddy.

"We'll just walk outside," said Freddy, "like the friends we are, and I'll take you back to have a talk with Rand. No fuss, no fight, but very gentlemanly. We would not want to do anything—either one of us—to cause Charline embarrassment."

"No," said Blaine. "No, of course, we wouldn't."

His mind was racing, seeking for a way, looking for an out, anything

at all that would get him out of this. For he was not going back. No matter what might happen, he wasn't going back with Freddy.

He felt the pinkness stir as if it were coming out.

"No!" yelled Blaine. "No!"

But it was too late. The pinkness had crawled out and it filled his brain and he was still himself, but someone else as well. He was two things at once and it was most confusing and something strange had happened.

The room became as still as death except for the groaning of the clock upon the wall. And that was strange, as well, for until this very moment, the clock had done no groaning; it had whirred, but never groaned.

Blaine took a swift step forward and Freddy didn't move. He stayed standing there, with the hand thrust in the pocket.

And another step and still Freddy barely stirred. His eyes stayed stiff and staring and he didn't blink. But his face began to twist, a slow and tortured twist, and the hand in the pocket moved, but so deliberately that one only was aware of a sort of stirring, as if the arm and hand and the thing the hand clutched in the pocket were waking from deep sleep.

And yet another step and Blaine was almost on him, with his fist moving like a piston. Freddy's mouth dropped slowly open, as if the jaw hinge might be rusty, and his eyelids came creeping down in the caricature of a blink.

Then the fist exploded on his jaw. Blaine hit where he was aiming and

he hit with everything he had, his torso twisting to follow through the blow. Even as he hit and the pain of contact slashed across his knuckles and tingled in his wrist, he knew it was all wrong. For Freddy had scarcely moved, had not even tried to defend himself.

Freddy was falling, but not as one should fall. He was falling slowly, deliberately, as a tree will topple when the final cut is made. In slow motion, he crumpled toward the floor and as he fell his hand finally cleared the pocket and there was a gun in it. The gun slipped from his flaccid fingers and beat him to the floor.

Blaine bent to scoop it up and he had it in his hand before Freddy hit the floor and he stood there, with the gun in hand, watching Freddy finally strike the floor—not actually striking it, but just sort of settling down on it and relaxing in slow motion on its surface.

The clock still groaned upon the wall and Blaine swung around to look at it and saw that the second hand was barely crawling across the numbered face. Crawling where it should have galloped and groaning when it should have whirred and the clock, Blaine told himself, had gone crazy, too.

There was something wrong with time. The creeping second hand and Freddy's slow reaction was evidence of that.

Time had been slowed down.

And that was impossible.

Time did not slow down; time was

a universal constant. But if time, somehow, had slowed down, why had not he been a party to it?

Unless—

Of course, unless time had stayed the way it was and he had been speeded up, had moved so fast that Freddy had not had the time to act, had been unable to defend himself, could under no circumstances have gotten the gun out of his pocket.

Blaine held his fist out in front of him and looked at the gun. It was a squat and ugly thing and it had a deadly bluntness.

Freddy had not been fooling, nor was Fishhook fooling. You do not pack a gun in a little game all filled with lightness and politeness. You do not pack a gun unless you're prepared to use it. And Freddy—there was no doubt of that—had been prepared to use it.

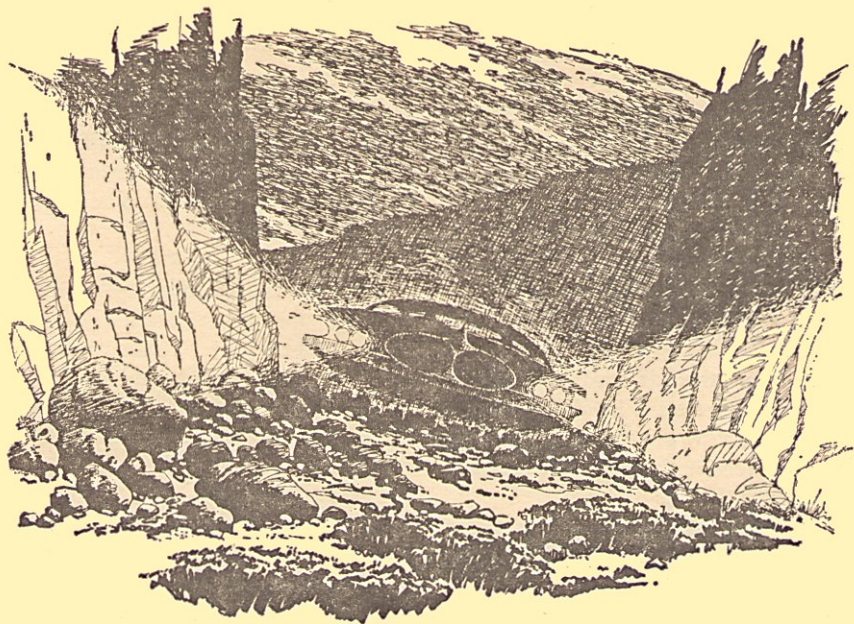
Blaine swung back toward Freddy and he was still upon the floor and he seemed to be most restful. It would be quite a little while before Freddy would be coming round.

Blaine dropped the gun into his pocket and turned toward the door and as he did so he glanced up at the clock and the second hand had barely moved from where he'd seen it last.

He reached the door and opened it and took one last glance back into the room. The room still was bright with chrome, still stark in its utility and the one untidy thing within it was Freddy sprawled upon the floor.

Blaine stepped out of the door and





moved along the flagstone walk that led to the long stone stairway that went slanting across the great cliff face.

A man was lounging at the head of the stairs and he began to straighten slowly as Blaine raced down the walk toward him.

The light from one of the upstairs windows shown across the face of the straightening man and Blaine saw the lines of outraged surprise, as if they were sculptured lines in a graven face.

"Sorry, pal," said Blaine.

He shot his arm out, stiff from the shoulder, with the palm spread flat and caught the graven face.

The man reeled backward slowly, step by cautious step, tilting farther

and farther backward with each step. In another little while he'd fall flat upon his back.

Blaine didn't wait to see. He went running down the stairs and out in the road, beyond the dark lines of parked vehicles, stood a single car, with its tail lights gleaming and its motor humming softly.

It was Harriet's car, Blaine told himself, but it was headed the wrong way—not down the road toward the canyon's mouth, but into the canyon's maw. And that was wrong, he knew, because the road pinched out a mile or two beyond.

He reached the bottom of the steps and threaded his way among the cars out into the road.

Harriet sat waiting in the car and

he walked around it and opened the door. He slid into the seat.

Weariness hit him, a terrible, bone-aching weariness, as if he had been running, as if he'd run too far. He sank into the seat and looked at his hands lying in his lap and saw that they were trembling.

Harriet turned to look at him. "It didn't take you long," she said.

"I got a break," said Blaine. "I hurried."

She put the car into gear and it floated up the road, its airjets thrumming and the canyon walls picking up the thrumming to fling it back and forth.

"I hope," said Blaine, "you know where you are going. The road ends up here a ways."

"Don't worry, Shep. I know."

He was too tired to argue. He was all beaten out.

And he had a right to be, he told himself, for he had been moving ten times—or a hundred times?—faster than he should, than the human body ever had been intended to. He had been using energy at a terrific rate—his heart had beat the faster, his lungs had worked the harder and his muscles had gone sliding back and forth at an astounding rate.

He lay quietly, his mind agape at what had happened, and wondering, too, what had made it happen. Although the wonder was a formalized and an academic wonder, for he knew what it was.

The pinkness had faded out of him and he went hunting it and found it, snug inside its den.

*Thanks*, he said to it.

Although it seemed a little funny that he should be thanking it, for it was a part of him—it was inside his skull, it sheltered in his brain. And yet not a part of him, not yet a part of him. But a skulker no longer, a fugitive no more.

The car went fleeing up the canyon and the air was fresh and cool, as if it had been new-washed in some clear mountain stream, and the smell of pine came down between the walls like the smell of a faint and delicate perfume.

Perhaps, he told himself, it had been with no thought of helping him that the thing inside his brain had acted as it did. Rather it might have been an almost automic reflex action for the preservation of itself. But no matter what it was, it had saved him as surely as itself. For the two of them were one. No longer could either of them act independently of the other. They were bound together by the legerdemain of that sprawling pinkness on that other planet, by the double of the thing that had come to live with him—for the thing within his mind was a shadow of its other self five thousand light-years distant.

"Have trouble?" Harriet asked.

"I met up with Freddy."

"Freddy Bates, you mean."

"He's the one and only Freddy."

"The little noncompoop."

"Your little nincompoop," said Blaine, "was packing a gun and he had blood within his eyes."

"You don't mean—"

"Harriet," said Blaine, "this is liable to get rough. Why don't you let me out—"

"Not on your life," said Harriet. "I've never had so much fun."

"You aren't going anywhere. You haven't much road left."

"Shep, you may not think it to look at me, but I'm the intellectual type. I do a lot of reading and I like history best of all. Especially if there are a lot of campaign maps to follow."

"So?"

"So I've found out one thing. It is always a good idea to have a line of retreat laid out."

"But not up this road."

"Up this road," she said.

He turned his head and watched her profile and she didn't look the part—not the hard-boiled newspaper gal that she really was. No chatter column writer nor a sob sister nor a society hen, but one of the dozen or so top-notch reporters spelling out the big picture of Fishhook for one of the biggest newspapers in North America.

And yet as chic, he thought, as a fashion model. Chic, without being sleek, and with an air of quiet assurance that would have been arrogance in any other woman.

There was nothing, he was sure, that could be known of Fishhook which she didn't know. She wrote with a strangely objective viewpoint, one might almost say detached, but even in this rare atmosphere of journalistic prose she injected a soft sense of human warmth.

And in the face of all of this, what was she doing here?

She was a friend, of course. He had known her for years, ever since that day shortly after she had arrived at Fishhook and they had gone to dinner at the little place where the old blind woman still sold roses. He had bought her a rose, he remembered, and being far from home and lonesome she had cried a little. But, he told himself, she'd probably not cried since.

Strange, he thought, but it all was strange. Fishhook, itself, was a modern nightmare which the outer world, in a century's time, had not quite accepted.

He wondered what it had been like, that century ago, when the men of science had finally given up, when they had admitted that Man was not for space. And all the years were dead and all the dreams were futile and Man had finally ended up in a little planetary dead-end. For then the gods had toppled and Man, in his secret mind, had known that after all the years of yearnings, he had achieved nothing more than gadgets.

Hope had fallen on hard times and the dreams had dwindled and the trap closed tight—but the urge to space had refused to die. For there was a group of very stubborn men who took another road—a road that Man had missed, or deserted, whichever you might choose, many years ago and ever since that time had sneered at and damned with the name of magic.

For magic was a childish thing; it was an old wives' tale; it was something out of nursery books—and in the hard and brittle world of the road that Man had taken it was intolerable. You were out of your mind if you believed in magic.

But the stubborn men had believed in it, or at least in the principle of this thing which the world called magic, for it was not actually magic if one used the connotation which through the years had been placed upon the word. Rather it was a principle as true as the principles which underlay the physical sciences. But rather than a physical science, it was a mental science; it concerned the using of the mind and the extension of the mind instead of the using of the hands and the extensions of the hands.

Out of this stubbornness and this belief and faith Fishhook had arisen—Fishhook because it was a reaching out, a fishing into space, a going of the mind where the body could not go.

Ahead of the car the road swung to the right, then swiveled to the left, in a tightening curve. This was the turnaround; here the road came to an end.

"Hang on," said Harriet.

She swung the car off the road and nosed it up a rocky stream bed that ran along one of the canyon walls. The airjets roared and blustered, the engines throbbed and howled. Branches scraped along the bubble top and the car tilted sharply, then brought itself aright.

"This is not too bad," said Harriet. "There is a place or two, later on, where it gets a little rough."

"This is the line of retreat you were talking about?"

"That's exactly right."

And why, he wondered, should Harriet Quimby need a line of retreat. He almost asked her, but decided not to.

She drove cautiously, traveling in the dry creek bed, clinging close against the wall of rock that came down out of darkness. Birds fled squawling from the bushes and branches dragged against the car, screeching in their agony of tortured wood.

The headlights showed a sharp bend, with a barn-size boulder hemming in the wall of rock. The car slowed to a crawl, thrust its nose into the space between the boulder and the wall, swiveled its rear around and went inching through the space into the clear again.

Harriet cut down the jets and the car sank to the ground, grating on the gravel in the creek bed. The jets cut out and the engine stopped and silence closed upon them.

"We walk from here?" asked Blaine.

"No. We only wait a while. They'll come hunting for us. If they heard the jets, they'd know where we had gone."

"You go clear to the top?"

"Clear to the top," she said.

"You have driven it?" he asked.

"Many times," she told him. "Because I knew that if the time ever

came to use it, I'd have to use it fast. There'd be no time for guessing or for doubling back. I'd have to know the trail."

"But why—"

"Look, Shep. You are in a jam. I get you out of it. Shall we let it go at that?"

"If that's the way you want it, sure. But you're sticking out your neck. There's no need to stick it out."

"I've stuck out my neck before. A good newsman sticks out the neck whenever there is need to."

That might be true, he told himself, but not to this extent. There were a lot of newspapermen in Fishhook; a few he could even call his friends. And yet no one of them—no one but Harriet—would do what she was doing.

So newspapering by itself could not be the answer. Nor could friendship be the entire answer, either. It was something more than either, perhaps a good deal more than either.

The answer might be that Harriet was not a newsman only. She must be something else. There must be another interest and a most compelling one.

"One of the other times you stuck your neck out, did you stick it out for Stone?"

"No," she said. "I only heard of Stone."

They sat in the car, listening, and from far down the canyon came the faint muttering of jets. The mutterings came swiftly up the road and Blaine tried to count them and it

seemed that there were three, but he could not be sure.

The cars came to the turnaround and stopped and men got out of them and tramped into the brush.

Harriet put out a hand and her fingers clamped around Blaine's arm.

*Shep, what did you do to Freddy (Picture of a grinning death's-head.)*

*Knocked him out, is all.*

*And he had a gun?*

*Took it away from him.*

*(Freddy in a coffin, with a tight smile on his painted face, with a monstrous lily stuck between his folded hands.)*

*No. Not that. (Freddy with a puffed-up eye, with a bloody nose, a cross-hatch of patches on his blotchy face.)*

They sat quietly, listening.

The shouts of the men died away and the cars started up and went down the road.

Now?

*We'll wait, said Harriet. Three came up. Only two went back. There is still one waiting. (A row of listening ears, all stretched out of shape with straining for a sound). They're sure we came up the road. They don't know where we are. This is (a gaping trap with jagged rows of teeth). They'll figure we'll think they went away and will betray ourselves.*

They waited. Somewhere in the woods a raccoon whickered and a bird, disturbed by some night time prowler, protested sleepily.

*There is a place, said Harriet. A place where you'll be safe. If you want to go there.*

*Any place. I haven't any choice. You know what the outside's like? I've heard.*

*They have signs in some towns (a billboard with the words: PARRY, DON'T LET THE SUN SET ON YOU HERE). They have prejudice and intolerance and there are (bearded, old-time preachers thumping pulpits; men clad in nightgowns, with masks upon their face and rope and whip in hand; bewildered, frightened people cowering beneath a symbolic bramble bush).*

She said in a vocal whisper: "It's a dirty, stinking shame."

Down on the road the car had started up. They listened to it leave.

"They gave up finally," said Harriet. "They may still have left a man behind, but we'll have to chance that."

She started the engine and turned up the jets. With the lights switched on, the car nosed up the stream bed. The way grew steeper and the bed pinched out. The car moved along a hog's back, dodging clumps of bushes. They picked up a wall of rock again, but it was on the left side now. The car dipped into a crevasse no more than a paint-layer distant away from either side and they inched along it. The crevasse pinched sharply out and they were on a narrow ledge with black rock above and black emptiness below. For an eternity they climbed and the wind grew chill and bitter and finally before them was a flatness, flooded by a moon dipping toward the west.

Harriet stopped the car.

Blaine got out and fumbled in his pocket for a pack of cigarettes. He finally found it and there was only one left in the pack. It was very badly crumpled. He straightened it out carefully and lit it. Then he walked around the car and stuck it between Harriet's lips.

She puffed on it gratefully.

"The border's up ahead," she said. "You take the wheel. Another fifty miles across country. Very easy going. There's a little town where we can stop for breakfast."

## VII

The crowd had gathered across the street from the restaurant. It was clustered thickly about Harriet's car and it was watching closely and it was deadly silent. Ugly, but not noisy. Angry, and perhaps just slightly apprehensive, perhaps just on the edge of fear.

Blaine pressed his back against the wall of the restaurant where, a few minutes before, they had finished breakfast. And there had been nothing wrong at breakfast. It had been all right. No one had said a thing. No one stared at them. Everything had been normal and very commonplace.

"How could they tell?" asked Blaine.

"I don't know," said Harriet.

"They took down the sign."

"Or maybe it fell over. Maybe they never had one. There are some that don't. It takes a lot of belligerence to put up a sign."

"These babies look belligerent enough."

"They may not be after us."

"Maybe not," he said. But there was no one else, there was nothing else against which they would be banded.

*Listen closely, Shep. If something happens. If we are separated. Go to South Dakota. Pierre in South Dakota (map of the United States with Pierre marked with a star and the name in big red letters and a purple road that led from this tiny border town to the city on the wide Missouri.)*

*I know the place, said Blaine.*

*Ask for me at this restaurant (the facade of a building, stone-fronted, big plate windows with an ornate, silver-mounted saddle hanging in one window, a magnificent set of elk antlers fixed above the door). It's up on the hill, above the river. Almost anyone will know me. They can tell you where I am.*

*We won't get separated.*

*But if we do, you mind what I SAY.*

*Of course I will, said Blaine. You have lugged me this far. I'll trust you all the way.*

The crowd was beginning to seethe a little—not actually moving, but stirring around, beginning to get restless, as if it might be gently frothing. And a murmur rose from it, a sullen, growling murmur without any words.

An old crone pushed through it and shambled out into the street. She was an ancient thing. What could be

seen of her—her head, her hands, her bare and muddy feet—were a mass of wrinkles. Her hair was dirty, ragged white and it dropped in wisps all about her head.

She lifted a feeble arm, from which flabby muscles hung like an obscene pouch, and she pointed a crooked, bony, quavering forefinger straight in Blaine's direction.

"That is him," she screamed. "He is the one I spotted. There's something queer with him. You can't get into his brain. It's—"

The rest of what she said was drowned out in the rising clamor of the crowd, which began moving forward. Not rapidly, but foot by foot—edging along toward the two against the wall, as if it might be fearful and reluctant, but pushed along by a civic duty that was greater than its fear.

Blaine put his hands into his jacket pocket and his fingers closed around the gun he'd scooped up in Charline's kitchen. But that was not the way, he knew. That would only make it worse. He pulled his hand out of the pocket and let it dangle at his side.

But there was something wrong—he was standing all alone, just his human self. There was no pinkness in him, no stir inside his brain. He was a naked human and wondered wildly, for a moment, if he should be glad or not. And then he caught it peeping out of one corner of his brain and he waited for it, but nothing happened and the questioning segment of it pulled out of consciousness again.

There was fury and loathing in the faces that floated atop the mass of bodies moving in the street. Not the night-shrouded baying of the mob, but the slantwise, daylight slinking of a pack of wolves and in the forefront of the press, borne along on the edge of this wave of human hatred, was the withered crone who had pointed with her finger to set the pack in motion.

"Stand still," Blaine said to Harriet. "That is our only chance."

Any moment now, he knew, the situation could hit a crisis point. The mob would either lose its nerve and waver, or some slight incident, some smallest motion, some spoken word, would send it forward with a rush.

And if that happened, he knew, he would use the gun. Not that he wanted to, not that he intended to—but it would be the only thing left to do.

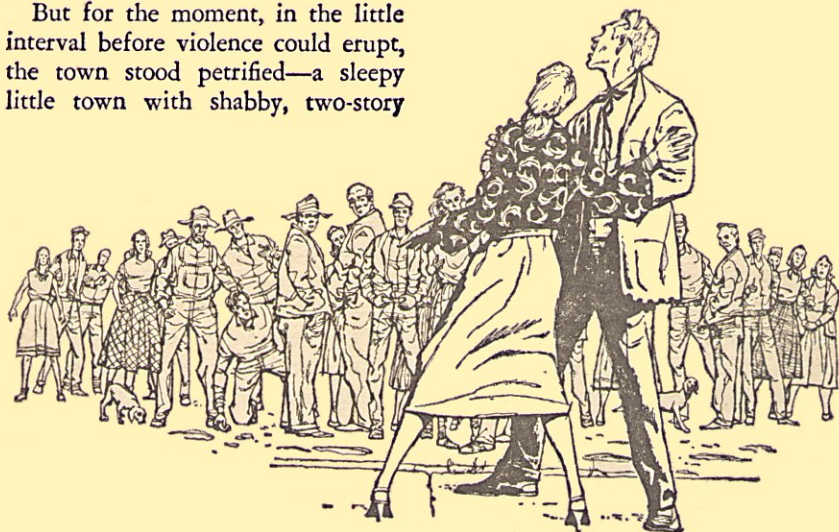
But for the moment, in the little interval before violence could erupt, the town stood petrified—a sleepy little town with shabby, two-story

business buildings, all in need of paint, fronting on a sun-baked street. Scraggy trees stood at infrequent intervals and there were faces at the upstairs windows, staring out in astonishment at the potential animal padding in the street.

The mob moved closer, circling, still cautious, and mute; all its murmur quieted, all its hate locked tight behind the savage masks.

A foot clicked sharply on the sidewalk, then another foot, and still another one—the rugged, steady sound of someone's stolid walking.

The footsteps came closer and Blaine turned his eyes a second to catch out of the corner of them the sight of a tall, angular, almost cadaverous man who strode along deliberately, for all the world as if he were out for a morning stroll.





The man reached Blaine and stood to one side of him and then he turned and faced the mob. He never said a word; he just stayed standing there. But the crowd came to a halt and stood there in the street in a dreadful quietness.

Then a man said: "Good morning to you, sheriff."

The sheriff didn't stir; he didn't say a word.

"Them is parries," said the man.

"Who says so?" asked the sheriff.

"Old Sara, she says so."

The sheriff looked at the crone: "How about it, Sara?"

"Tom is right," Old Sara screeched. "That one there, he has a funny mind. It bounces back at you."

"And the woman?" asked the sheriff.

"She is with him, ain't she?"

"I am ashamed of you," the sheriff said, as if they all were naughty children. "I have a mind to run you in, every one of you."

"But them is parries!" yelled a stricken voice. "You know we don't allow no parries here."

"Now, I tell you what," the sheriff said. "You all get back to business. I'll take care of this."

"The both of them?"

"Why, I don't know," the sheriff said. "The lady ain't no parry. I just kind of figured we'd run her out of town and that would be enough."

He said to Harriet: "Are you with this man?"

"And I'm staying with him!"

No! said Blaine. (*A sign for silence, finger to the lips*).

Fast, hoping that no one would catch it, for in a town like this even a telepath might be in for trouble.

But the warning must be sounded.

"That your car across the street?" the sheriff asked.

Harriet shot a questioning glance at Blaine.

"Yes, it is," she said.

"Well, I tell you, miss. You just trot over to it and get out of here. The folks will let you through."

"But I don't intend—"

Blaine said: "You better do it, Harriet."

She hesitated.

"Go ahead," he said.

She stepped slowly off the sidewalk, then turned back.

"I'll be seeing you," she said to Blaine.

She glanced with contempt at the sheriff. "Cossack," she declared.

The sheriff didn't mind. He'd never heard the term.

"Beat it, lady," he said, and his voice was almost kindly.

The crowd parted to let her through, but buzzing angrily. She reached the car and turned to wave at Blaine. Then she got into the seat and started the motor, gunned the jets and swung the car sharply out into the street. The crowd fled, shrieking, tumbling over one another to get out of the way, blinded by the screaming dust that was spun up by the jets.

The sheriff watched with monumental calm as the car roared down the street.

"You see that, sheriff!" roared an

outraged victim. "Why don't you run her in."

"Served you right," the sheriff said. "You started all of this. Here I was getting ready for a restful day and you got me all stirred up."

He didn't look stirred up.

The protesting crowd pushed toward the sidewalk, arguing violently.

The sheriff waved his hands, as if he were shooing chickens.

"Get along with you," he told them. "You have had your fun. Now I got to get to work. I got this guy to jug."

He turned to Blaine. "Come along with me," he said.

They walked down the street together toward the courthouse.

"You ought to have known better," said the sheriff. "This town is hell on parries."

"No way to tell," said Blaine. "There wasn't any sign."

"Blew down a year or two ago," the sheriff told him. "No one had the gumption to set it up again. Really should have a new sign. Old one got pretty rickety. You could hardly read the lettering on it. Sand storms scoured off the paint."

"What do you intend to do with me?"

The sheriff said: "Not too much, I reckon. Hold you for a while until the folks cool down. For your own protection. As soon as it is safe, I'll get you out of here."

He was silent for a moment, considering the situation.

"Can't do it right away," he said. "The boys will be watching."

They reached the courthouse and climbed the steps. The sheriff opened the door. "Straight ahead," he said.

They walked into the sheriff's office and the sheriff closed the door.

"You know," said Blaine, "I don't believe you've got the grounds to hold me. What would happen if I just walked out of here?"

"Nothing much, I guess. Not right away, at least. I certainly wouldn't stop you, although I'd argue some. But you'd not get out of town. They'd have you in five minutes."

"I could have left in the car."

The sheriff shook his head. "Son, I know these people. I was raised with them. I am one of them. I know how far I can go with them and when I've got to stop. I could get the lady off, but not the both of you. You ever see a mob in action?"

Blaine shook his head.

"It ain't a pretty sight."

"How about this Sara? She's a parry, too."

"Well, I tell you friend. Sara has good blood behind her. Fell on evil times, but her family's been here for more than a hundred years. The town just tolerates her."

"And she's handy as a spotter."

The sheriff shook his head and chuckled. "There ain't much," he said, with local pride, "that filters past our Sara. She has a busy time of it, watching all the strangers that come into town."

"You catch a lot of parries that way?"

"Tolerable," said the sheriff. "Every now and then. A tolerable number, I would say."

He motioned at the desk. "Just dump your pockets there. The law says I got to do it. I'll fix up a receipt for you."

Blaine began digging in his pockets. Billfold, card case, handkerchief, key ring, matches and, finally, the gun.

He lifted it out rather gingerly and laid it with the other stuff.

The sheriff eyed it. "You had that all the time?"

Blaine nodded.

"And you never reached for it?"

"I was too scared to reach for it."

"You got a permit for it?"

"I don't even own it."

The sheriff whistled softly through his teeth.

He picked up the gun and broke it. There was the coppery shine of cartridge cases.

The sheriff opened a desk drawer and tossed it in.

"Now," he said, as if relieved, "I've got something legal I can hold you on."

He picked up the book of matches and handed them to Blaine.

"You'll want these for smoking."

Blaine put them in his pocket.

"I could get you cigarettes," the sheriff said.

"No need," Blaine told him. "I carry them sometimes, but I don't do much smoking. Usually I wear them out just carrying them."

The sheriff lifted a ring of keys off a nail.

"Come along," he said.

Blaine followed him into a corridor that fronted on a row of cells.

The sheriff unlocked the nearest one, across the corridor from the door.

"You've got it all alone," he said. "Ran the last one out last night. Boy who came across the border and got himself tanked up."

Blaine walked into the cell. The sheriff banged and locked the door.

"Anything you want," he said, with a fine show of hospitality, "just yell out and say so. I'll get it for you."

## VIII

It had gone by many names.

Once it had been known as extrasensory perception. And then there had been a time when it had been psionics, psi for short. But first of all it had been magic.

The medicine man, with the oxides that he used for paint, with his knuckle bones to rattle in the skull, with his bag of nauseous content, may have practiced it in a clumsy sort of way before the first word had been written—grasping at a principle he did not understand, more than likely not even knowing that he did not understand, not realizing there was anything he ought to understand. And the knowledge was passed on, from hand to inept hand. The witch doctor of the Congo used it, the priests of Egypt knew it, the wise men of Tibet were acquainted with it. And in all these cases it was

not wisely used and it was not understood and it got mixed up with a lot of mumbo jumbo and in the days of reason it became discredited and there was scarcely any one who believed in it.

Out of the days of reason rose a method and a science and there was no place for magic in the world that science built—for there was no method in it and there was no system in it and it could not be reduced to a formula or equation. So it was suspect and it was outside the pale and it was all stupid foolishness. No man in his right mind would once consider it.

But they called it PK now for paranormal kinetics, which was too long to say. And the ones who had it they called parries and shut them up in jails and did even worse than that.

It was a queer business, once one thought of it—for despite the strange gulf which lay between PK and science, it had taken the orderly mind which science had drummed into the human race to make PK finally work.

And, strange as it might seem, Blaine told himself, it had been necessary that science should come first. For science had to be developed before Man could understand the forces which had freed his mind from the shackles in which they had been bound, before mental energy could be tapped and put to work by those who quite unsuspectingly had always carried with them that power and energy. For even in the study of

PK there had been a need for method and science had been the training ground in which method had developed.

There were those who said that in some distant past two roads had forked for mankind, one of them marked Magic and the other Science and that Man had taken the Science road and let the Magic go. Many of these people then went on to say that Man had made a great mistake in the choosing of the roads. See how far we'd have gone, they said, if we had taken Magic at the first beginning.

But they were wrong, Blaine said, talking to himself, for there had never been two roads; there'd only been the one. For Man had had to master science before he could master magic.

Although science had almost defeated magic, had almost driven it into limbo with laughter and with scorn.

And would have driven it had there not been stubborn men who had refused to give up the dream of stars. Men who had been willing to do anything at all, to brave the laughter of the world, to accept derision, if they only could lay hands upon the stars.

He wondered how it must have been in those days when Fishhook had been no more than a feeble hope, a glimmer of the mind, an article of faith. For the little band of hopeful, stubborn men had stood entirely by themselves. When they had asked for help, there had been no help, but

only scornful chuckling against such errant foolery.

The press had made a field day of it when they had appeared in Washington to ask financial aid. There had, quite naturally, been no such aid forthcoming, for the government would have naught to do with such a wildcat scheme. If science in all its might and glory had failed to reach the stars, how could there be hope that such as these might do it? So the men had worked alone, except for such pittances as they might be given here and there—a small grant from India, another from the Philippines and a little from Colombia—plus dribbles that came in from metaphysical societies and a few sympathetic donors.

Then finally a country with a heart—Mexico—had invited them to come, had provided money, had set up a study center and a laboratory, had lent encouragement.

And almost from that day, Fishhook had become reality, had developed into an institution which did credit not to itself alone, but to the country which had opened up its heart.

And I am a part of it, thought Blaine, sitting in his cell; a part of this virtually secret society, although secret through no fault of its own. Made secret, rather, by the envy and intolerance and the surging superstition of the entire world. Even though I am running from it, even though it be hunting me, I am still a part of it.

He got up from the tiny bunk with its dirty blanket and stood at the window, staring out. He could see the sun-baked street and the scraggly trees staggered on the boulevard and across the street the sad, defeated business houses with a few delapidated cars parked against the curb, some of them so ancient they were equipped with wheels which in turn were driven by internal combustion engines. Men sat on the steps that led up to the store fronts, chewing tobacco and spitting out onto the sidewalks, creating little pools of sticky amber liquid which looked like old blood stains. They sat there languidly and chewed and occasionally talked among themselves, not looking at the courthouse, looking nowhere in particular, but being very nonchalant about their deadly loafing.

But they were watching the courthouse, Blaine knew. They were watching him—the man with the mirror in his mind. The mind, Old Sara told the sheriff, that bounces back at you.

And that had been what Kirby Rand had seen, that had been what had tipped him off and set Fishhook on the trail. Which meant that Rand, if he were not a peeper, then certainly was a spotter. Although, Blaine thought, it didn't really matter whether Rand was a peeper or a spotter, for a peeper would have little luck in reading a mind that bounced right back at you.

And that meant, Blaine realized, that he carried in his mind the

equivalent of a flashing warning light for any one with the ability to see. There'd be nowhere he'd be safe. There'd be no place he could hide. He'd ring a loud and angry bell for any peeper or any spotter or any hounder that came within his range.

He'd not been that way before. He was quite certain of it. Someone would have mentioned it or it would have been on his psych report.

*You*, he said to the hider in his mind, *come out of there!*

It wagged its tail. It wriggled like a happy dog. It did not come out.

Blaine went back to the bunk and sat down on the edge of it.

Harriet would be back with some sort of help. Or maybe the sheriff would let him go before then, as soon as it was safe. Although the sheriff didn't have to, for the sheriff had good grounds to hold him—the possession of the gun.

*Buster*, he said to his boon companion, *it may be up to you again. We may need another trick.*

For the thing inside his mind had come up with a trick before—a trick in time. Or metabolism? There was no way of knowing which, whether he had moved faster than was customary or whether time had been slowed down for everyone but him.

And when he got away, what then?

Up to South Dakota, as Harriet had said?

He might as well, he told himself, for he had no other plans. There had been no time in which he could make any plans. It had been a bare,

bald matter of getting out of Fish-hook's clutches. Years ago, he told himself, he should have laid his plans, but it had seemed a far thing then. It had seemed a circumstance that could never happen to him. So here he was, stuck inside a jail cell in a little town of which he did not even know the name, with no more than fifteen dollars and that locked in the sheriff's desk.

He sat and listened to a gasoline car come stuttering down the street and somewhere a bird was chirping. And he was in a jam, he admitted to himself—he was in an awful jam.

The men were waiting out there, sitting on the steps, trying very hard not to seem to watch the courthouse, and he did not like the looks of it.

The door in the sheriff's office opened and banged again and there was the sound of feet moving on the floor. What was the use of listening? What was the use of anything?

Then the sheriff's deliberate tread moved across the office and out into the corridor. Blaine looked up as the sheriff stopped just outside his cell.

"Blaine," the sheriff said, "the father's here to see you."

"What father?"

"The priest, you heathen. The pastor of this parish."

"I can't understand," said Blaine, "why he'd be interested."

"You're a human being, aren't you?" said the sheriff. "You have got a soul."

"I will not deny it."

The sheriff regarded him with a

stern and puzzled look. "Why didn't you tell me that you were from Fishhook?"

Blaine shrugged. "What difference would it make."

"Man," the sheriff said, "if the folks in this town knew you were from Fishhook they'd be in to string you up. They might let just a simple parry slip through their fingers, but not a man from Fishhook. They burned down the Trading Post three years ago last month and the factor got out of town just ahead of them."

"And what would you do about it," Blaine demanded, "if they decided I needed stringing up?"

The sheriff scratched his head. "Well, naturally, I'd do the best I could."

"Thanks a lot," said Blaine. "I suppose you contacted Fishhook."

"I told them to come and get you. Take you off my hands."

"That's a pal," said Blaine.

The sheriff proceeded to get sore.

"Why did you come blundering into this town?" he demanded, with quite a lot of heat. "This is a quiet, peaceable, decent place until folks like you show up."

"We were hungry," said Blaine, "and we stopped to get some breakfast."

"You stuck your head into a noose," the sheriff told him, sternly. "I hope I can get you out of it."

He started to turn away and then turned back.

"I'll send the father in," he said.



The priest came into the cell and stood for a moment, blinking in the dimness.

Blaine stood and said to him: "I am glad you came. The best I can offer you is a seat here on the bunk."

"It's all right," said the priest. "I thank you. I am Father Flanagan and I hope I'm not intruding."

"Not in the least," said Blaine. "I am glad to see you."

Father Flanagan eased himself to a seat upon the bunk, groaning a little with the effort. He was an aged man who ran to corpulence, with a kindly face and withered hands that looked as if they might be crippled by arthritis.

"Sit down, my son," he said. "I hope I don't disturb you. I warn you at the outset that I'm a horrible busybody. It would come, I would suspect, from being the shepherd to a group of people who are largely children, irrespective of their years. Is there anything you would like to talk about?"

"Anything at all," said Blaine, "except possibly religion."

"You are not a religious man, my son?"

"Not particularly," said Blaine. "Whenever I consider it, I tend to become confused."

The old man shook his head. "These are ungodly days. There are many like you. It is a worry to me. To Holy Mother Church as well. We have fallen on hard times of the spirit, with many of the people more

concerned with fear of evil than contemplation of the good. There is talk of werewolf and incubus and devil and a hundred years ago all fear of such had been washed out of our minds."

He turned his body ponderously and sat sidewise the better to face Blaine.

"The sheriff tells me," he said, "that you come from Fishhook."

"There is no use," said Blaine, "of my denying it."

"I have never talked with anyone from Fishhook," the old priest said, mumbling just a little, as if he might be talking to himself rather than to Blaine. "I have only heard of Fishhook and some of the stories I have heard of it are incredible and wild. There was a factor here for a time before the people burned the Post, but I never went to see him. The people would not have understood."

"From what happened here this morning," Blaine agreed, "I rather doubt they would have."

"They say you are a paranormal—"

"Parry is the word," Blaine told him. "No need to dress it up."

"And you are really one?"

"Father, I am at a loss to understand your interest."

"Just academic," said Father Flanagan. "I can assure you, purely academic. Something that is of interest to me personally. You are as safe with me as if you were in a confessional."

"There was a day," said Blaine, "when science was deeply suspect as



the hidden foes of all religious truth. We have the same thing here."

"But the people," said Father Flanagan, "are afraid again. They close and bar their doors. They do not go out of night. They have hex signs—hex signs, mind you, instead of the blessed crucifix—hanging on their gates and the gables of their houses. They whisper of things which have been dead and dust since the Middle Ages. They tremble in the smoky chimney corners of their minds. They have lost much of their ancient faith. They go through all the rituals, of course, but I see it in their faces, I sense it in their talk, I glimpse it in their minds. They have lost the simple art of faith."

"No, Father, I don't think they have. They're just very troubled people."

"The entire world is troubled," said Father Flanagan.

And that was right, Blaine told himself—the entire world was troubled. For it had lost a cultural hero and had not been able to acquire another for all that it had tried. It had lost an anchor which had held it against the winds of illogic and unreason and it was now adrift upon an ocean for which there was no chart.

At one time Science had served as the cultural hero. It had logic and reason and an ultimate precision that probed down into the atom and out to the farther edge of space. It spawned gadgets by the millions for the comfort of its worshipers and it placed the hand and eye of Man upon

the entire universe, by proxy. It was something you could trust in, for it was the sum of human wisdom among many other things.

But principally it was translated into machines and machine technology, for science was an abstract, but machines were something that anyone could see.

Then there came the day when Man, for all his wondrous machines, for all his famed technology, had been driven back from space, had been whipped howling from the heavens back to the den of Earth. And that day the cultural god of science had shone a bit less brightly, had died a little in the people's minds.

And that other day, when Man had gone to the stars without the benefit of machines, the worship of technology had died for good and all. Machines and technology and science itself still existed, still were in daily use, still were of vast importance, but they no longer formed a cult.

For while Fishhook used machines, they were not machines as such—not machines that could be accepted by the common mass of mankind. For they had no pistons and no wheels, no gears, no shafts, no lever, not a single button—they had nothing of the component parts of a commonplace machine. They were strange and alien and they had no common touch.

So Man has lost his cultural hero and since his nature was so fashioned that he must have some abstract hero-worship, because he must always

have an ideal and a goal, a vacuum was created that screamed aloud for filling.

Paranormal kinetics, for all its strangeness, for all its alien concept, filled the bill exactly. For here, finally, were all the crackpot cults completely justified; here, at last, was the promise of ultimate wish-fulfillment; here was something erotic enough, or that could be made erotic, to satisfy the depth of human emotion such as a mere machine never had been able.

Here was magic!

So the world went off on a magic jag.

The pendulum had swung too far, as always, and now was swinging back and the horror of intolerance had been loosed upon the land.

So Man once again was without a cultural hero, but had acquired instead a neo-superstition that went howling through the dark of a Second Middle Age.

"I have puzzled much upon the matter," said Father Flanagan. "It is something which naturally must concern even so unworthy a servant of the Church as I. For whatever may concern the souls and the minds of men is of interest to the Church and to the Holy Father. It has been the historic position of Rome that we must so concern ourselves."

Blaine bowed slightly in recognition to the sincerity of the man, but there was a fleck of bitterness in his voice when he answered: "So you've come to study me. You are here to question me."

There was sadness in the old

priest's voice: "I prayed you would not see it in this light. I have failed, I see. I came to you as to someone who could help me and through me, the Church. For, my son, the Church at times needs help. It is not too proud to say so, for all that it has been charged, through all its history, with excessive pride. You are a man, an intelligent man, who is a part of this thing which serves to puzzle us. I thought that you might help me."

Blaine sat silent and the priest sat looking at him, a humble man who sought a favor, and yet with a sense of inner strength one could not help but feel.

"I would not mind," said Blaine. "Not that I think for a moment it would do any good. You're a part of what is in this town."

"Not so, my son. We neither sanction nor condemn. We do not have facts enough."

"I'll tell you about myself," said Blaine, "if that is what you want to know. I am a traveler. My job is to go out to the stars. I climb into a machine . . . well, not exactly a machine, rather it's a symbolic contrivance that helps me free my mind, that possibly even gives my mind a kick in the right direction. And it helps with the navigation . . . look, Father, this is hard to say in simple, common terms. It sounds like gibberish."

"I am following you with no difficulty."

"Well, this navigation. That's another funny thing. There are factors

involved that there is no way to put one's tongue to them. In science it would be mathematics, but it's not actually mathematics. It's a way of getting there, of knowing where you're going."

"Magic?"

"Hell, no . . . pardon me, Father. No, it isn't magic. Once you understand it, once you get the feel of it, it is clear and simple and it becomes a part of you. It is as natural as breathing and as easy as falling off a log. I would imagine—"

"I would think," said Father Flanagan, "that it is unnecessary to go into the mechanics of it. Could you tell me how it feels to be on another star?"

"Why," Blaine told him, "no different than sitting here with you. At first—the first few times, that is—you feel obscenely naked, with just your mind and not your body—"

"And your mind wanders all about?"

"Well, no. It could, of course, but it doesn't. Usually you stuff yourself inside the machine you took along with you."

"Machine?"

"A monitoring contraption. It picks up all the data, gets it down on tape. You get the entire picture. Not just what you see yourself—although it's not actually seeing; it's sensing—but you get it all, everything that can possibly be caught. In theory, and largely in practice, the machine picks up the data and the mind is there for interpretation only."

"And what do you see?"

Blaine laughed. "Father, that would take longer than either of us have."

"Nothing like on Earth?"

"Not often, for there are not too many Earth-like planets. Proportionately, that is. There are, in fact, quite a lot in number. But we're not limited to Earth-like planets. We can go anywhere it is possible for the machine to function and the way those machines are engineered, that means almost anywhere—"

"Even to the heart of another sun?"

"Not the machine. It would be destroyed. I imagine that the mind could. But it's not been done. So far as I know, that is."

"And your feelings? What do you think?"

"I observe," said Blaine. "That is what I go for."

"You do not get the feeling that you're lord of all creation? You do not have the thought that Man holds all the universe in the hollow of his hand?"

"If it's the sin of pride and vanity you're thinking of, no, never. You sometimes get a thrill at knowing where you are. You're often filled with wonder, but more often you are puzzled. You are reminded, again and yet again, of how insignificant you are. And there are times when you forget that you are human. You're just a blob of life—brother to everything that ever existed or ever will exist."

"And you think of God?"

"No," said Blaine. "I can't say I ever do."

"That is too bad," said Father

Flanagan. "It is rather frightening. To be out there alone—"

"Father, at the very start I made it plain to you that I was not inclined to be a religious sort of man—not in the accepted sense, that is. And I played square with you."

"So you did," said Father Flanagan.

"And if your next question is going to be: Could a religious man go out to the stars and still retain his faith; could he go out and come back full of faith; would traveling to the stars take away something of the true belief he held, then I'd have to ask you to define your terms."

"My terms?" asked Father Flanagan, amazed.

"Yes, Faith, for one thing. What do you mean by faith? Is faith enough for Man? Should he be satisfied with faith alone? Is there no way of finding out the truth? Is the attitude of faith, of believing in something for which there can be no more than philosophic proof, the true mark of a Christian? Or should the Church long since—"

Father Flanagan raised a hand. "My son!" he said. "My son!"

"Forget it, Father. I should not have said it."

They sat for a moment, regarding one another; neither understanding. As if we were two aliens, thought Blaine. With viewpoints that did not come within a million miles of coinciding, and yet they both were men.

"I am truly sorry, Father."

"No need to be. You said it. There are others who believe it, or think it,

but would never say it. You at least are honest."

He reached out and patted Blaine slowly on the arm.

"You are a telepath?" he asked.

"And a teleporter. But limited."

"And that is all?"

"I don't know. I've never dug around."

"You mean you may have other abilities you are not aware of?"

"Look, Father, in PK you have a certain mental capacity. First, you are the simple things, the easy things—the telepath, the teleport, the huncher. You go on from there—or there are some who do. You grow. Some stop growing after a time and others keep on growing. Each of these abilities is not a separate ability; the abilities themselves are simply manifestations of a wholeness of the mind. They are, lumped together, the mind working as it always should have worked, even from the very first, if it had had its chance."

"And it is not evil?"

"Certainly. Wrongly used, it's evil. And it was wrongly used by a lot of people, a lot of amateurs who never took the time to understand or to analyze the power they had. But man has misused his hands, as well. He killed, he stole—"

"And you are not a warlock?"

Blaine wanted to laugh—the laugh was rising in him—but he could not laugh. There was too much terror for a man to laugh.

"No, Father, I swear to you. I am not a warlock. Nor a werewolf. Nor a—"

The old man raised his hand and stopped him.

"Now, we're even," he declared. "I, too, said something I should not have said."

He rose stiffly from the bunk and held out his hand, the fingers twisted by arthritis or whatever it was that might be wrong with them.

"Thank you," he said. "God help you."

"And you'll be here tonight?"

"Tonight?"

"When the people of this town come to take me out and hang me? Or do they burn them at the stake?"

The old man's face twisted in revulsion. "You must not think such things. Surely not in this—"

"They burned down the Trading Post. They would have killed the factor."

"That was wrong," said Father Flanagan. "I told them that it was.

For I am certain members of my parish participated. Not that they were alone in it, for there were many others. But they should have known the better. I have worked for years among them against this very sort of thing."

Blaine put out his hand and grasped the hand of Father Flanagan. The crippled fingers closed with a warm, hard grip.

"The sheriff is a good man," said the priest. "He will do his best. I will talk to some of them myself."

"Thank you, Father."

"My son, are you afraid to die?"

"I don't know. I have often thought I wouldn't be. I'll have to wait and see."

"You must have faith."

"Perhaps I will. If ever I can find it. You'll say a prayer for me?"

"God watch over you. I'll pray away the blessed afternoon.

TO BE CONTINUED

---

## In Times To Come

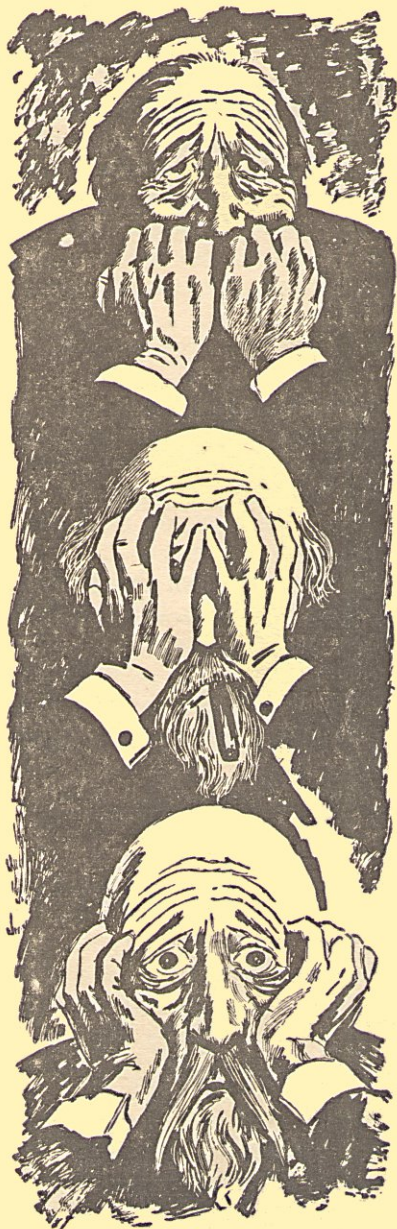
Next month's lead novelette is Christopher Anvil's "Identification" . . . which has more to do with "Who am I?" than "Who dunnit," though the story does have to do with crime.

If you've got a really *good* robot-control linkage . . . are you—the real "I"—in the control chamber . . . or "being" the robot?

And then there's another use for "identification." It can make a most remarkably effective punishment . . .

The Editor.

**A PRIZE...**

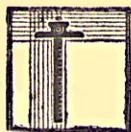


**Illustrated by Schoenherr**

# ...FOR EDIE

By J. F. BONE

*The Committee had, unquestionably, made a mistake. There was no doubt that Edie had achieved the long-sought cancer cure . . . but awarding the Nobel Prize was, nonetheless, a mistake . . .*



HE letter from America arrived too late. The Committee had regarded acceptance as a foregone conclusion, for no one since Boris Pasternak had turned down a Nobel Prize. So when Professor Doctor Nels Christianson opened the letter, there was not the slightest fear on his part, or on that of his fellow committeemen, Dr. Eric Carlstrom and Dr. Sven Eklund, that the letter would be anything other than the usual routine acceptance.

"At last we learn the identity of this great research worker," Christianson murmured as he scanned the

closely typed sheets. Carlstrom and Eklund waited impatiently, wondering at the peculiar expression that fixed itself on Christianson's face. Fine beads of sweat appeared on the professor's high narrow forehead as he laid the letter down. "Well," he said heavily, "now we know."

"Know what?" Eklund demanded. "What does it say? Does she accept?"

"She accepts," Christianson said in a peculiar half-strangled tone as he passed the letter to Eklund. "See for yourself."

Eklund's reaction was different. His face was a mottled reddish white as he finished the letter and handed it

across the table to Carlstrom. "Why," he demanded of no one in particular, "did this have to happen to us?"

"It was bound to happen sometime," Carlstrom said. "It's just our misfortune that it happened to us." He chuckled as he passed the letter back to Christianson. "At least this year the presentation should be an event worth remembering."

"It seems that we have a little problem," Christianson said, making what would probably be the understatement of the century. Possibly there would be greater understatements in the remaining ninety-nine years of the Twenty-first Century, but Carlstrom doubted it. "We certainly have our necks out," he agreed.

"We can't do it!" Eklund exploded. "We simply can't award the Nobel Prize in medicine and physiology to that . . . that *C. Edie!*" He sputtered into silence.

"We can hardly do anything else," Christianson said. "There's no question as to the identity of the winner. Dr. Hanson's letter makes that unmistakably clear. And there's no question that the award is deserved."

"We still could award it to someone else," Eklund said.

"Not a chance. We've already said too much to the press. It's known all over the world that the medical award is going to the discoverer of the basic cause of cancer, to the founder of modern neoplastic therapy." Christianson grimaced. "If we changed our decision now, there'd be all sorts of embarrassing questions from the press."

"I can see it now," Carlstrom said, "the banquet, the table, the flowers, and Professor Doctor Nels Christianson in formal dress with the Order of St. Olaf gleaming across his white shirtfront, standing before that distinguished audience and announcing: 'The Nobel Prize in Medicine and Physiology is awarded to—' and then that deadly hush when the audience sees the winner."

"You needn't rub it in," Christianson said unhappily. "I can see it, too."

"These Americans!" Eklund said bitterly. He wiped his damp forehead. The picture Carlstrom had drawn was accurate but hardly appealing. "One simply can't trust them. Publishing a report as important as that as a laboratory release. They should have given proper credit."

"They did," Carlstrom said. "They did—precisely. But the world, including us, was too stupid to see it. We have only ourselves to blame."

"If it weren't for the fact that the work was inspired and effective," Christianson muttered, "we might have a chance of salvaging this situation. But through its application ninety-five per cent of cancers are now curable. It is obviously the outstanding contribution to medicine in the past five decades."

"But we must consider the source," Eklund protested. "This award will make the prize for medicine a laughingstock. No doctor will ever accept another. If we go through with this, we might as well forget about the medical award from now on. This will be its swan song. It hits too close to



home. Too many people have been saying similar things about our profession and its trend toward specialization. And to have the Nobel Prize confirm them would alienate every doctor in the world. We simply can't do it."

"Yet who else has made a comparable discovery? Or one that is even half as important?" Christianson asked.

"That's a good question," Carlstrom said, "and a good answer to it isn't going to be easy to find. For my part, I can only wish that Alphax Laboratories had displayed an interest in literature rather than medicine. Then our colleagues at the Academy could have had the painful decision."

"Their task would be easier than ours," Christianson said wearily. "After all, the criteria of art are more flexible. Medicine, unfortunately, is based upon facts."

"That's the hell of it," Carlstrom said.

"There must be some way to solve this problem," Eklund said. "After all it was a perfectly natural mistake. We never suspected that Alphax was a physical rather than a biological sciences laboratory. Perhaps that might offer grounds—"

"I don't think so," Carlstrom interrupted. "The means in this case aren't as important as the results, and we can't deny that the cancer problem is virtually solved."

"Even though men have been saying for the past two generations that the answer was probably in the literature and all that was needed was

someone with the intelligence and the time to put the facts together, the fact remains that it was C. Edie who did the job. And it required quite a bit more than merely collecting facts. Intelligence and original thinking of a high order was involved." Christianson sighed.

"Someone," Eklund said bitterly. "Some *thing* you mean. C. Edie—C.E.D.—Computer, Extrapolating, Discriminatory. Manufactured by Alphax Laboratories, Trenton, New Jersey, U.S.A. C. Edie! Americans! —always naming things. A machine wins the Nobel Prize. It's fantastic!"

Christianson shook his head. "It's not fantastic, unfortunately. And I see no way out. We can't even award the prize to the team of engineers who designed and built Edie. Dr. Hanson is right when he says the discovery was Edie's and not the engineers'. It would be like giving the prize to Albert Einstein's parents because they created him."

"Is there any way we can keep the presentation secret?" Eklund asked.

"I'm afraid not. The presentations are public. We've done too good a job publicizing the Nobel Prize. As a telecast item, it's almost the equal of the motion picture Academy Award."

"I can imagine the reaction when our candidate is revealed in all her metallic glory. A two-meter cube of steel filled with microminiaturized circuits, complete with flashing lights and cogwheels," Carlstrom chuckled. "And where are you going to hang the medal?"

Christianson shivered. "I wish you wouldn't give that metal nightmare a personality," he said. "It unnerves me. Personally, I wish that Dr. Hanson, Alphax Laboratories, and Edie were all at the bottom of the ocean—in some nice deep spot like the Marianas Trench." He shrugged. "Of course, we won't have that sort of luck, so we'll have to make the best of it."

"It just goes to show that you can't trust Americans," Eklund said. "I've always thought we should keep our awards on this side of the Atlantic where people are sane and civilized. Making a personality out of a computer—ugh! I suppose it's their idea of a joke."

"I doubt it," Christianson said. "They just like to name things—preferably with female names. It's a form of insecurity, the mother fixation. But that's not important. I'm afraid, gentlemen, that we shall have to make the award as we have planned. I can see no way out. After all, there's no reason why the machine cannot receive the prize. The conditions merely state that it is to be presented to the one, regardless of nationality, who makes the greatest contribution to medicine or physiology."

"I wonder how His Majesty will take it," Carlstrom said.

"The king! I'd forgotten that!" Eklund gasped.

"I expect he'll have to take it," Christianson said. "He might even appreciate the humor in the situation."

"Gustaf Adolf is a good king, but

there are limits," Eklund observed.

"There are other considerations," Christianson replied. "After all, Edie is the reason the Crown Prince is still alive, and Gustaf is fond of his son."

"After all these years?"

Christianson smiled. Swedish royalty *was* long-lived. It was something of a standing joke that King Gustaf would probably outlast the pyramids, providing the pyramids lived in Sweden. "I'm sure His Majesty will cooperate. He has a strong sense of duty and since the real problem is his, not ours, I doubt if he will shirk it."

"How do you figure that?" Eklund asked.

"We merely select the candidates according to the rules, and according to the nature of their contribution. Edie is obviously the outstanding candidate in medicine for this year. It deserves the prize. We would be compromising with principle if we did not award it fairly."

"I suppose you're right," Eklund said gloomily. "I can't think of any reasonable excuse to deny the award."

"Nor I," Carlstrom said. "But what did you mean by that remark about this being the king's problem?"

"You forget," Christianson said mildly. "Of all of us, the king has the most difficult part. As you know, the Nobel Prize is formally presented at a State banquet."

"Well?"

"His Majesty is the host," Christianson said. "And just how does one eat dinner with an electronic computer?"

THE END

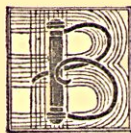
*Hamlet sought to catch the conscience of the King in a play. In this case, a different approach seemed more applicable . . .*

# STILL, SMALL VOICE

By  
**LLOYD  
BIGGLE,  
Jr.**

Illustrated by Douglas





BEHIND him a door opened and closed. Jeff Forzon kept his attention on the paintings that crowded one wall from floor to ceiling.

The first thing he would do, he thought, would be to put a chemist to work on that paint. He'd never seen anything like it. The colors were magnificent, the texture astonishing. In the hands of the better artists—and most of those represented in the display were better artists—it produced an effect of dimension that made his head spin.

And then—that portrait of a musician. The beautifully carved instrument was a plucked chordophone, and for the want of a better term he called it a harp, though it was totally unlike any harp he had ever seen or heard of. The sounding medium was globe-shaped, probably hollow, and the strings were attached to its circumference, stretching upwards to converge in a kind of dragon's mouth that ornamented the top of the instrument.

All signs pointed to a cultural complex of gratifying richness Forzon felt rather pleased with himself. This planet was well out of his territory, and he had grumbled when Cultural Survey Headquarters inconsiderately jerked him away from his study of folk literature on Perrod. But he had kept his grumbling to himself, and here he was—ready to delve into the advanced level of culture every CS officer dreamed about but almost never encountered.

"The Co-ordinator will see you now, sir."

Forzon turned away reluctantly. He loved his work, but he hated these irrelevant formalities. He also hated shapely young ladies who wore masculine uniforms and smiled superior smiles. He glared at the girl, and felt a twinge of conscience as her smile vanished abruptly.

"All right," he said. He stole a last glance at the shimmering portrait of a magnificently feminine young lady of this planet of Gurnil—richly colored robes, frills in abundance, long, luxurious tresses of blond hair.

"Do the base personnel ever wear native costumes?" he asked.

"Sir?"

The door slipped from her startled fingers and threatened to slam in his face—or on it. She caught it just in time.

Forzon stepped through, and she released the door and led the way along a corridor. "There's no rule against it, is there?" he asked, observing her near-masculine hair styling with masculine disapproval.

"No, sir. But the Co-ordinator does not approve."

Forzon felt his resentment of the Co-ordinator changing to active dislike. The man had kept him waiting for over a hour—not that Forzon had minded, with the paintings to study, but he knew it was unnecessary. Now it turned out that the Co-ordinator was not merely rude, he was also a petty tyrant. On other bases the personnel delighted in native costume.

But it was no problem of his. He would complete the formalities, and get out among the people, where he belonged.

The girl saw him through another door, gave him a pert nod, and left him. Another young lady, equally severe in appearance, passed him along to a private office. Forzon strolled calmly into the presence of Co-ordinator Wern Rastadt, of the planet Gurnil.

"Forzon reporting," he said.

The words brought no expression of pleasure to the face of Co-ordinator Rastadt. Forzon wondered, in fact, if the face were capable of expressing pleasure. It was flabby and deeply wrinkled. The mouth drooped morosely. The eyes, for all their blazing aliveness, were sunken above unhealthy puffs of flesh. Rastadt wore his white hair in a stiffly military haircut. His plump white hands he held palm down on the desk in front of him, as though he were tensing himself to spring at Forzon.

Obviously he had grown old and fat in the service, waived voluntary retirement, and entrenched himself in a soft assignment with which, barring a colossal blunder and a special competency investigation, only death would him part. Forzon turned his gaze from the Co-ordinator to the framed motto on the wall behind him—**DEMOCRACY IMPOSED FROM WITHOUT IS THE SEVEREST FORM OF TYRANNY**—and suppressed a smile.

STILL, SMALL VOICE

Abruptly the Co-ordinator's hands folded into fists, and his words lashed at Forzon "I don't suppose Cultural Survey teaches its men how to report to a superior officer."

Forzon said easily, "Superiority is a myth. Cultural Survey proved that long ago."

Rastadt's fists hit the desk. He jerked erect, his chair overturned and crashed to the floor, and he leaned across his desk and shouted. "You are now a part of my command, and you are going to conduct yourself as if you knew it! Get outside, now, and come in and report properly."

Forzon was sorely tempted to have some fun with this obnoxious martinet. But, he thought reluctantly, Rastadt's age and position entitled him to some respect, even if his conduct did not. Forzon tossed his credentials onto the desk.

Rastadt studied them for a moment, in silence. "You're a Sector Supervisor in Cultural Survey?" he asked finally.

"So I've been told."

Rastadt turned, carefully righted his chair, and sat down heavily. "You're young," he said.

"That happens once to everybody."

"I see." Rastadt looked at the credentials again, took a long look at Forzon, and turned away. He spoke to the far wall. "Do you know why you're here?"

"Why am I anywhere? To set up a cultural survey."

"No," Rastadt said. He shook his

head. "No. Gurnil is still classified a hostile planet. Cultural Survey officers are not allowed on hostile planets, as you should know."

"My headquarters ordered me to this planet," Forzon said. "Interplanetary Relations cleared the orders, gave me a Class One priority, and even arranged to have a battle cruiser go a number of light-years out of its way to deposit me on your doorstep. Are you trying to tell me I'm lost?"

Rastadt pushed the credentials back across the desk. "I'll have my assistant brief you," he said. "Good morning, Forzon. *Supervisor* Forzon, I should say."

Forzon backed away dumbly. The young lady in the outer office informed him that his baggage had already been transferred to his temporary quarters. Did he want to wait there until Assistant-co-ordinator Wheeler was ready for him?

She escorted him herself, and five minutes later Forzon sat on a cot in a small barren room, gazing out of the window at a bleak, mountainous landscape. On the wall behind him was a framed motto. DEMOCRACY IMPOSED FROM WITHOUT IS THE SEVEREST FORM OF TYRANNY.

Assistant-co-ordinator Wheeler arrived an hour later. A big, pleasant-looking man about forty, he snapped to attention in the doorway and delivered a crisp military salute.

"Skip it," Forzon said. "Come in and sit down."

"Yes, sir."

"You can skip that, too. The name is Jeff. Do you have a first name?"

"Ed."

"Good enough I'd wear myself out calling you Assistant-co-ordinator. Would you be kind enough to tell me what's going on around here?"

"All we know is what Bureau Headquarters told us. You're here to take charge of one of our teams."

Forzon dropped back onto the cot, and said incredulously, "I'm supposed to *what?*"

"Take charge of one of our teams. Gurnil Team B."

"A Cultural Survey man in charge of an Interplanetary Relations Bureau team? One of us is crazy."

Wheeler chuckled. "I'm not prepared to argue that either way. All I know is what the advance memo said. The team is yours, or will be as soon as orders arrive. You can call on us for anything you want, and probably we won't have it."

"If this is a joke, someone's carrying it too far. I've been in CS practically all my life. My dad was a CS sector supervisor, and I've never thought or cared about anything but Cultural Survey. On an IPR assignment I wouldn't know where to start."

Wheeler tossed a thick book onto the bed. "Field Manual 1048K. The basic manual. I thought you might like to look at it. It tells you everything except what you need to know."

"Just what am I supposed to do?"

"Like I said, you're to take charge of Team B. Team B is in Kurr, which is one of two land masses on this planet. Kurr is governed by an old, firmly entrenched monarchy. Your job is to convert it into a democracy. Without any outside interference, of course." He got to his feet, and saluted sharply. "Let us know if there's anything we can do to help."

The door closed softly behind him. Forzon pushed the manual aside, picked it up again, and idly thumbed the pages. The Interplanetary Relations Bureau, he knew, was more than a mere governmental department. It was a cult, a secretive fraternal order, a religion. The Holy Word leaped out in bold, black type as he flipped the pages.

DEMOCRACY IS NOT A FORM OF GOVERNMENT; IT IS A STATE OF MIND. PEOPLE CANNOT BE ARBITRARILY PLACED IN A STATE OF MIND . . .

THE RULE OF ONE WAS A MASTERFUL CONCESSION BECAUSE IT CONCEDED NOTHING. INCOMPETENT FIELD WORKERS AGITATED FOR THE SUBSTITUTION OF TECHNOLOGY FOR INTELLIGENCE. THEY WERE GIVEN TECHNOLOGY—IN A WAY THAT LEFT THEM ABSOLUTELY DEPENDENT UPON INTELLIGENCE . . .

THE BUREAU DOES NOT CREATE REVOLUTION . . . IT CREATES THE NECESSITY FOR REVOLUTION. GIVEN THAT NECESSITY, THE NATIVE POP-

STILL, SMALL VOICE

ULATIONS ARE PERFECTLY CAPABLE OF HANDLING THE REVOLUTION . . .

ONE MEASURE OF THE URGENCY OF REVOLUTION IS THE FREEDOM THE PEOPLE HAVE, COMPARED WITH THE FREEDOM THEY WANT . . .

Forzon snapped the book shut, and tossed it aside. So there was a continent, Kurr, ruled by a monarch. The government had to be changed to a democracy—obviously, since Gurnil could not qualify for Federation membership until it was one hundred per cent pure democracy. This was one of the many jobs of the IPR Bureau, and as far as he knew the Bureau generally did its work well. And when that phase of its work was finished, it would certify the planet nonhostile, and the Cultural Survey men, and men from other government bureaus could come in and start their studies.

None of which told him why Jeff Forzon, Sector Supervisor in the Cultural Survey, was needed on Gurnil *now*.

Forzon paced about his room restlessly for a few minutes, and then decided to have a look at the building that housed Base Headquarters. He walked back to the administration section, and a young-lady clerk eyed him suspiciously when she thought his attention was elsewhere. Whatever the reason for his presence, it was obvious that some considered him unwelcome.

He stopped by her desk. "I'm go-

ing to need a blitz language course," he said. "Could you have the equipment sent up to my room?"

She did not smile. She said, "Certainly, if the co-ordinator approves your request—"

He walked on. The building consisted of two two-story dormitory wings, connected by a long, one-story section that housed the administrative offices, a dining room, and recreational facilities. He had never seen such an elaborate IPR Bureau Base; but then, he reminded himself that this was his first visit to a planet officially labeled hostile.

He walked the length of the administrative section, and made a perfunctory tour of the lower hallway of the far wing. As he turned back, he felt music.

Felt, rather than heard. The sound was so soft, so delicate, so indescribably fragile, that no single sense seemed to play a part in apprehending it. He stood transfixed and breathless before a door, and long after the sound had faded to nothingness he imagined that he still heard it.

He waited. When the music did not start again, he knocked timidly.

The door opened, and a girl stood before him—a startlingly feminine girl, her long hair a gleaming gold, her brightly colored dressing gown a brilliant contrast to the severely furnished room behind her.

"I'm sorry," he said. "I didn't realize the women's quarters were here. I heard the music, and I was curious."

To his surprise, she glanced fur- tively up and down the corridor. Then, magically, her expression changed from a frown to a smile. "You'll be the new chief. Come in."

He followed her into the room, and took the chair she offered. Not until her smile broadened did he realize that he was staring. "Sorry," he said. "All the women I've seen to- day have been playing soldier."

Her laughter, in some ethereal way, reminded him of the music he'd heard. "They're Base personnel," she said. "They have to play soldier. I'm Team B. I have to be able to look native, whether the co-ordinator likes it or not."

"Team B?" he said quickly.

"Resting up. I caught a virus."

Suddenly he noticed the instru- ment, standing on a low table near her bed. It was only two feet high, looking more like a child's toy than the medium for great art. Its wood frame was unadorned, but richly polished. From where he sat the slender strings were nearly invisible.

"It's so small!" he exclaimed. "The one in the portrait was enormous."

"That was a *torril*," she said. "A man's instrument. An instrument for public performance, really. The frame is elaborately carved, and built precisely the height of the musician. To a hair. There's a venerable tradi- tion associated with it. This is the *torru*, which is a woman's instru- ment. It's used exclusively for femi- nine diversion, and it has a soft tone suitable to the boudoir."

"A marvelous, whispering tone."



She smiled again. "I've wondered what CS men were like. Now I know. They hear music!"

Was she poking fun at him? He answered her seriously. "CS men are diligent students of all the arts and crafts, and connoisseurs of the utterly unique in any of them. This instrument, now—that circular arrangement of strings. Do you know that it completely defies classification?"

"I never thought about classifying it. It's a lovely instrument to play."

"Team B . . . what do you do in Team B?"

"I'm a music teacher in Kurra, which is the capital city of Kurr. I give music lessons to the talented and not-so-talented daughters of the elite. Two of King Rovva's daughters are among my students. Most of the young ladies of the court are, or have been, or will be."

"How large is Team B?"

"Around two hundred."

He blinked his surprise. "All of them masquerading as natives?"

"Members of a Bureau Team don't masquerade. We *are* natives—when we're in Kurr."

"Two hundred. In all walks of life, I suppose."

She nodded.

"Two hundred highly skilled and experienced IPR Bureau agents, and myself. Just what am I supposed to do—or is that a trade secret?"

"Didn't the co-ordinator brief you?"

"Wheeler gave me a manual."

"You're lucky the Old Man didn't

shoot you dead on the spot. You gave him a real shock. First the IPR Bureau notified him that a Cultural Survey man was coming to take charge of his pet project. That was bad enough, but at least he figured he could keep you firmly under his thumb. Then you turned out to be a Sector Supervisor, which has him outranked three grades. Not only does that take the project out of his hands, but technically it puts Base under your command. If you looked in on him right now, you'd find him crying into his lower desk drawer."

"The longer I'm here," Forzon said, "and the more I hear about this, the more confused I get."

"Perhaps some Gurnil history would help."

"Anything would help."

"Interplanetary Relations Bureau procedure works like this: When a new planet is discovered, a survey team works it over. If there's intelligent life, a co-ordinator is appointed, and he establishes a Federation Base, and sets up the teams he needs to guide the planet towards membership in the Federation. It's another matter, of course, if there is no intelligent life. Then a colonization team takes over. That doesn't concern us, since there was a flourishing civilization on Gurnil when it was discovered four hundred years ago."

"I know the basic procedure," Forzon said. "Vaguely, that is. Usually a planet is well on its way to Federation membership before the Bureau allows a Cultural Survey man to land."

"Yes. CS can't come in until we certify the planet nonhostile, and of course we don't do that until things are pretty well in hand. Can't take a chance on having our work messed up, you know."

"Thanks," Forzon said.

She pulled the instrument toward her, and strummed the strings absently. "That's the official attitude, anyway. This guiding a planet towards Federation membership can be a touchy thing. We work in a terrible complex of regulations. There must be a planet-wide democratic government, set up by the people without apparent outside interference."

"Democracy imposed from without—" Forzon murmured.

"The Bureau's first law. We rarely find even a planet-wide government, let alone a democracy. So we guide smaller political units towards democratic government, and then we guide them towards combining into larger democratic governments, and so on, until we have our planet-wide democratic government. And of course it all has to be done without their knowing we're around. Sometimes it takes centuries."

"Which is why the cultures are often tainted when you let us in."

"We can't help that. Gurnil looked easy, at first. There were two continents, both of them political entities. The Bureau estimated the job at fifty years. That was four hundred years ago, and Gurnil is still a long way from qualifying for the Federation.

"Each continent was governed by an absolute monarchy. The kings were tyrants, and the people had no rights at all. The Bureau went to work with two teams. Team A, here in Larnor, was immediately successful. Within fifteen years the monarchy was overthrown, and a healthy young democracy flourishing. It's still flourishing. It's practically a model of its kind.

"Team B, over in Kurr, had no success at all. After four hundred years Kurr is no closer to democratization than it was when the planet was discovered. In fact, the situation keeps getting worse. The monarch keeps consolidating his power"

"I suppose," Forzon said, "that the Bureau assigned its best men to the problem, and all of them failed."

"That's right. Each new co-ordinator comes in brightly optimistic about solving the problem, and leaves more or less under disgrace. So you see why Co-ordinator Rastadt did not welcome you with open arms."

"The Bureau's best men couldn't handle the problem, so they're giving it to me?"

Her smile was frighteningly serious. "Something like that."

"All right. I haven't received any orders, and I'll believe it when I see them. But in the meantime—if Larnor was so easy, why is Kurr so difficult?"

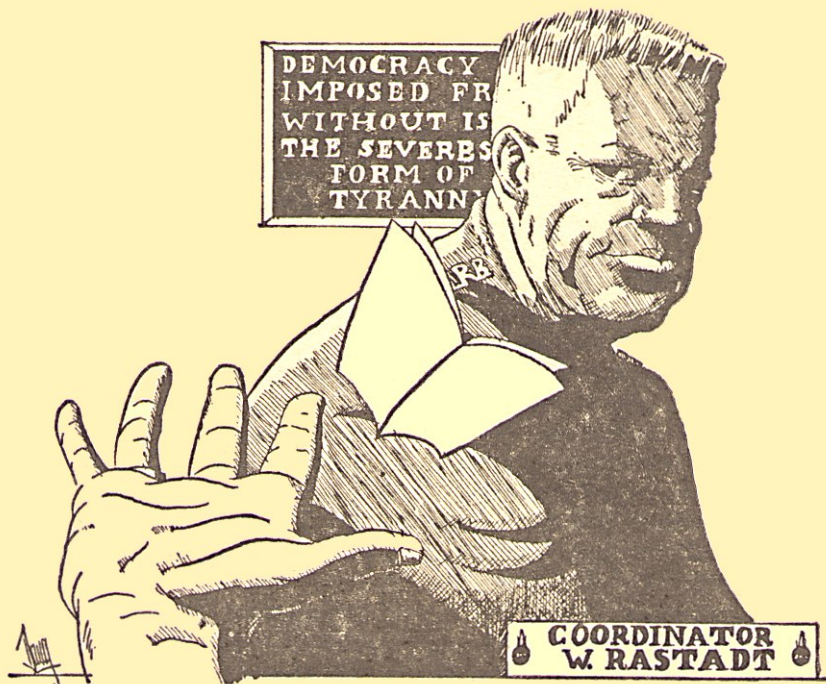
"Larnor is not a rich continent, and it had an immensely stupid king. Its resources had been neglected,

and the people lived in dire poverty. It didn't take much to incite them to revolt. The king was encouraged to impose more and more taxes, and the people were encouraged to do something about them."

"All without outside interference, of course."

"Without *apparent* outside interference. It's not quite the same thing. The problem was different in Kurr. It's an immensely wealthy continent, and its rulers have been nothing short of brilliant. They are tyrants, with the usual evil vices, but they seem to know to a hair how far they can go. They are able to raise the wealth they want without oppressive

taxation, because their realm is wealthy. Some refined instinct seems to keep a check on their natural greed. They indulge in acts of cruelty, but they're shrewd enough to temper them in some way, so that their subjects continue to hold them in high regard. The king may summarily seize a girl who strikes his fancy, but he always rewards her husband or father, and when he tires of her he rewards the girl. What should be an intolerable act turns out to be an honor—a profitable honor. If a man offends him, the king may have his left arm severed at the elbow—a favorite practice, incidentally, of the present King Rovva—but the victim



will be cared for, and it is usually a court hanger-on about whom the people aren't likely to get excited. And naturally the people have had respect for the monarch bred into them for countless generations."

Forzon said, "But what about the relations between Kurr and Larnor?"

"Since the Larnorian revolt, there aren't any. The kings of Kurr have been shrewd enough to see that Larnor ideas are dangerous. Contacts were cut off altogether. That wasn't difficult. Both continents are only at technological level five, and ocean travel is brutally primitive."

"As I see it, then," Forzon said, "the people of Kurr are perfectly satisfied with things the way they are, and the king stubbornly refuses to take any action that would make them dissatisfied."

"A masterful summary of the situation!"

"Maybe this is a treasonable question, but if the people are happy, who are we to bring about a change?"

She leaned forward. "One of the things you must see in Kurr are the one-hand villages. There are a number of them, populated exclusively by individuals who have displeased the king, and had their left arm severed at the elbow. It's just a pleasant little diversion the king indulges in to amuse himself and his friends. The attendant who sneezes when the king has ordered silence, or who accidentally wears a combination of colors not to the king's taste—and the taste changes daily—or who

drops a serving tray—but no one is immune, up to, and including, the king's high ministers. There are good kings and bad kings, and we in the Bureau sometimes find ourselves working to depose a king who is a kind, benevolent monarch, and whom we personally like and admire. It is the system that is evil. The ideal monarch may have a successor who is a raving terror."

Forzon, unnerved somewhat by the reference to one-hand villages, said, "It's almost time for lunch. Will you join me?"

She regarded him gravely, and shook her head. "I think it would be best if no one knows we've been talking. So—please don't mention it to anyone." She hurried to the door, opened it cautiously, and looked out. "All right," she said. "Hurry. And don't come back here. I'll try to see you again before I leave."

He realized only after the door closed that he did not know her name.

As he entered the dining room, a girl hurried to intercept him. "Officers are served in their rooms," she said.

"That's kind of you," Forzon said. "But I prefer to eat here."

Her face reddened, and she stood doggedly in front of him. "The co-ordinator . . ."

"If the co-ordinator says anything, tell him I insisted and refer him to me."

He stepped around her, and seated himself at a long table where a dozen people were already eating. They re-

ceived him in silence, avoided his eyes, and responded in mumbled monosyllables when he attempted to start a conversation. The girl placed food in front of him, and as he ate the others departed, one by one. He was alone in the dining room when he finished.

Ed Wheeler called on him early the next morning, bearing two sealed envelopes. Forzon was just finishing his breakfast, which a uniformed young lady had thrust into his room with an unseemly haste that could only have been born of a fear that he might devour her instead of the food. He nodded at Wheeler, and pointed at the vacant chair.

Wheeler handed him the envelopes. "Your orders," he said. "They've just been decoded."

Forzon nodded, and laid them aside.

"How are things going," Wheeler asked.

"You mean the language? It's just a language. Nothing complicated about it. I'll have it down pretty well in another day or two."

"It's a logical first step," Wheeler said.

"Other than that," Forzon said, watching him sharply, "I'd say things weren't going so well. There's a conspiracy to keep me out of the dining room, your base personnel refuse to speak to me, and someone has been going through my luggage."

Wheeler shrugged off the first two complaints, and professed horror at the third. "Are you sure?"

"It was a very clumsy job. Stuff messed up and switched around, and I found my linguistic analysis notebook under my cot."

"You couldn't have dropped it there yourself?"

"I hadn't even opened the bag it was in."

"Hard to believe," Wheeler said. "I didn't think we had a dishonest person on the base. Anything missing?"

"As far as I can tell, no."

"Except in the office, there isn't a lock on the base. But maybe we'll have to start having them. I'll see if we can install one on your door."

"Thanks," Forzon said. He turned to the two envelopes.

The first contained his orders from Cultural Survey. He was attached to the IPR Bureau for immediate assignment as the Bureau might direct. His rank and salary were to be retained by IPR. There was a final, unofficial postscript from his commanding officer. "Good luck, Jeff."

The second communication was from IPR Bureau Headquarters. Forzon was ordered to assume command of Bureau Base and all Bureau activities on Gurnil. Period. There was a letter of explanation. It was assumed that he would make IPR Bureau Team B in Kurr his personal concern. Base Headquarters and Larnor Team A were to remain in the nominal control of Co-ordinator Rastadt, but under Forzon's command so that he could draw upon them for any assistance he needed for Team B. There followed a concise summary of

the mission of Team B, and the Bureau's First Law: DEMOCRACY IMPOSED FROM WITHOUT . . .

Forzon looked up, and found Wheeler grinning at him. "Everything clear?" Wheeler said.

"It doesn't tell me why. But I suppose that would be asking too much."

"The Bureau never explains. It is not a matter of the right hand not knowing what the left hand is doing. It is a matter of the right hand not knowing there is a left hand. You are now officially in command. Any orders?" His tone was light, his expression enigmatic.

"Nothing now. I'll want to spend a couple more days on language."

Wheeler got leisurely to his feet. "Good idea. No sense in going to Kurr until you're proficient. It wouldn't be safe."

"In the meantime," Forzon said, remembering the girl with the *torru*, "I'd like to meet Team B."

Wheeler frowned. "If you like. It'd be a little awkward, though. They're all established in Kurr, in one way or another, and they can't always break away at a moment's notice. They have to keep up their positions, or a lot of good work is wasted. We could bring back one or two at a time, but it would take a long time for you to see them all. It'd be better if you saw them in Kurr."

"There aren't any here at Base?"

"No," Wheeler said. "They don't get back here very often. We can fly you over to Kurr any time you think you're ready."

Forzon sat gazing helplessly at the closing door. His first impulse was to hurry over to the women's quarters, but a sober second thought checked him. This Gurnil IPR Base was embroidered in some kind of machination—that much was certain. The girl had not been concerned with proprieties when she told him not to come back to her room. She was giving him a warning.

Thoughtfully he clamped on the head set, and started another language lesson.

She came in the darkness. He'd already gone to bed, and she tapped lightly on the door, opened it, and stepped quickly out of the dim hallway into the dark room.

"No light," she whispered.

He could not see her. Had it not been for her soft breathing and the faint scent of an unknown perfume, he could have convinced himself that her dramatic entry was an hallucination.

"I go back tomorrow," she whispered.

"In the daytime?"

"It will be night in Kurr."

"Of course," he said. "And they'll fly you back. Perhaps I should go with you."

"No," she said quickly. "They must not know that we know each other."

"Actually, we don't. At least I don't know who you are."

"Ann Cory. Officially, Gurnil B627."

"All right, Gurnil B627. What do you suggest that I do?"

"Wait three days, and then ask to be taken to Kurr."

"Why three days?"

"Just a precaution. It will give us time to get ready for you." Her robe rustled softly as she shifted her feet.

"I should have the language down good in another three days. I'll do that, then."

"I'd like to sample your linguistic ability."

He gave her a colloquial greeting, "Hail, Citizen," and rambled on at length about the weather, the coming harvest, and how soon the province tax collector might be expected. She was silent when he finished.

"What's the matter?" he said. "Is my accent bad?"

"No. Your accent is very good. Remarkable, for the short time you've had to practice."

"Then I should be ready. You leave tomorrow, and you can expect me two days later."

"Is it official, now, that you're in charge of Gurnil Base?"

"That's what the orders said. I gather that I'm not expected to do anything about it, except where Team B is concerned."

"I'll see you in Kurr," she said.

The door opened quietly, closed quietly. Forzon got up and fumbled in his clothing, looking for cigarettes. "And when I get to Kurr," he told himself grimly, "I intend to find out just what the devil is going on."

In the morning he strolled down to administration, walked past the young lady in the outer office, and

rapped sharply on Rastadt's door. The co-ordinator peevishly ordered him to enter. Wheeler was there with him, and the two of them stared at Forzon, while the co-ordinator's bloated face reddened alarmingly. Suddenly he scrambled to his feet, and Wheeler belatedly followed him. Forzon returned the salutes.

"Please be seated, gentlemen," he said.

They sat down

"Since my work is to be in Kurr," he said, "I don't intend to waste any more time here at Base than is absolutely necessary. Can you arrange transportation to Kurr for the day after tomorrow?"

"Why, certainly," Wheeler said easily. "There won't be any difficulty there."

"That will give me a night landing in Kurr, won't it?"

"Yes. It has to be a night landing. We use a special plane. It isn't very fast, but it's virtually noiseless, and we put our agents down on a deserted stretch of coast where we aren't likely to stir up any local superstitions."

"That sounds satisfactory. Please advise Team B, and arrange to put me in touch with them on arrival."

"Certainly," Wheeler said. "Your transportation will be ready the day after tomorrow."

They came in low over the coast, and circled once. The night was overcast, blotting out Gurnil's tiny moon. The land below looked appallingly black and menacing. They

headed out over the sea again, and Forzon, looking back, saw a dim light.

"Farmhouse," Wheeler said. "It's a Team B station." He had on night glasses, and he peered downwards as the plane banked. "It looks all right," he said to the pilot. "Take her down."

They descended vertically, bounced, and came to rest. Forzon jumped down, and found himself on a narrow strip of sandy beach. Waves splashed rhythmically, running up the beach to lap at his shoes.

Wheeler scrambled down beside him. "There isn't much of a tide," he said, "but there'll be enough to hide any suspicious marks. Come on—it wouldn't do to have some night fisherman see the plane."

Forzon followed him. A low bluff overhung the beach. Wheeler blundered around in the darkness, found a path, and started up. At the top they wound their way through a grove of towering trees, and reached a deep-rutted road. The light still burned palely in the distance.

"Someone should be here to meet you," Wheeler said. "But we're a little early. You'll probably meet him on the road. If you don't, you won't have any trouble finding the place. Follow the road, and it's the first building you come to, on the right."

"How far?" Forzon asked.

He sensed Wheeler's shrug, invisible in the darkness. "A mile. Maybe a mile and a half."

"I'll find it," Forzon said. "Thanks. See you some day."

"Oh, you'll be in touch with us all the time. Team B operates several communication centers. You'll want to give us regular reports to keep on file, and then of course, we're always available if you need anything."

"Right," Forzon said. He waited for Wheeler to leave, but Wheeler was evidently waiting for him to be on his way, so he thanked him again and stepped off down the road.

After a couple of hundred paces the road left the woods. On his right was a cultivated field; on his left there seemed to be a pasture, with a crude wood fence that followed the road. He stopped and listened, wondering if he would hear the plane taking off.

The night sounds were dazzling—strangely musical insects, trees that sighed audibly at the faintest touch of wind, a night bird that sang a soulful, quavering lament. He strained for the muffled hum that would be the plane, and heard instead rapidly approaching footsteps.

Forzon backed off the road. The footsteps hesitated at the edge of the wood, and then came on quickly. A dark shadow loomed directly in front of him. Team B or a citizen of Kurr? There was no time for calculation, and he played it safe.

"Hail, Citizen," he said, in his newly acquired language.

The reply was a sharp whisper—in Galactic. "Don't talk. Walk slowly, and keep walking until I catch up with you."

He turned obediently, and walked on. The whisper had been a familiar



one, belonging to Ann Cory, Gurnil B627.

Forzon walked slowly, and stopped occasionally to listen. Finally he heard her footsteps. She came up to him, breathing quickly, and took his arm. "It's all right," she whispered. "They've left. Now we can go the other way."

"I don't mind games," he whispered back. "I rather like them. But I like to know ahead of time what the object is, if any."

"Later," she said impatiently. "And if we meet anyone don't say anything."

They hurried back the way he had come. Her long, effortless stride amazed him, and he had to lengthen his own stride to keep up with her. They passed through the woods, climbed over a fence, and came to a small plane. She opened the door, and thrust a bundle at him

"You'd better change now," she said.

He changed. The clothes he had worn from Base he stuffed into a bag. Following her instructions he packed the bag with rocks and tied it securely.

When he returned to the plane, she was seated at the controls, tracing the progress of Wheeler's plane on a small detector. "I don't think he suspects anything," she said. "But we'll fly low, just in case."

"This wasn't on the schedule," Forzon said.

"I don't think you'd like the schedule Wheeler had in mind."

They lifted slowly, and flew along

the coast, skimming low over the waves. Having tossed the bag of discarded clothing overboard, Forzon sat back with nothing to do but wait.

For an hour they followed the coast, at a leisurely speed of about six hundred. Where the land thrust a long, narrow peninsula into the sea they turned inward. A moment later a light blinked below, blinked again and again. They circled, lost speed, and sank quickly earthward. The ground opened to receive them and closed over them, and the plane came to rest.

Suddenly light flooded the underground room. A man in native costume, a costume identical to the one Forzon now wore, walked towards the plane. As Forzon scrambled down he came to attention and saluted.

"Welcome to Kurr," he said

The girl was beside him, making introductions. "Supervisor Forzon, this is Paul Leblanc, your second in command. Gurnil B495."

His hand gripped Forzon's firmly. He was an elderly man, white-haired, mild-looking of slight physique, but Forzon wondered how much of his age might be due to disguise.

"Congratulations on your safe arrival," Leblanc said.

"If it is a safe arrival, the congratulations are due elsewhere."

"To be sure. You must be thoroughly mystified, but that is easily corrected. Would you like some food first? No? Then come this way, please, and we can talk."

Ann Cory led the way into a small

adjoining room. There were only two chairs, and Leblanc got Ann and Forzon seated, poured steaming mugs of *cril*, the Gurnil substitute for coffee, and perched on the edge of a battered desk.

"This is Team B Headquarters," he said. "We live a simple life, here in Kurr." He smiled as Forzon's gaze swept the bare room. "This place is absolutely safe, but still we take no chances. An uninvited guest would find nothing of interest here, except the plane—which is not so easily hidden. He would not live long enough to describe that discovery. I'm a Kurrian farmer—have been, for thirty years. This land was farmed by another Team B agent before me, and another before him. But more of that later."

"He was dressed," Ann said, "in the ceremonial robes of a Larnorian priest."

Leblanc grinned. "Making him about as inconspicuous as a horse in a flock of sheep—an old Kurrian saying, except that their horses are not horses, and their sheep something entirely different. But it will do. By dawn, Forzon, you would have been a prisoner. If the local governor'd had any doubts, your first speech would have convinced him. You would



have traveled under guard to Kurra, the king would have personally supervised your torture, and then, if you survived it, he would have had your arm or your head or some other vital part of your body removed. And Co-ordinator Rastadt would have sent a sad report to Bureau Headquarters, with a warning to never again entrust a Bureau assignment to a CS man."

"You're going too fast," Forzon said.

"For four hundred years we have been trying to convert Kurr into a democracy. You knew that?"

"Yes."

"A lot of plans can be tried in four hundred years. A lot have been tried. None have worked. During that time Gurnil has had some highly competent co-ordinators, and some shockingly incompetent ones, and they've all failed.

"Three years ago Co-ordinator Rastadt arrived. He brought a large contingent of his own people with him, a few of whom were worked into Team B. He tried a series of rash measures, against the advice of the older Team B men, and all of them failed. One of the failures cost us three agents. Then he stopped. In the past two years he has done nothing at all.

"But I still have a few reliable contacts at Base Headquarters, and they keep me informed. During these two years, he has sent regular reports back to Bureau Headquarters, describing the excellent progress he is making. Something had to be

done, and I did it. One of our men was due for rotation, and we smuggled out a complete report on our situation. The report went to my brother-in-law, who is a mildly high Bureau official. I described the situation, and asked that a Cultural Survey man, of sufficiently high rank, be sent in to take charge."

"Why?" Forzon asked.

"We of the Bureau have our techniques, and they are good techniques, but they don't work in Kurr. We need a drastically different approach. Kurr has an impressive level of culture. Perhaps a CS man can come up with that different approach. It seemed worth trying.

"And then there was another angle to it. I didn't know if Rastadt was guilty of treason, or merely trying to cover up his incompetence. I thought the arrival of a CS man who was also his superior might force him to take decisive action. It has. He deliberately tried to get rid of you. When you asked for a language, he gave you Larnorian instead of Kurrian. He dressed you in a Larnorian costume and abandoned you several hundred miles from the nearest Team B station. We were prepared, of course. I've been sending agents back for a rest, one at a time, so we would have someone at Base when you arrived. Wheeler flew over last night to look the ground over. We had a beam on him, so we knew where you would land."

Forzon mopped his forehead. "What if he'd taken me somewhere else?"

"We were prepared. We couldn't tip our hand before we had you safely in Kurr, because Rastadt might have chosen a quicker means of disposing of you. Now we'll give him a couple of weeks to think he's safely rid of you, and then we'll notify him of your arrival and ask why we weren't informed. That should give him a good jolt. It'll be interesting to see what he tries next. In the meantime, you're in charge here. What do you want to do first?"

"I want the language, and a suitable identity."

"We'll get to work on it. I have a man who comes through once a month, buying produce. A Team B man, of course. I think he could use an assistant. It would give you a look at the capital city and the surrounding country, and more important, the people. After that . . . well, you might have some ideas of your own. I hope so."

Forzon hoped so, too. He poured himself another mug of *cril*, and said, "I'll leave the Rastadt business to you. Tell me about this Kurrian culture."

Eleven days later the Team B agent arrived, a blond giant of a man, Hans Ulman, Gurnil B541. Forzon reluctantly tore himself away from Leblanc's marvelous collection of Kurrian poetry. He had mastered the Kurrian language to the last shaded accent, he was thoroughly briefed on Team B's activity in Kurr, and he was ready to go to work.

Ulman had six heavy wagons, each

pulled by a pair of Kurrian beasts of burden, more oxlike than horse-like. They were placid, obedient animals, and one driver sufficed for the six wagons. Each team was tied to the wagon ahead, starting when it started, and stopping when it stopped. Forzon mounted beside Ulman in the first wagon, waved his farewell to Leblanc, and began his education as a produce apprentice.

Ulman specialized in a luxury food, a type of tuber that few farmers cultivated. He bought always from the same sources, scattered widely about the province. They drove slowly along narrow country roads, from village to village and farmhouse to farmhouse, and to Forzon it was a journey through wonderland.

There was a painters' village, with lovely old stone houses and a scenic, slow-moving river. All of the male children, from toddlers to adolescents, were out in the bright sunshine painting—painting the river, or the countryside, or the houses, or each other. There were no adult males, because they ranged far during the warm season, painting portraits and local scenes on commission. Throughout the land no family seemed too poor to employ one of these itinerant artists for family portraits or views of the homestead. Paintings were proudly displayed in every home, all competent, frequently masterful, sometimes magnificent.

The secrets of the arts and crafts were jealously guarded and passed along from father to son. So there

were painters' villages, and musicians' villages, and woodcarvers' villages, a sculptors' village, even a poets' village.

"There are more of them in this province, because Kurra has a large population and an insatiable demand for art," Ulman said. "And it's not only the prosperity that makes Kurr such a stable country. There isn't any population pressure, and there really isn't much of a privileged class, outside of the royal family, because the kings have been consolidating their power and thinning out the nobility."

"Which doesn't make our job any easier," Forzon said.

"I have my doubts that we'll ever succeed," Ulman said frankly. "They're a happy, prosperous people. Why should they trade what they have for a wildly revolutionary and untried system of government?"

Forzon was not long in finding at least one reason for a change. A lone traveler approached them, and Ulman abruptly steered his wagons off the road, and halted. The stranger wore a bright, but travel-stained uniform. He plodded along wearily, his eyes on the dust that rippled under his feet. People took to the fields to go around him, or waited until he had passed. The left sleeve of his uniform flapped loosely at his side.

"One of the king's grooms," Ulman said. "He's displeased His Majesty, so now he's on his way to a one-hand village. Until he gets there, he's an outcast. People will feed him, but they won't speak to him, and

they won't feed him more than once."

"What is a one-hand village?"

"Royal property. Exclusively inhabited by one-handed people—meaning people who have displeased the king. They have a self-contained economy, and the rest of the population leaves them strictly alone. No one knows how many there are, or how many people live in them. That's a matter between the king and his conscience. They serve a useful purpose—give the victims a place to live, and security, and also keep them out of the way so they aren't constantly reminding people what a villain the king is."

"Does the king have a conscience?"

Ulman chuckled. "I doubt it."

"What about religion?"

"The king is the religion. Not exactly a god, but at least an ultra-high priest. It isn't possible to distinguish between the king's secular and religious functions."

The women don't seem to have much of a role in the arts."

"Or in anything else," Ulman said. "A few daughters of musicians teach music to daughters of the wealthy. Otherwise, the Kurrian woman is a domestic animal, though a happy, respected, well-treated animal. Team B once worked for years to bring about a revolt through an equal rights for women movement, and failed to convince any women that they lacked equal rights. They tell me that the file of things that haven't worked in Kurr adds up to a dozen

bound volumes in Bureau Headquarters."

"So that leaves culture," Forzon mused. "But how? A tax on paintings?"

"I think it's been tried. The king is much too smart to be taken in by the tax angle. In fact, you'll have to plan your revolt without any help from His Majesty. The old boy never makes a wrong move. He knows to a hair what he can get away with."

"A free press would help. If the people knew more about these one-hand villages, they'd have to think less of their king."

"You can't have a free press under a totalitarian government. Anyway, printing hasn't been invented."

"Supposing we make them a present of it?"

Ulman laughed. "You're forgetting Rule of One."

"I've heard of that," Forzan said. "What is it?"

"Centuries ago, some bright young agent wanted to help a revolution along by giving the rebels a primitive type of firearm. It was considered a stupid suggestion, because Bureau has always had a strict ban on technological innovations. But Bureau Headquarters didn't reject the suggestion. Instead, the Rule of One was formulated. Bureau agents were permitted to introduce one technological innovation, and only one. That made the young agent happy, until he found out that the One was to be taken literally, and there were a couple of hundred innovations in

the rifle alone, not to mention the cartridges. He was laughed out of the service, and since then no one has attempted to use technological assistance. But the Rule of One is still on the books."

"Then we could introduce the type, but no printing press. Or the press, but no type."

"It isn't even that simple. There'd be dozens of innovations in either the press or the type."

"Which brings us back to culture again. But how?"

"You're the CS man."

They moved slowly through the countryside, and Ulman gradually loaded his wagons with produce. They paused in a musicians' village for a feast day, and the village street was the setting for dozens of recitals. Forzon moved from one group to another, watching entranced as shiny-faced urchins made their first public performances with *torrils* that matched their diminutive height, or, young men in their late teens gave masterful renditions on larger instruments. Women and children, in bright holiday costume, listened intently and applauded loudly.

After twenty days of wandering, they followed a main road into the old walled city of Kurra, their wagons heaped high with sweet-smelling tubers. Kurra was a city of narrow, winding streets and cramped passageways, of old stone houses, three or four stories high, of lively market places and colorful costumes. Where the villages had been the homes of artists, the city harbored artisans. The

streets were lined with shops of humbler craftsmen and crude hand manufacturies.

Ulman stopped to read an elaborately hand-lettered proclamation, topped with a gilt crest. "We're in luck," he said. "The king has ordered a festival for tonight."

"Is the public invited?"

"The festivals are for the people. The male citizens, that is. Everyone pays a token admission fee. The entertainment is good, and I imagine His Majesty makes a tidy profit. Want to go?"

"I wouldn't miss it!"

"We'll get unloaded, and get some rest. Sometimes the festivals run late."

Ulman occupied a damp, gloomy basement, and Forzon paused at the bottom of the stairs and looked about disapprovingly.

"It has its advantages," Ulman said. "I've got a couple of escape routes dug out. Can't do that from an upper story, you know. If a Bureau agent gets into trouble for any reason at all, the best thing he can do is mysteriously vanish. Sometimes he can get help, but not very often. Now I'll order a meal from my landlady, to celebrate our homecoming, and then we'll see about the Festival."

Darkness found them beyond the walls of Kurra, waiting in line by the king's amphitheater. When their turns came they paid their admission fees and filed through a narrow arched gateway. Seats were built on

the side of a steeply-sloping hill. At the bottom was a cleared space, and beyond it stood the royal box. Rows of torches flamed brightly along the wall at the rear, and circled the stage. Forzon watched the crowd until the king's party entered the royal box. At that distance the king was no more than a robed and bulky figure, and Forzon longed for a pair of binoculars.

The entertainment began, and the audience watched with unconcealed delight and shouts of approval. There was a troop of dancers, performing spectacularly to the beat of small drums. There were a dozen performing animals, catlike creatures, superbly trained. A poet, evidently a local celebrity, recited his latest opus, and the crowd listened in respectful silence while Forzon marveled at the flawless acoustics.

The next performer was a musician. A uniformed attendant brought the beautifully carved and inlaid *torril* to the center of the arena. The musician strode forward, to a thunder of cheers.

"They call him Tor," Ulman whispered. "Meaning he's practically synonymous with his instrument. He's the best, and he's a relatively young man."

Tor seated himself facing the *torril*, and circled the strings with his hands. The larger instrument had a rich, booming tone, and Tor brought forth the notes with unbelievable rapidity. The music sang joyfully, sank to a muted lament, whispered of romance, and crescendoed to a

brilliantly martial conclusion. Forzon rose to his feet with the rest of the crowd, and cheered.

"I've never heard anything like it," he confided to Ulman, when the tumult had died down.

Tor was beginning another number. The rippling, surging onslaught on the strings commenced low and gradually rose through the range of the instrument. The structure of the basic scale was as unusual as the tone quality, and Forzon held his breath and listened.

Inexplicably, the music stopped. Tor got to his feet and turned to the royal box, head bowed. King Rovva was standing. Obviously he was speaking, though his words did not carry. His arms moved and gestured, and guards stepped forward.

As the crowd watched silently, they surrounded Tor and stripped him bare to the waist. Forzon turned to Ulman, and found him staring in bewilderment. And then, because it happened so quickly, it was over before he completely grasped the horror of it—the flashing sword, the cry of pain, a doctor working busily on the blood-spurting stump of an arm.

He did not realize he was on his feet until Ulman roughly hauled him back, whispering frantically, "Careful, careful—"

The crowd sat spellbound, gripped by silence where great music had welled up a moment before. Tor, his arm bandaged, his clothing restored, staggered away. An attendant carried his *torril* after him.

Behind him in the blood-stained

dust lay the fragment of an arm. It lay there untouched through the remainder of the festival, and the performers avoided it nervously.

"Why?" Forzon choked. "Why? He was a wonderful musician."

Ulman motioned for silence. "He *was*," he whispered.

There was impressive singing, a talented juggler, gymnastic demonstrations, a game played with a ball, and with complicated machinations that normally would have intrigued Forzon, but his benumbed mind refused to concentrate. He felt violently ill, and he knew without asking that it might be fatal to leave the king's festival before its finale.

It lasted for another two long hours, even though the crowd had been stunned out of its enthusiasm and the entertainers moved as though pursued by terror. Finally it ended. The king and his party departed, and the crowd began to file slowly out.

Ulman did not speak until they were safely away from the crowd, in the dark, winding streets of Kurra.

"They say it happens all the time," he said. "But I've never heard of it being done in public before. Old Rovva must be powerfully upset about something."

The image of that severed limb in the dust burned painfully in Forzon's memory. "He was a great artist," he said.

"He was more than that. These musicians travel around a lot, and he was the best. Kind of a national hero. It makes you wonder."



They threaded their way in and out among the involved pattern of streets, Forzon following Ulman's lead and wondering if he would possibly be able to find his way back alone. Torches burned in some of the squares, but otherwise the only light was that seeping out from the buildings. Everything appeared different in the darkness, and it was not until they had walked much farther than seemed necessary that Forzon realized that everything *was* different.

"We're going a different way, aren't we?" he asked.

"Yes," Ulman said shortly.

They reached an open space formed by the intersection of several streets, and Ulman drew Forzon back into the shadows. A lone torch burned by an entrance on the far side.

"See that window?" Ulman whispered, pointing.

Forzon sighted into the darkness. "I'm not sure—"

"We came this way this morning. Usually there's a box of flowers in that window. Now it's gone."

They moved on, walking quickly. Forzon became aware that Ulman was repeatedly glancing behind them. "There are usually forty or fifty of us here in Kurra," Ulman said. "Every one of us has some kind of a sign like that. That's the fifth one I've checked. It means Team B is in trouble."

"What do we do?" Forzon asked.

"We can't go back to my place until I make contact and see what

this is all about. It may be a little risky. But—"

"Cultural Survey was never like this," Forzon muttered. He began to watch the passersby uneasily.

They had kept to the shadows, but suddenly Ulman stopped under a torch, and removed his hat. Forzon did likewise, and a moment later a stooped old hag of a woman came out of a doorway and hobbled towards them. She leered at Forzon, exchanged a few pungent remarks with Ulman, and walked on.

As she passed them, she whispered, "Storm three."

They lingered until she disappeared around the corner. Then Ulman clapped his hat on his head and set out in a new direction. There was a long, wearying walk, and finally Ulman led the way into a shabby tavern. He called loudly for a private room and entertainment. The customers studied them dully and returned to their own amusement, and a fat proprietor led them to the rear of the building and down a narrow hallway.

He spoke softly, in Galactic. "There's been a big cave-in, but I don't think they got anyone. Leblanc is here."

"Need any help?" Ulman said.

"I can handle it. I'm clean so far."

"Keep on your toes. This is Supervisor Forzon, the new chief."

The proprietor gripped his hand, and hurried away.

"A good man," Ulman said.

"They're all good. Did you recognize the old woman?"

"Should I have recognized her?"

"She thought so. It was Ann Cory. She usually goes about as an old dame in Kurr. It isn't safe for a girl to be young and attractive around old Rovva's court."

They entered a small room. Ulman slid aside a wall panel, and closed it after them. They descended a flight of stairs into a dimly lit room. Leblanc strode forward to meet them.

"Glad to see you," he said. "I hoped you'd catch a signal. Your place is being watched."

"What happened?" Ulman said.

"Only one thing could have happened. Rastadt has sold us out. Every place he or his ruffians knew about has been raided. We didn't lose anybody, and the king lost a lot of soldiers, but all our transmitters and planes are gone. We're cut off, and we'll have to wait until someone at Bureau Headquarters gets curious enough to make an on-the-spot investigation. That won't be soon, because Rastadt is certain to keep sending misleading progress reports."

"What's the plan?" Ulman said.

Leblanc turned apologetically to Forzon. "I've been making free use of your authority."

"I'm glad someone has," Forzon said. "Carry on."

"Are we pulling out?" Ulman asked.

"You're on the hot list. Do you need anything?"

"Some money."

Leblanc tossed him a small bag.

"Thanks," Ulman said. "Let me

know when." He opened a section of the wall, and disappeared.

"How does it feel to be wanted?" Leblanc said with a grin.

"It's a new experience," Forzon said. "I suppose it's old stuff to you."

"No. Definitely not old stuff. King Rovva has always been on the alert for subversive elements, but this is the first time he's been after Team B. Do you see the significance of that? No? King Rovva is not supposed to know there is a Team B. But suddenly he hits all of our communication centers and severely inconveniences a number of our agents."

"Then it has to be Rastadt."

"We were wondering if he is a traitor, or merely incompetent. Now we know. My guess is that when he saw he wasn't getting anywhere with his official mission in Kurr, he got himself put on King Rovva's payroll to lay off altogether. Naturally he couldn't have you stirring things up and spoiling a profitable connection for him. He took steps to get rid of you. When we informed him of your safe arrival, he knew that not only you, but all of Team B would know about his treachery. So now he has to eliminate Team B."

It seemed unbelievable to Forzon that Rastadt or anyone would deliberately betray his subordinates. Leblanc observed his perplexity, and shrugged. "There are always those who will do anything for money. Now—our problem is what to do

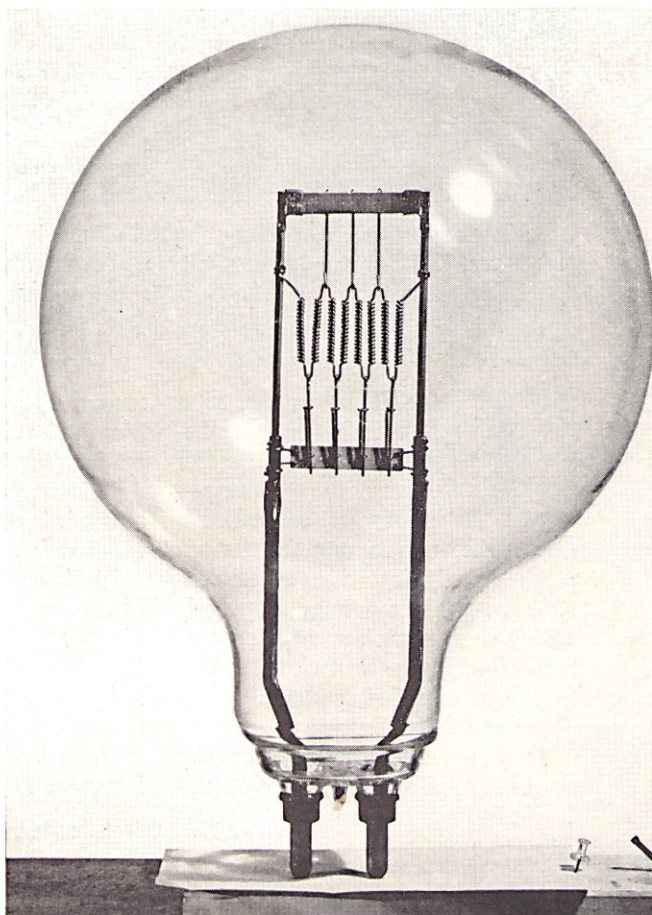
*(Continued on page 145)*

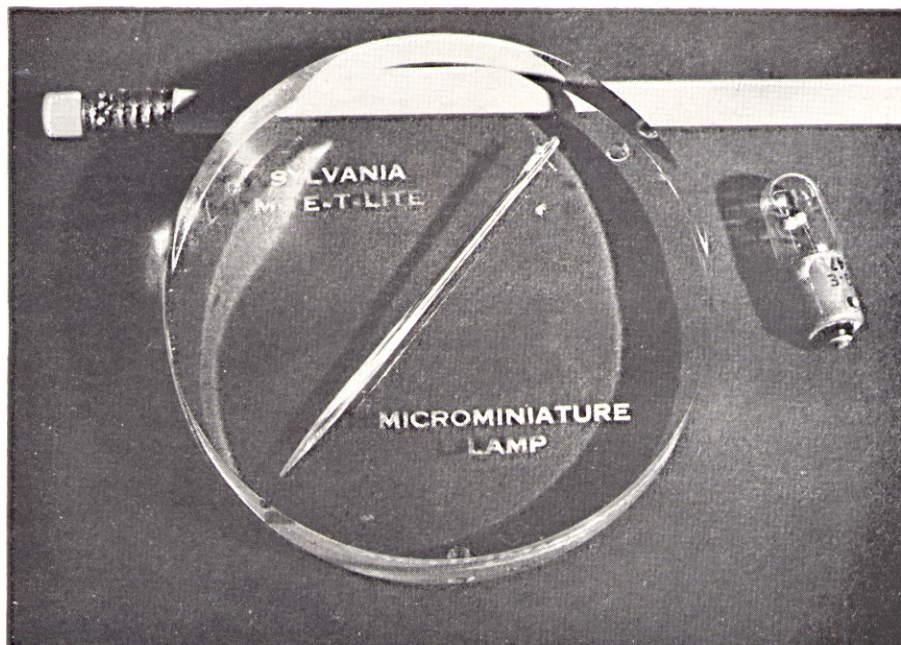
# THE UNNATURAL LIGHT

By JOHN W. CAMPBELL

*Nature has, in the vast laboratory of the Cosmos, exploited most of the things that can be. But not all . . . there is a light, now . . .*

General Electric won a movie-industry "Oscar" for their biggest incandescent lamp—a 10,000 watt number, used for lighting color-movie sound-stages. The drafting pin gives an idea of the size of the bulb.





The other end of the incandescent lamp business is Sylvania's microminiature *Mite-T-Lite*. That's a standard radio-type pilot light beside the souvenir plastic-disk paper-weight. The *Mite-T-Lite* is in the disk . . . if you can find it.



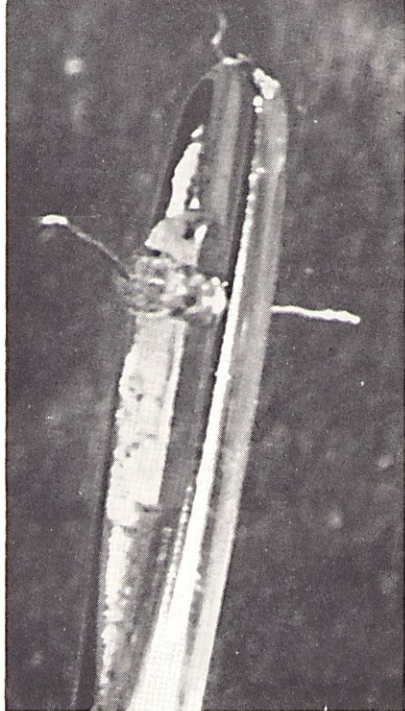
IN THE last year or so, a new kind of lamp has begun to appear in stores across the country—small, flat, offered as a night-light or orientation-light, it plugs directly into a standard convenience outlet, hugging flatly against the wall. So far, they're greenly luminous gadgets of about two to four square inches, and selling for about one dollar.

They are the first commercially available application of the first un-

natural light-generating system Man has so far discovered—the electro-luminescent panel.

It is an "unnatural light" in this sense; it is one form of light generator that is not found in nature.

Man's earliest light sources were, of course, the Sun, Moon, and stars; his first artificial light sources were fires. The fire, refined, miniaturized and packaged, became the candle, and then the oil lamp. One thoroughly modern version is the gasoline-burning mantle-type lamp, which gives a



It helps to use a twenty diameter enlargement, though . . .

strong, clear-white illumination for places where electric power isn't practical. The fuel cost is higher than power-line electricity—but don't make the mistake, if you haven't seen one in operation, of thinking that fuel-burning light sources are hopelessly unsatisfactory.

Then there is the fuel-burning light source that every amateur and professional photographer knows—another miniaturized, modernized, and tightly packaged light generator. It burns a magnesium-aluminum alloy fuel, and has a service life of from 1/200th to about 1/30th second. If

you want a very great deal of light, for a short time—they're great stuff.

But Man probably encountered combustion light sources first long before he was Man. Lightning—lava flows—various things can start wood burning.

Incandescent light sources are, necessarily, equally old; most of the light from combustion comes from incandescent solids heated by the flame. There's a wild variety of techniques of getting the solid stuff hot enough to be an effective light source, of course—electricity is simply the latest and handiest technique in the line. The modern gasoline-burning mantle lamp is, in a strict sense, an incandescent lamp—it's the thorium and cerium oxides in the mantle, rather than the gasoline flame, that emit the light. The gasoline is simply another way of generating the necessary temperature.

Incandescence being one of the fundamental principles of light-generation; it's been with us a very long time, and will continue to be with us for the rest of history, no doubt. But there are always improvements.

One of the newest—and most "elegant" in the scientific sense of an "elegant solution"—developments in incandescent lighting is represented by General Electric's *Quartzline* lamps, intended for floodlighting service, and in Sylvania's new *Sun Gun* lamp, intended for home movie makers.

The first incandescent lamps used carbon filaments, of course, and were evacuated. Their life wasn't very long,

and the light they gave was a warm, cheery yellow-orange. Cheery . . . but not very satisfactory. Operating the filament at a higher, whiter temperature, however, meant shorter life still—because the carbon sublimates into the vacuum.

Tungsten gave us a far better lamp; it has a much lower vapor pressure than carbon, and could be operated for a reasonable time at a markedly higher temperature.

The trouble with that subliming of the filament, however, is two-headed; the filament vanishes, which is undesirable, and reappears as an opaque metallic coating on the inside of the bulb . . . which is even more undesirable.

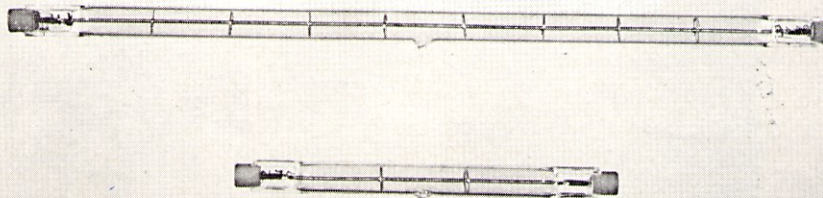
Putting inert gas into the bulb helped; the standard argon-filled tungsten-filament lamp of today lasts considerably longer and blackens much less. (However, the standard photoflood type lamp, where the filament is operated at about  $3200^{\circ}$  K., rapidly shows up with blackening that cuts into the light output drastically.)

The new, and remarkably neat, trick is to put a very tiny amount of iodine in the bulb. The gimmick is quite simple; tungsten iodide— $WI_2$ —is volatile at about  $300^{\circ}$  C., and iodine itself is entirely gaseous at that temperature. When the lamp is turned on, the iodine sublimates almost instantly; the  $I_2$  molecules formed are not stable at anything near the  $3000^{\circ}$  or so temperature of the tungsten filament, and break down to I atoms. The I atoms migrate toward the walls of the bulb . . . and attack any tungsten there. The  $WI_2$  formed immediately volatilizes, thus cleaning the walls of the bulb beautifully and automatically.

But the  $WI_2$  is decidedly not stable at any temperature much above  $2000^{\circ}$ —wherefore any molecule of it that hits the incandescent filament immediately breaks down, depositing tungsten right back where it belongs.

The result is the first incandescent bulb that has maintained its initial light-output for its entire service life. In actual lab tests, a few of the quartz-

General Electric's Quartzline heavy-duty industrial flood lamps use the ingenious "iodine cycle" principle to keep putting the tungsten back on the filament where it belongs.





And Sylvania's "iodine cycle" lamp is designed for the home-movie market. The idea is elegant, the efficiency high, the bulb is fused quartz . . . and unfortunately, the bulbs cost in proportion. About \$15.

line bulbs actually showed about 1% *brighter* after several hundred hours use. Evidently the iodine cycle had scrubbed the fused quartz tube cleaner than it started!

You will not, however, be getting these for your normal home-lighting needs; a 500-watt model sells for

about \$15, is about the size and shape of a pencil, and produces—because of its compactness—a viciously intense glare. Also, it operates with a bulb temperature about 600° C. which will set most normal organic materials afire.

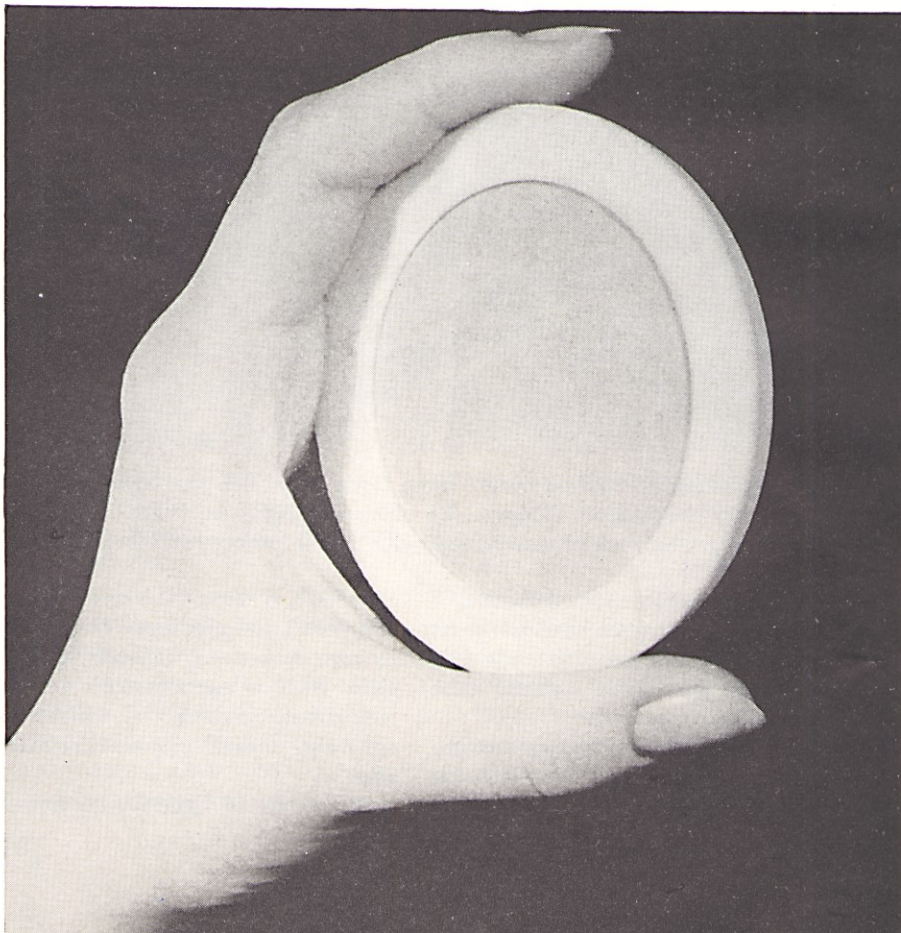
For industrial lighting, it's fine—

and for uses such as the home-movie light source, where the high cost is compensated by the convenience of compactness, it's fine.

Much of the cost stems from the necessity of using a fused-quartz tube and all-tungsten support structure; the iodine cycle won't work in a bulb with a low surface temperature, nor in a bulb that is not almost uniformly very hot.

The greatest breakthrough in light generators after the original Edison bulb was, probably, the development of the fluorescent lamp. Fluorescence was no new discovery, of course; Herr Dr. Roentgen was studying fluorescence when he quite accidentally saw the shadow of the bones in his fingers, investigated, and discovered X rays. X-ray light sources would never have become a popular

Sylvania was first into the local dime stores with an electro-luminous lamp—their *Panelescent* nite-lite, selling under a dollar.







"This . . . is a lamp?!"

home-commodity type fluorescent lamp, but fortunately ultraviolet light is, if anything, more efficient than X rays at exciting fluorescence.

Fluorescence in Nature isn't common here on Earth; it's very common indeed in the universe, however. In a standard fluorescent lamp, there's a source of ultraviolet light, which excites some fluorescent material to visible light-emission. The whole thing is wrapped up in a glass tube

that blocks the UV radiation, but allows the visible light free passage. The result is that we don't see the original source of radiation—we see only the secondhand radiation from the fluorescent material surrounding the actual radiation source.

That system is a great deal older

**"Why . . . so it is!"** It's G. E.'s electroluminous plastic-sheet lamp—a 10 x 10 inch square, 1/32nd inch thick.





The 10 x 10 inch G. E. electroluminous lamp, operating on 120 volts, 60 cycles, can be used for stop-action snapshots . . . but it isn't really bright. That's 1/30th second, at F 1.4 on Tri X Pan.

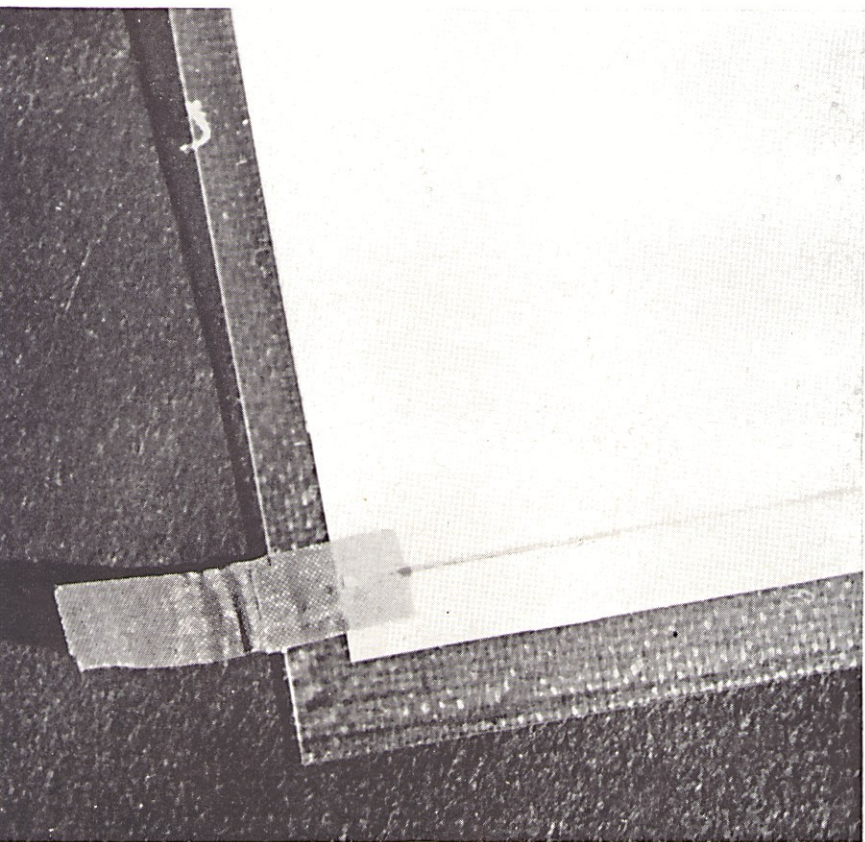
than Man. There are a number of stars—particularly those of the "brightest star class"—which are so enormously hot that practically all their radiation output is in the far ultraviolet and near X-ray region of the spectrum. None of that radiation can penetrate the Earth's atmosphere;

the stars themselves, therefore, are practically invisible. The rather famous star S Doradus, in the Lesser Magellanic Cloud, is of the class; at its enormous distance, its small percentage of radiation in the visible would be quite inconspicuous.

But stars of that immense radiance

The back of G. E.'s electroluminous plastic-sheet lamp is a sheet of aluminum foil, which acts both as current-carrier and reflector. The front surface of the lamp proper is a translucent conductive material; the bronze-mesh tab connects to a thin strip of copper that runs down one edge of the lamp. Then the entire system is sealed in a plastic envelope that protects it against humidity, and the user against electric shock.

ionize practically every atom of hydrogen and helium in space around them for *100 light-years* or so. The excited gas atoms in a 100 light-year sphere—even though the gas is markedly dilute—can do a great deal of re-radiating. That, friends, is the original fluorescent lamp; they're readily visible at several million light-years distance. And, like the Earthly variety, you can't see the actual radiation source!



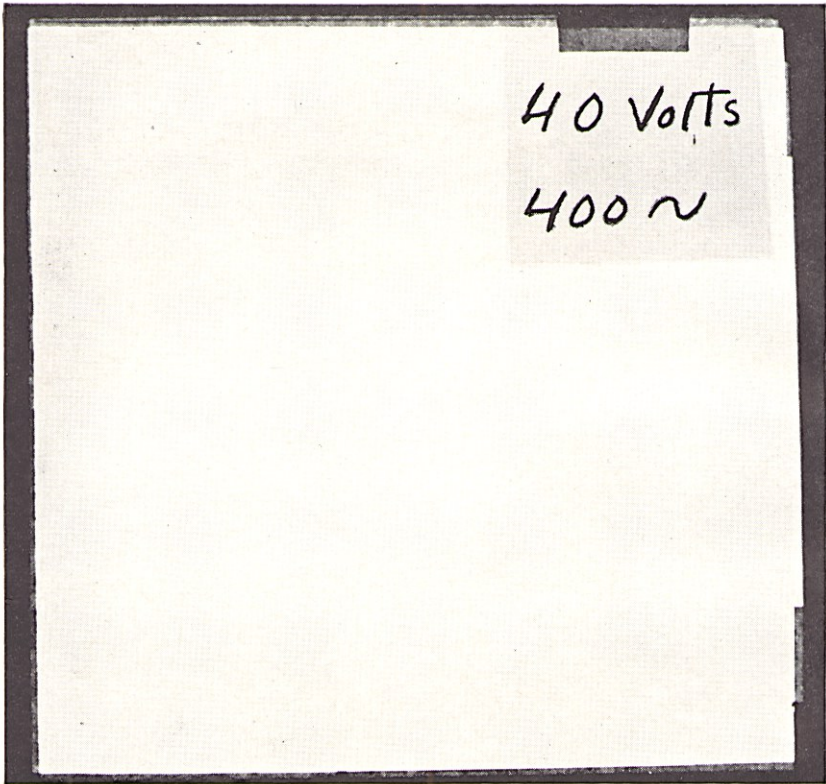
40 Volts  
40 ~

Testing the 10 x 10 G. E. panel, at low voltage and low frequency, slight irregularities of dielectric thickness show up as bright spots.

So the fluorescent lamp wasn't a new-in-Nature light source.

The old Geissler tubes—which, be it noted, is *not* the same as a Geiger tube!—wasn't new in Nature either. Even when it was modernized and called "a Neon sign." (It's remarka-

ble the number of people who think they're called "Neon signs" because a man by the name of Neon invented them, by the way.) The Northern Lights had been in that business since long before Man, or his most remote ancestor, saw them. The light gener-



40 Volts

400 ~

At 400 cycles, the electric potential distribution is maintained fairly well.

ated by ionizing a gas under low pressure by particle-excitation is by no means new in the world, let alone in the universe!

The small glow lamps, currently widely popular as indicator lights, are of the same family.

The original arc lights, on the other hand, were very early in Man's pre-history, attributed to the Gods. The Greeks claimed Zeus used 'em. Arc lights have always been highly effec-

tive as high-intensity light generators; mercury vapor arc lamps were in practical use as electric lights before Edison invented a usable incandescent lamp. The latest mercury vapor lamps are really high-efficiency units, and give a nearly white light—no longer the blue-green "my don't you look ghastly!" lights of yore.

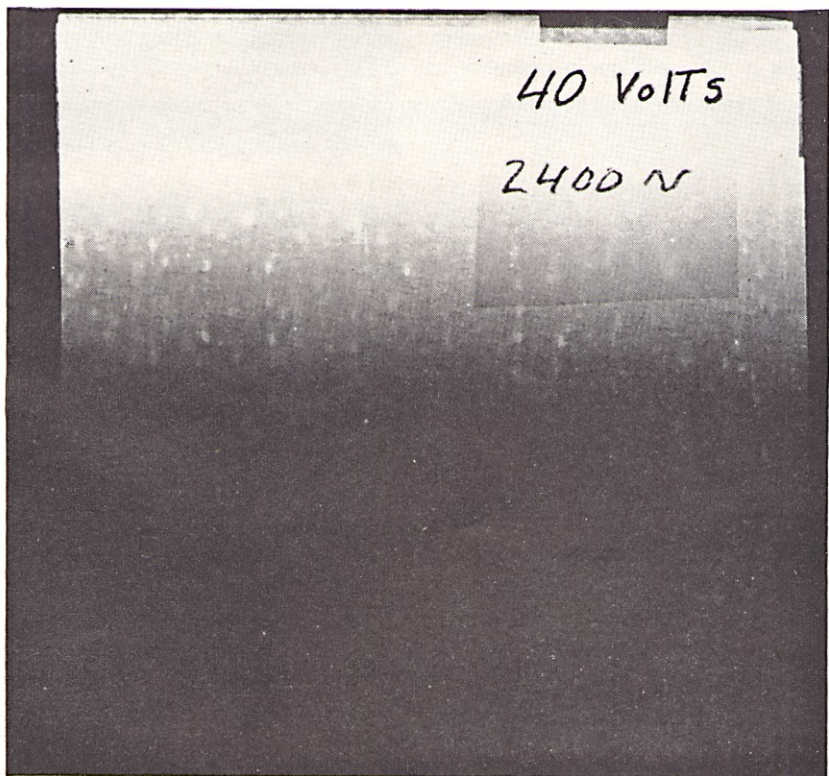
The latest—and highly useful—use of Zeus' favorite lightning-bolt type lighting, however, is the now-

familiar "electronic flash" for photography. Not new in basics—but the packaging is a big improvement. It would take a Zeus to lug around a set of storm-clouds to supply the stored charge for the arc. Arc—or spark—lighting was used for extreme high-

speed photography long before Edgerton of M.I.T. developed the modern approach; sparks—triggered by the passage of the projectile itself—were used for photographing bullets before the beginning of this century.

The cathode-ray tube might be

But at 2,400 cycles per second, the effect of the resistance of the not-too-good conductor front coating shows up. The current has to flow from the copper strip (at the top in these shots) down the length of the sheet; the high capacitance between front and back conductors acts as a distributed series of shunts . . . and the voltage is practically zero at the bottom edge.

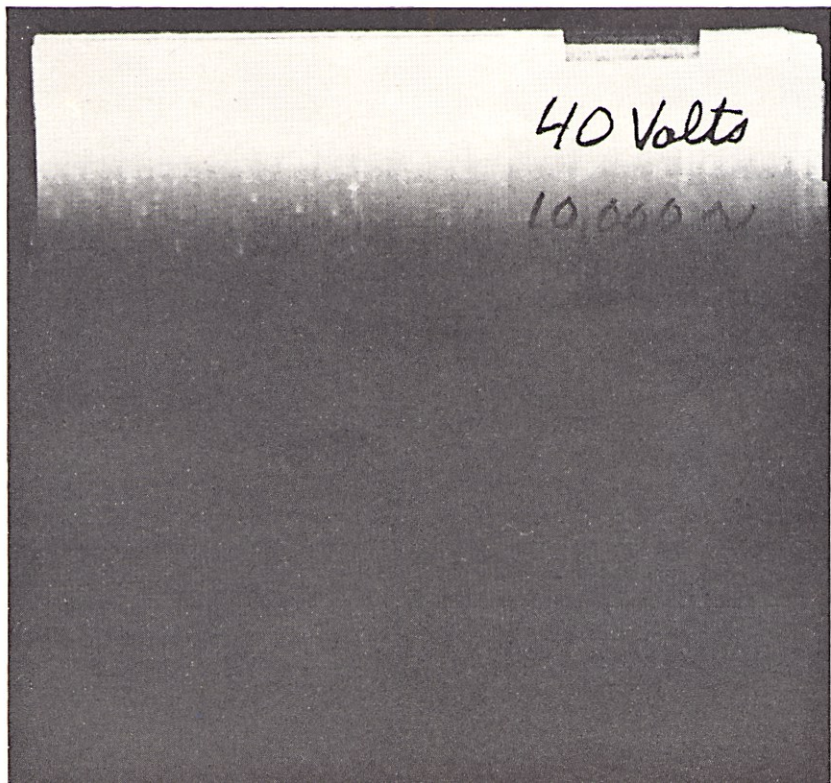


added as a light generator; besides its use in TV and Radar sets, it is being used in photographic printing. The cathode-ray tube acts as the light source illuminating the negative being projected in an enlarger.

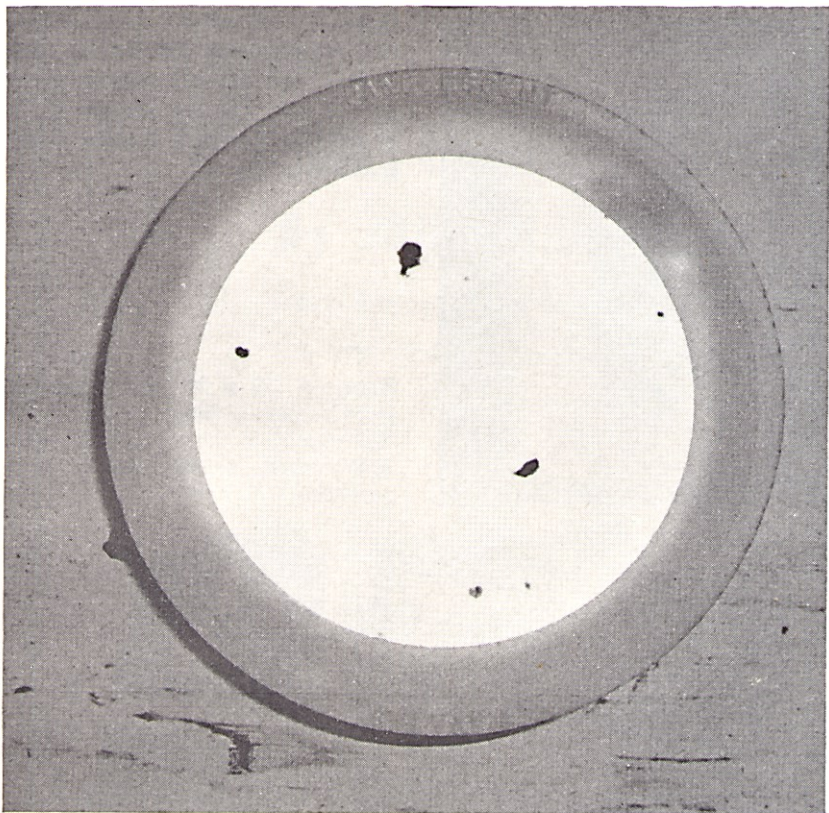
But even that's not unnatural; radioactive ores have been exciting fluorescence in minerals for all the ages Earth's existed. And, incidentally, the Curies were the first to see the strange, soft bluish glow now known as Cherenkov radiation, and a familiar feature of the "swimming pool reactors" of nuclear research. It's not exactly a practical light source; it re-

sults from electrons moving through a medium at a speed greater than the speed of light. (If the electron is moving 175,000 miles a second through water, it's moving faster than light moves through water; the electron is, therefore, moving faster than the speed of light.) Cherenkov radiation is *not* fluorescence; characteristically, the color of fluorescence is a function of the fluorescing material, and *not* of the source. Cherenkov radiation's color is the same in a water-filled swimming-pool reactor, as it was in the air around the Curie's first pure samples of radium.

At 10,000 cycles, only the top edge lights up! Power for these tests came from a 120-watt audio amplifier, driven by an audio signal generator.





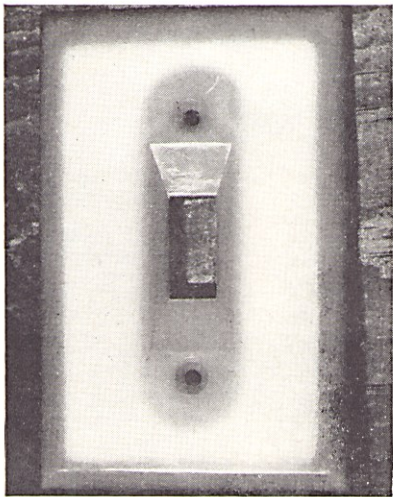


The Sylvania nite-lite was mounted on a rubber tile for insulation, and then tested for insulation breakdown. The black spots are local punctures; the first breakdown of this 120-volt rated lamp came at 750 volts; the big hole was caused by 850 volts at 1,000 cycles. At 700 volts and 1,000 cycles, the lamp was really brilliant . . . but "not long for this world!" Want some home-made pictures of sunspots . . . ?

However, electroluminescence does appear to be one form of light generator that is *not* found in Nature. The present commercially available examples are the development of a phenomenon first detected only thirty-eight years ago—which is a pretty

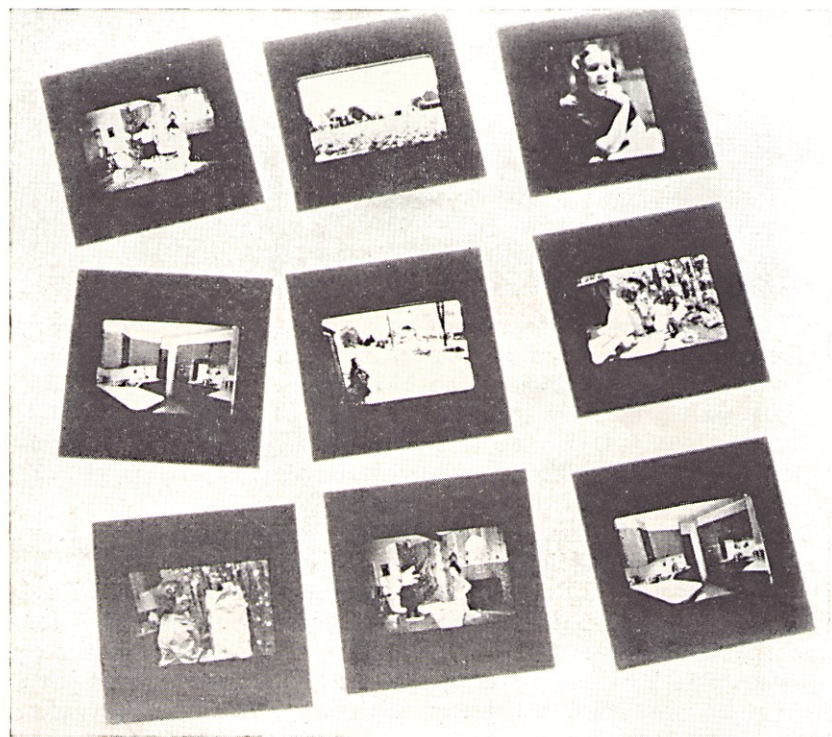
fair score for basic-discovery-to-commercial-application.

It was first reported by a Russian scientist, O. W. Lossev, who found that a particular silicon carbide crystal he had, when oriented in just the right way, between two direct-current



Opposite: Sylvania's self-luminous *Panelescent* switch-plate can be wired at the switch so that it's On, when the light is Off. It draws something like 1/100th of a watt, and glows a pale greenish white.

Below: A 10 x 10 inch square of electroluminescent lamp makes a fine "light-box"—in this case, however, a light-surface—for illuminating transparencies.



electrodes would give light. The experiment turned out to be a bit difficult to confirm.

1. Not all silicon carbide crystals would do it.

2. The "correct orientation" wasn't definable, except in terms of "the right orientation is the one that produces the desired result"—which isn't very helpful.

3. The light level was down in the region where, after spending some half hour or more in absolute darkness—which made manipulating the crystal between high-voltage electrodes somewhat difficult—the glow was just barely on the extreme edge of human vision. Neither photocells nor photographic materials of the time could detect it.

4. It didn't make much sense that it should happen, anyway.

Then thirteen years later, in 1936, Professor Georges Destriau in France discovered that good, old reliable zinc sulphide phosphors—and zinc sulphide has been the Old Reliable among light-emitting materials since the days of Sir William Crooks and the Crooks tubes—would, when suspended in an insulating liquid between two plane parallel electrodes, emit light when an alternating current was applied to the plates.

The light output was still down in the just barely-perceptible zone. Completely dark-adapted human eyes remained the only detectors capable of observing that there was a glow.

A few years later, two Hungarians, Bay and Szigeti, had succeeded in getting things working better. They

demonstrated electroluminescence in silicon carbide crystals, and applied for patents on lighting devices employing the principle. And about that time, some General Electric researchers succeeded in getting some high-purity silicon carbide crystals to glow feebly.

That electroluminescence existed had been demonstrated. To that date, however, the only things that could really get excited about it were the rods in a thoroughly dark-adapted human retina. It was feeble; it was strictly a laboratory-basic-research sort of phenomenon.

Since then, and particularly since World War II, laboratories have been working on it—because the potentials inherent in the thing are dazzling, even if the results to 1940 weren't.

The essential mechanism of present—admittedly primitive—electroluminescent lamps is extremely simple; two conductive sheets, with a very poor grade of insulating material between them. One of the conductive sheets is transparent, or translucent, to let the light generated in the high-loss insulator out.

The physical mechanism is also simple . . . basically. The application of the principle, as so frequently happens, isn't. When alternating current is applied to the conductive coatings, an alternating electrostatic stress is set up in the insulating materials. This insulation is an excellent insulator for pure DC—it doesn't allow DC current to leak through. But for AC, it's a low-efficiency insulation; there

are energy losses in the material, as the electric potentials reverse, and reverse the stresses on the molecules. It has high dielectric losses.

Some of those energy losses appear as light.

The Problem for Solution is to raise the percentage of the losses that appear as light; potentially, the electroluminescence principle promises a true cold light, of very high efficiency, in which electricity is directly converted to light in one step.

Even without that, the electroluminous panels represent a highly interesting system. They are a true area light source; a 10 x 10 inch square of electroluminous lamp—it seems strange to call the actual, physical device "a lamp," it's so completely different from anything we've ever thought of as "a lamp"—gives a strong, steady glow over the entire surface.

And that "lamp" is a sort of whitish square of plastic sheeting, about as thick as the usual cardboard the laundry sends your shirts home on—but, being plastic, it's more flexible.

And *that* is a lamp?!

Well . . . it needs only to be clipped to 110 volt 60 cycle power—and it shines. The surface brightness of the sample I have is about equal to that of a standard green-phosphor cathode-ray tube; it looks very satisfactorily bright to the eye in normal room light level.

As of March, 1961, the really important properties of electroluminous lamps are still almost entirely

potential. One 10 x 10 inch square lamp sells for eleven dollars, ordered directly from General Electric's Nela Park, in Cleveland. They are selling sample lamps, to encourage research on applications, naturally, on a basis that is, itself, entirely unique in lamps; you order them by the square inch! From one to four square inches \$1.50 per lamp. Their present maximum dimensions are 14" x 11 $\frac{3}{4}$ ", which sells for fourteen dollars. Minimum order, five dollars, with a surcharge of fifty cents per hole!

Reason for the price per hole: The insulating material is thin; where it is cut, the edges must be sealed to prevent arc-over. And because the material tends to lose effectiveness when humidity gets at it, the hole, like the other edges, must be sealed air-tight.

The electroluminous lamp is, basically, simply a condenser, in which the dielectric losses, instead of appearing simply as heat, appear as visible light. That in itself suggests some of the directions of development, and its potentials—and some of the peculiar limitations.

In any condenser with dielectric losses, the losses tend to increase with increasing frequency. In an electroluminous lamp, the surface brightness, predictably, increases with frequency. A lamp with a brightness of 4.5 lumens per square foot when operated on 120 volts, 60-cycle current, gives 20 lumens per square foot when operated on 400-cycle current.

But . . . there's a slight hitch. To date, at least, the phosphors sort of

"wear out" from having to turn around so much; at 400 cycles they wear out faster; a lamp good for 7500 hours on 60 cycles, reaches the same lowered output in 3000 hours on 400 cycles.

Then there's another thing; the front surface conductor has to be transparent; the back surface conductor is shiny aluminum, and conducts just fine. But the front-surface conductor has considerable impedance—largely resistive—and it is feeding a condenser. In a lamp over about 6 x 6 inch size, the resistance of the front conductive coating begins to be important at 400 cycles. It can't change and discharge the condenser that fast through that much resistance. The lamp will show full brightness near the current input strips . . . but fades off gradually farther away.

At 1,000—or 10,000—cycles the brightness should be much greater, with a given voltage. But things don't work quite that simply; the resistance of the front coating gets more and more important, and the service-life gets shorter and shorter.

The brightness also increases with voltage, however—and that doesn't appear to have any life-shortening effects. (Within the reasonable limits that the life becomes very short indeed if you run the voltage so high it punctures the dielectric, and arcs through.)

As of now, electroluminous lamps have practical applications as night lights (they make the usual seven-watt night lights seem monstrously wasteful; an electroluminous night

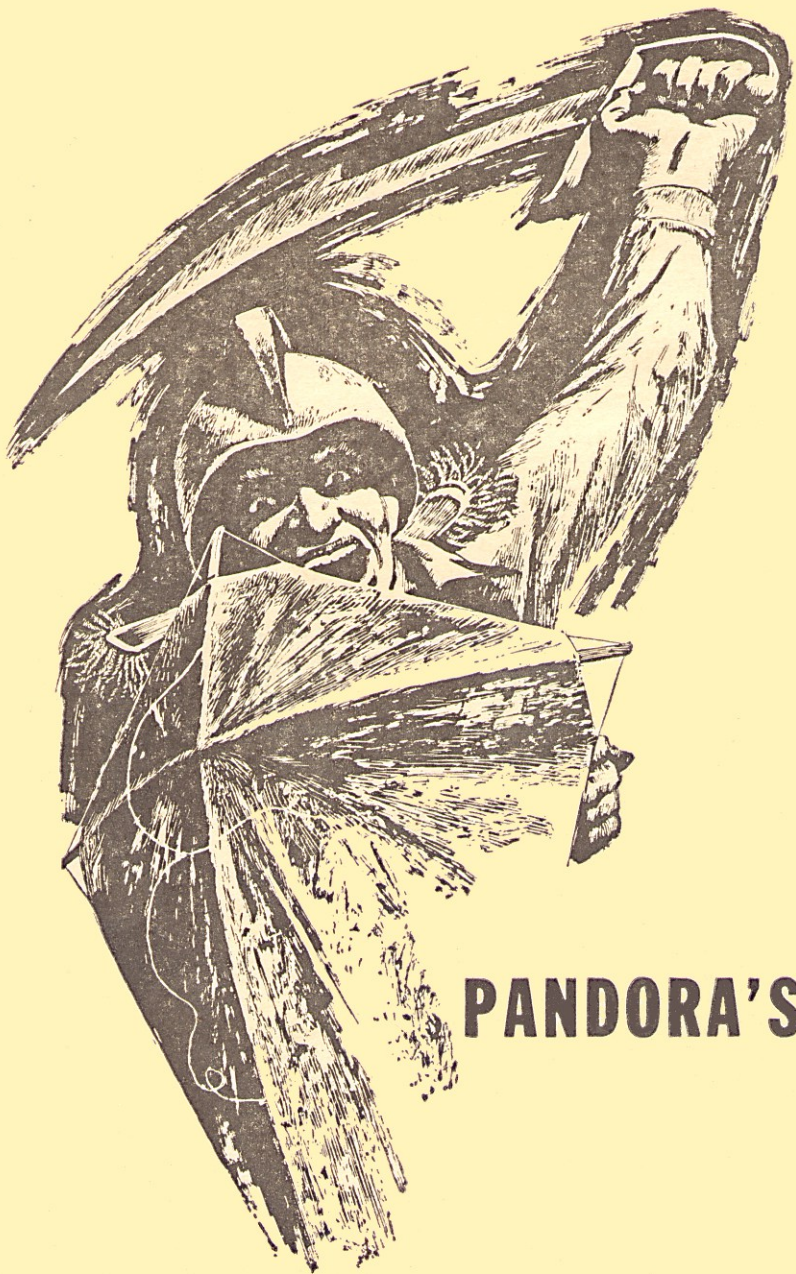
light draws about 0.05 watts.) These are available on the market now. Near future applications are in instrument-panel lighting; a true area illumination, without effective depth— $\frac{1}{32}$  inch only—with a luminosity readily controlled by varying the voltage, has real attractions. So the lamps sound expensive in comparison to a dashboard light—but they may be very much cheaper to install and may save some very expensive space. A gadget for converting 12 volts DC to 150 volts AC at 400 cycles is simple and cheap.

There's lots of research to be done in converting those dazzling potentials into a good, bright light—but the things that this very new, and first of Man's unnatural light sources can do make the job of doing that research highly attractive.

The high cost isn't inherent in the thing—it's simply the usual high cost of prototype manufacture, and process development. The 11 x 14 size limitation isn't inherent, either—just that that happens to be the size GE's present prototype production machine turns out. The present translucent conductive coating can, no doubt, be improved in conductivity—or helped out with a micro-fiber metallic mesh.

In the reasonably near future, electroluminous panels ought to be selling for a price—and with a wiring hook-up arrangement—such that you can buy standard 9 x 9 inch tiles to cover your wall, at your local construction supply or hardware stores.

THE END



**PANDORA'S...**



ark Monnik, Planetary Integrator of Centralis II, looked out through his twin telescope at an early-morning pano-

rama of tracer bullets, blazing cannon, and geysers of flying dirt. The solid mountain trembled under his feet. The air reeked of gun powder. Monnik and his occupation army, settled down comfortably just a few weeks before, now found themselves bled white, cornered, and fighting for their lives. Monnik looked up angrily and gestured to a nearby officer with the staff's morning summary of the situation.

"Sir," said the officer, "in the north, the enemy—"

"Never mind that," said Monnik. "The other day I sent out a call for reinforcements. Everything depends on whether or not we get them. Has any answer come in yet?"

The staff officer looked unhappy. "Yes, sir. We've had a reply from

Drasmon Argit himself."

"Good," said Monnik. "Let's hear it."

The staff officer separated one sheet of paper from the rest, and read: "Monnik—Owing to complications elsewhere, we find it impossible to properly reinforce you in less than sixty to eighty days. To tide you over till the reinforcements arrive, we send you "Able Hunter"—this is his code name—who is a member of the Supreme Staff, and a genuine Earthman. Hunter is bringing his Special Effects Team, with full field equipment. You may find Hunter's methods of war somewhat unconventional and even eccentric, but we would advise you not to underrate either him or them. As we mentioned before, he is an *Earthman*.— Good luck, Argit."

The staff officer stopped reading, and Monnik said "Let's see that." He read it over, then looked up blankly.

"What's an 'Earthman'?"

## ... ENVOY

*The trouble with the amateur—the irregular—is that he doesn't understand the niceties—the proprieties—of the business. And the things he does can be soooooo disturbing to a professional . . .*

By **CHRISTOPHER ANVIL**

Illustrated by Schoenherr

The officer looked perplexed. "Sir, we've had our hands so full here, I guess I haven't kept up with things. It sounds like some kind of alien to me, sir."

Monnik, puzzled, ran his hand through the fur at the base of his neck. "If I remember correctly, we have a few men in the Headquarters Guard who were transferred from a planet called 'Earth.' Get hold of them, and see what they can tell you."

"Yes, sir."

"When is this 'Able Hunter' going to get here?"

"His ship came down at the spacefield a few hours ago, sir. He's on his way out here by groundcar right now."

"All right. Give me that summary, and go find out about Earth."

"Yes, sir."

Monnik braced himself, and looked over the sector-by-sector summary of the situation. Not much had happened overnight, but the new day was starting with a bang. Monnik's defense rested on a network of improvised fortifications in the south, and a river along most of the rest of his front. Behind the river was a chain of formidable mountains, a strip of coastal lowland, and the sea. Monnik was fighting to hold the river line. The enemy was using every stratagem and maneuver to pry him out of it.

Last week, the enemy concentrated his artillery south of the big bend of the river, and under protection of the artillery swung a pontoon

bridge across. Monnik rushed reinforcements to the scene, and concentrated his own artillery. The enemy established a bridgehead. Monnik blew up the bridge, and plastered the bridgehead with a heavy bombardment.

Now, though the firing from both sides still went on, the summary in Monnik's hands told him that the enemy had secretly started the bulk of his artillery south during the night, and was at present rushing this rolling concentration of firepower down the river road at all possible speed.

Farther to the south was Monnik's network of improvised fortifications. If the enemy could get there first with his artillery, it would mean serious trouble for Monnik.

Monnik gave the necessary orders to start the bulk of his own artillery moving south. He then went inside to study the map table and was confronted with a bulging excess of symbols on the other side of the river, and a depressing scarcity of them on his own side. Venturesome plans just starting to germinate deep in his consciousness withered at the mere sight of the map.

Monnik was moodily contemplating the superiority of enemy numbers and equipment when he heard a groundcar come slamming up the trail of ruts and potholes that served as the road to his headquarters.

A few moments later, the door opened up to let in a strongly built alien with the insignia of a general—



grade III—and member of the Supreme Staff. Monnik was absorbing the sight of this tailless, practically furless, wide-browed creature, when the creature looked directly at him, and said, "I'm Able Hunter."

"Tark Monnik," said Monnik automatically.

Able Hunter handed over his identification and a set of vague orders assigning him to Monnik's command "for purposes of consultation and technical assistance."

Hunter remarked, "I understand you've got a little trouble here."

Monnik grunted. "They've got us with one hand, and they've got an axe in the other hand. All they need is to get our neck on the block for about five seconds."

"Is that the present situation on the map table over there?"

"That's it."

Hunter looked over the map intently. After a while, he walked around and looked at it from the other side. He grunted and said "How did this mess come about?"

Monnik scowled, then glanced at the silver emblem of the Supreme Staff on the Earthman's jacket. Monnik said, "We made a serious error of judgment. Before we landed, the planet was run by a caste system that was pretty unfair to the governed classes. After we finally managed to smash their military resistance, we also smashed their caste system. We thought the majority of the natives would be grateful. What we overlooked was that their philosophy stated that the lowest member

of their caste system was still higher than any other species in creation. They call themselves 'kingmen,' and I guess they'll fight to the finish to stay 'kingmen.' They feigned obedience to us, fooled the attitude-testing technicians, and at a given signal there was a simultaneous uprising all over the planet. Now, if we don't get reinforcements soon—"

There was a faint rapid tapping noise to one side. Monnik glanced around. The staff officer he'd sent to get information about Earth was standing a little back from the doorway, out of Hunter's range of vision. He looked urgently at Monnik.

"If you'll excuse me," said Monnik, "one of my officers wants to see me for a moment."

"Go right ahead," said Hunter.

Monnik went outside and moved away so they wouldn't be overheard.

"Sir," said the staff officer excitedly, "the men who were on Earth said the fighting here is like a vacation by comparison. They—"

"Keep your voice down," growled Monnik. "How reliable did these soldiers seem?"

"Sir, several of them have the platinum nova for extreme bravery in action. But then, they said the platinum nova was issued to whole units on Earth."

Monnik blinked. The platinum nova was given out with grudging restraint, and only after investigation by half-a dozen separate teams of examiners, all of whom had to be satisfied or the award was withheld.

"Listen," said Monnik, "I don't want to leave him in there too long. For now, just give me a quick summary of these Earthmen. What's their strong point?"

The staff officer thought intently. "They're original thinkers, sir, and they're mechanically ingenious. The soldiers said they'd come to the conclusion an Earthman must be born with a tool kit in one hand."

"I don't see how that can help us in the present situation."

"I don't know, sir. The soldiers said it was no fun at all fighting them. They said—"

Monnik nodded. "Tell me that later. I'm going back inside now."

"Yes, sir."

Monnik went back and found the Earthman leaning over the map table, contemplating the big bend of the river near the center of Monnik's line. He said, "I suppose you're hanging onto that riverbend to cramp the enemy's movements from north to south?"

"Well, yes, and also because it would be a lot harder to stop him once he got across that river anywhere."

The Earthman nodded thoughtfully, and Monnik cleared his throat. It had just occurred to him that there might be advantages to the Earthman being "mechanically ingenious." Monnik said, "I imagine you've brought along special equipment. Any . . . ah . . . new weapons?"

Hunter's face took on a blank uninformative expression. "We have

some exceptionally powerful weapons, but they're only for use as a last resort. My men and I aren't operating as regular troops. We're irregulars, and work on a special theory of war."

"What's that?"

"An army, like a person," said Hunter, "has certain special points of vulnerability. Strike these at the right times and in the right sequence and the whole thing will collapse of its own weight."

Monnik looked at the map, at the symbols of the tremendous power massing against him across the river. Where, he asked himself, were the weak points in that bristling array of helmets and guns? He looked at the Earthman without enthusiasm. "Maybe," he said.

"Well," said Hunter, "if you'll get me some passes, so my men and I can operate on all sectors of the front—"

Monnik nodded. "I can do that easily enough."

A little while later, the Earthman was on his way back down the mountain, and Monnik was listening to his staff officer describe the war against Earth, as told to him by those who had been there.

". . . Traveling forts," the staff officer was saying, "ships with guns big enough to hide in, bombs that flew under their own power; why, sir, the place sounds like a nightmare. They had guns that squirted out fire—"

"Fire?"

"Yes, sir. And if it hit you, that was the end. They say it took thirty-five million troops before they got the place more or less under control, and all they really ended up with then was a compromise."

Monnik scowled. Automatically, he discounted fifty per cent for exaggeration. But, even so—

"Sir," the staff officer finished, "the Earthmen have a fairy tale about somebody called 'Pandora,' who opened up a nice-looking box, and all sorts of horrors came out. The soldiers say Earth is like that box. They call it 'Pandora's Planet!'"

Monnik thought that over. "All right. All right. Set up a team to report to me everything these Earthmen do. And I'll want to know *fast*."

"Yes, sir."

As this staff officer departed at a run, another bolted out of the headquarters building.

"Sir, the kingmen are trying another crossing!"

Monnik stared. "Where?"

"Sir, that artillery they were moving south along the river—they've swung it off the road and opened fire on our observation posts along the opposite bank. We thought all the wagons they had with them were part of the ammunition train, but they've got a disassembled pontoon bridge on some of them. They've got a column of troops marching up the road toward them. We've got practically *nothing* on the opposite bank because we sent everything north to fight at that first bridgehead. We

can't pull those troops back yet because they're still fighting, and they're about worn out."

"Where's our artillery?"

"Coming south on the road. But, sir, they're bogged down in a terrible stretch of road."

"How long till they get to the new crossing-place?"

"Tomorrow afternoon."

Monnik felt as if he had been hit over the head with a club.

"Sir," cried the staff officer, "the kingmen will cross the river, go straight through us, and split the front in two halves. They'll—"

"Shut up," snarled Monnik. "Bring Karrif up from the south and block the crossing."

"Sir, it was quiet on Karrif's sector, so his transport was pulled out to help move the reserve. He has no transport."

"Then he'll have to do it on foot. Get moving."

The staff officer sprinted away. Monnik considered the Earthman and his theory. He hoped there was something to it because the fight was getting to the point where the moves were forced, and there didn't seem to be too many moves left.

For most of the day, the situation wavered and hung fire. Then a fierce attack opened up before his fortifications in the south. The kingmen in the original bridgehead tried hard to break out. As both these attacks were held, the enemy engineers assembling the new pontoon bridge lagged and bungled in a suspicious

way. Meanwhile, on Monnik's side of the river, General Karrif's troops alternately marched and ran, marched and ran, the general himself at the head of the column, as they raced north toward the crossing.

As evening approached, Karrif's troops, bone-tired but triumphant, marched up opposite the crossing place.

The enemy artillery instantly swung onto the road and headed south again. With smooth efficiency, the engineers loaded the pontoon bridge back onto its wagons and followed the artillery.

"They'll cross farther south, sir," said a worn-looking staff officer. "We can't move anything north because of the attack at the fortifications. Even the general reserve's committed—what's left of it."

"Give Karrif two hours rest. Then start him south again."

"Sir, the men will drop like flies."

"It will be worse than that if the kingmen get across that river. How's the artillery coming?"

"Axle-deep in mud, sir. The men are moving the guns but it's hellish work."

"How did this come about? That road was all right earlier."

"Yes, sir, but some rubbish plugged up a culvert under the road. The water backed up, overflowed the ditch, and soaked the roadbed. The dirt turned into mud, and when the weight of those guns hit it, they ground it into bottomless slop."

Monnik shook his head in weary

disgust. "They've got the culvert unplugged by now, I hope."

"Yes, sir, and they're laying down planks, but it's a mess."

"All right. Get that order out to Karrif."

"Yes, sir."

Monnik stood still for a moment, considering how the fate of an army could rest on a few puny branches drifting into the mouth of a culvert and catching a pile of miscellaneous trash that could indirectly halt a whole column of artillery, without so much as a shot fired or a hand raised in anger.

He scowled suddenly, and sent one of his officers to find out what the Earthmen were doing. The officer came back with a blank look.

"Sir, they're flying kites."

"They're what?"

"Flying kites, sir. The reports say they've very pretty kites. And they're also floating little rafts down the river."

Monnik shook his head in disgust. There, he thought, went his last hope. Grimly, he braced himself for the morrow.

It was a bad night for Monnik. And then he woke to confront a gray-faced staff as the reports came in.

"Sir, Karrif is back in position."

"Good."

"And there's about a third to a fourth of the enemy artillery opposite him."

Monnik started. "Where's the rest of it?"

"They apparently pulled it off the

road soon after dark, sir. Now it's back where it was yesterday. They're putting the pontoon bridge together with record speed, and the first enemy troops are waiting to cross. We're back where we were before, only now Karrif is too worn out to be able to intervene either in the north or the south. His troops are exhausted."

Monnik made a hard effort to keep his equilibrium. "How's the fighting elsewhere?"

"The enemy has made a little dent in the south, but it isn't bad. The reserve has stopped them. Further north, they've been driven back into their bridgehead with heavy losses. We've stopped them elsewhere, but there's nothing left to stop them at the crossing." The officer managed a faint imitation of a smile. "Except the Earthmen, sir. They're there."

"What are they doing?"

"Flying kites, sir. And floating rafts."

Monnik grunted. "Where are the guns?"

"They're just dragging the first of them out onto the solid road. But they can't get into position before this afternoon, and with no infantry support, we'll just lose them to the kingmen."

"Keep dragging them out," said Monnik, "and move them south as fast as possible. Pull out Hossig and his best units and send them south."

"Sir, they'll never make it."

"They've *got* to make it."

"Sir, it just isn't possible. If there

were anything, of any size, to slow down the kingmen when they cross, it *might* work. But there's nothing left there except the remnants of our observation posts. There's just nothing to delay them, sir."

"Then there will be," said Monnik. "We'll delay them ourselves. The Headquarters Guard is an elite unit. Assemble them outside."

The staff officer swallowed. "Yes, sir." He saluted, turned, and ran off.

For the first part of the trip, over the miserable trails that wound around horseshoe curves and plunged up and down long steep grades, Monnik used what remained of his pool of headquarters transport. When they had delivered Monnik and the first section of the Headquarters Guard to a specified point, they went back for more. Monnik started off cross-country with the men he had.

On the map, it had looked to him like a possible thing. Monnik had thought he knew all about maps, and their little tricks, until he came to the third of the ravines that weren't shown on the map. Sweating and furious, he led the men as they scrambled and slid down to the bottom, stumbled through the tumbled rocks and rushing water, and laboriously hauled themselves up the other side. In time, they emerged on an open hill, to see in the distance below them a pontoon bridge, with a steady stream of enemy soldiers crossing and fanning out on the near side of the river. To Monnik's left, far

down the road that wound along the base of the hill, his own guns were approaching.

Monnik looked over the ground carefully. He turned to the captain of the guard.

"You see that ridge above the road? If we spread out along it, and switch our men back and forth as we fire, we can give the impression of a much larger body of troops. Come on."

The captain passed the orders back, and they spread out along the ridge. In the distance, the kingmen approached. From somewhere out of sight, the Earthmen drifted pretty kites over the battlefield. Monnik and his men began to fire.

The kingmen continued to advance.

Monnik braced himself for the unavoidable end. He hoped Hossig would make good use of the delay.

Suddenly, from the direction of the river came a white flash, followed by a terrific concussion.

From the drifting kites dropped little gray packets.

The captain put his hand on Monnik's arm.

"Sir, their bridge is gone! And look there. *Great hairy master of sin! Look at that!*"

The kingmen were rushing in all directions, thrashing their arms wildly. Abruptly they all bolted for the river. The huge array dwindled into a mob that vanished headlong over the river bank.

Monnik said suddenly, "The

Earthmen dropped *something* from those kites. But what could—"

From the distance came a faint whining sound that grew to a speeding little speck, and was joined by other whining little specks.

Monnik looked at the fleeing kingmen, then at the growing multitude of specks traveling in his direction. His mouth felt dry. He turned to the captain of the guard.

"We've done our duty here, captain. I don't know what that is coming. We'd better withdraw."

"Yes, sir." The captain flung back his head.

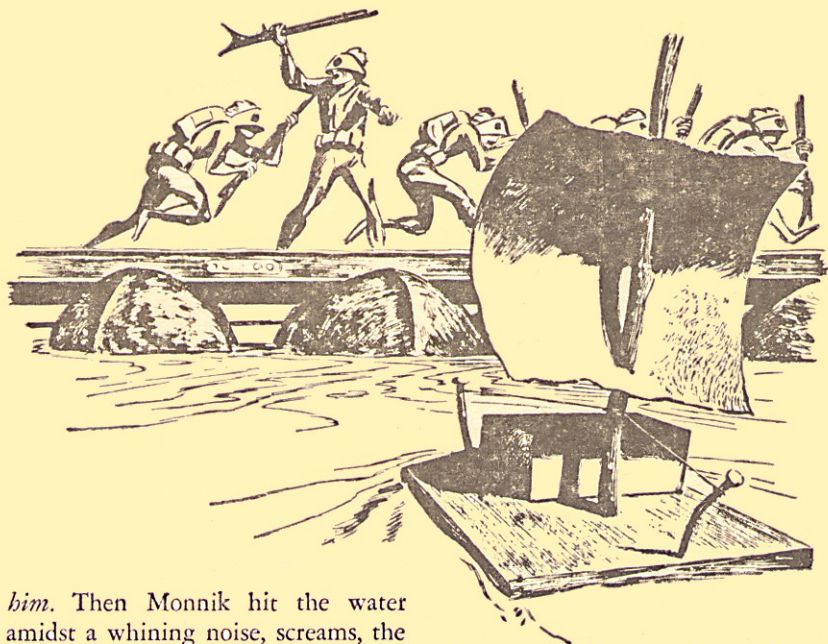
"RUN FOR IT!"

Monnik suddenly found himself alone on the battlefield. The kingmen had vanished into the river. His own troops were so many pairs of heels dwindling fast up the hillside. The multiple whine was closing on him like a cyclone. A sudden sense of urgency gripped Monnik and moved him up the hillside in a blur of speed.

A whining noise followed right behind him and suddenly caught up.

A red-hot knitting needle seemed to pass back and forth through Monnik with simultaneous discharges of about twenty thousand volts.

Monnik let out a yell and suddenly began to *really* move. He passed his men as if they were standing still, miraculously bolted uphill between innumerable tree trunks without hitting any, and plunged down a steep ravine. Ear-splitting yells burst out to the rear, and on the way down the ravine, his men started to pass



*bim*. Then Monnik hit the water amidst a whining noise, screams, the roar of guns let off in panic, flying rocks, chunks of dirt and moss, and somebody's left boot with no foot in it. The water suddenly went up his nose, a submerged rock hit him on the chin, and a sensation like fifty poisoned fishhooks passed through his exposed right shoulder.

When Monnik came to, he was done up in bandages, and lying on a cot somewhere in the pitch blackness.

"Great space," he croaked. He sat up, and somewhere in the distance he could hear intermittent dull explosions. He tried to get up, felt dizzy and nauseated, and sat down again. He leaned back, and never even felt himself hit the cot.

The next thing he knew, it was broad daylight.

An orderly with a bulging white patch over his face brought him in some hot broth. Monnik forced down the broth and sent for a member of his staff. A staff officer came in looking as if he had spent the night being rolled around in an oil drum.

"Good afternoon, sir," said the staff officer shakily.

"*Afternoon?*" growled Monnik.

"Yes, sir."

Monnik squinted around. He had some trouble seeing, as his face and one side of his head was swollen up. "What happened?" he said, propping himself up.

"Well, sir, the second section of the Guard found us in the bottom of

the ravine and dragged us out. At that, we lost about half a dozen men drowned."

Monnik lay back dizzily. "What about the kingmen?"

"Some of them made it across the river, sir. The ones on the other side, at the guns, ran away when the kites started drifting over them. After they ran away, a man-sized thing with flippers came up out of the river, set down a cylinder, took off the flippers and a kind of face mask, turned into an Earthman that walked past the line of guns carrying a sack. As he passed the guns, he reached into the sack and slapped something onto the left wheel of each gun-carriage. He went back into the water, and all of a sudden a section blew out of each left-hand wheel of the kingmen's cannons." The officer paused and added, "The kingmen aren't going anywhere with those guns, sir, till they get the wheels fixed."

"Where are our guns?"

"In position, sir. Dropping whip-shot on the other side of the river every time they try to get at *their* guns."

A pleasant warm sensation built up in Monnik. "Well," he said, "what was it that blew up the bridge?"

"The Earthmen drifted some explosive under it in a little raft."

Monnik's bruised lips creased into a grin.

"And what was that racket last night?"

"That was the Earthmen, too, sir. They were on the other side putting

bombs in culverts and setting off fuel dumps. The kingmen were a little rattled from what had happened earlier in the day, it was a dark night, and they couldn't do much to stop it. The patrols are boiling over there today, though, and I'd hate to set foot on the other side tonight."

"Help me up," said Monnik. "A situation like this should be taken advantage of."

With one arm across the staff officer's shoulders, Monnik got out of the room. He was vaguely conscious that it took three of them and a swearing doctor to load him back on the cot again.

After a nightmarish interval, Monnik awoke to again find it dark. A distant uproar suggested to him that despite the bristling patrols, the Earthmen must once more be busy on the enemy side of the river. Feeling that things were in good hands, Monnik drifted into a deep, restful sleep.

The next morning, Monnik awoke feeling refreshed. He found that if he moved slowly, and was careful not to touch or bump various parts of his body, he was able to get around with only an occasional spell of dizziness. He went to his headquarters, to find worried officers clustered around the map-table. A brief glance showed him the reason. The kingmen were gathering in great force around the wide loop of the river near the center of his front.

"What's this about?" he demanded.



"Sir, the Earthmen have been operating from that river bend. Last night, there was a terrific uproar on the kingmen's side of the river. It sounded like they'd split up into two teams and were having a private war. I guess they were, too. The Earthmen told us they let animals called 'rabbits' loose over there, with 'noisemakers' strapped to them. Every ten or twelve bounds there would be a loud *bang* from the noisemaker. Then the rabbit would run and there would be more bangs. In the dark, the kingmen fired at the rabbits, and there were so many kingmen on patrol they couldn't help firing near each other, and a few of them got hit, and others fired back, and one thing led to another and pretty soon they were calling out the reinforcements. Well, sir, as we see it, their commander has had about all he can take, and he's going to end everything by brute force. The troops were coming in from all over this morning. They're a little short on artillery, but they've got a lot of transport, even if they do have to use alternate roads, and they're massing fast."

Monnik glanced at the map. "You think they'll try to smash through the center and crush each half?"

"Yes, sir. You can see, here, they've brought up some more pontoon bridges. They must be bringing those in from all over the planet. And they've got what artillery they can still move. If they once get a good grip on this side of the river, it's going to be rough."

"Can we bring our artillery back along that road to the base of this loop of the river?"

"Not too well, sir. That road hasn't drained dry yet. We'd get bogged down again. Sir, the Earthmen asked us to pull back, fortify these hills back here, and fight to the death on that line if the kingmen get over. But we aren't to advance in any circumstances. We couldn't do it, sir, on our own authority, but if you think —"

Monnik nodded. "Pull them back. Once that attack opens up, they'll never stop it." He frowned. "What about the old bridgehead—the first one? Is that still holding out?"

"No, sir. The Earthmen flew their kites over it yesterday, and that caused so much panic our men got in and cleaned them out."

"Good. Then we don't have that to worry about. All right, we'll have to thin our men out some to the north, and rush all we can down here where the kingmen are going to get through. Get the artillery ready to move on short notice. Switch Karrif and Hossig to the south and put Karrif in overall command. When the kingmen come over that river to crack our center, I want to smash their left, swing around and hit them from the rear. We've got to give Karrif the bulk of our transport, and check with our observation posts and the Earthmen to see what roads on the other side are usable."

"Sir, we can use our transport to switch troops down from the north, and at the same time our other trucks

and groundcars can be rushing back and forth from the south, too. But the men can lie down while the trucks are headed south, and coming north we can set up dummy props like the Earthmen use, and then the kingmen will think we're moving troops north, instead of south."

"Good. All right, get to work." Monnik glanced at the map, and then the phrase "dummy props like the Earthmen use" really penetrated his consciousness. Puzzled, he asked the nearest officer about it.

"Oh, yes, sir," said the officer. "You see, sir, they're trying to bluff the kingmen. They've got a lot of dummies made out of rubber that they blow up to large size, and weight down with dirt. Why, there are dummy guns, dummy soldiers, dummy groundcars, and imitation marching sounds coming out of loud-speakers. They said, sir, it was one of their favorite effects."

Feeling somewhat dizzy, Monnik went outside to peer at the river bend through his double telescopes. As he bent at the telescopes, he instantly recognized the signs of a mammoth troop movement. Clouds of dust trailed across the jutting salient of the river bend. The roar of engines, rumble of rolling guns, tramp of feet, and murmur of mingled voices rose to meet him. He could just detect the chink of picks and shovels as the troops dug in, the called orders of officers, and the distant blast of signal whistles. Through the dust and haze, he seemed to see the moving shapes of columns of

groundcars, and the dull flash of the sun on the shiny scabbards of masses of marching troops.

Monnik straightened in wonder. It hardly seemed possible to him that a troop movement of that size could be counterfeited. But then, almost everything was shrouded in that dust and haze, and besides, he knew it *had* to be fake. With the meager stock of transport he had available, his men just couldn't have been concentrated that fast.

Monnik took another look at the scene, and could find nothing wrong with it. If he hadn't known that it was impossible, it would have fooled him. He went back inside, and watched as the kingmen piled up more and more power around the loop of the river, while his own men pulled out to fortify the hills farther back. The map took on a fantastic appearance. With a crushing superiority on one side, and nothing on the other side, the enemy was afraid to move.

As a staff officer remarked, "They're completely fooled, sir."

"Yes," said Monnik cheerfully, "at this rate, we'll have things in good shape by tomorrow or the next day." He felt a sensation of warm friendliness for the Earthmen.

Just then, the solid mountain seemed to jump under his feet. There was a concussion that stunned him for an instant. Then they were all running outside.

Down below, within the bend of the river, a great column of black smoke boiled toward the sky. Then a

second and a third explosion shook the ground.

Monnik whirled and shouted!

"Get inside. There'll be a flood of reports any moment now and we have to know what's going on."

As the officers ran in, Monnik took a closer look at the river bend. The wind was slowly moving the column of smoke, and through it he could vaguely see burning groundcars, overturned cannon, and flickering bits of wreckage.

Monnik groaned. He didn't know what had caused the disaster. But he knew what the result would be.

A little later, an officer ran out to him.

"Sir, the kingmen are swinging their pontoon bridges across!"

Monnik watched the map as the enormous enemy force funneled unresisted across the pontoon bridges and began to surge toward him. "How," he demanded of his officers, "is that defense line in the mountains coming along?"

"Slow, sir. There just hasn't been enough time, and there aren't enough men there yet. It will *probably* stop the first attack. If they don't hit it too hard, or in the wrong place."

Monnik swore, went outside, and got the captain of the guard. "I hate to do this to you," said Monnik to the bandaged figure, "but I've got another job for you."

As the guard roared off to help dig and man the defense line, Monnik once more became conscious of his aches and pains.

Late that afternoon, he received word that the advance scouts of the kingmen had reached the defense line, with the swarming army not far behind them. Able Hunter had by then installed a television command post in Monnik's headquarters, so Monnik could see the advancing scouts on one of the screens. Hunter was talking into a headset. On the screen, the enemy scouts moved toward the defenses.

A few moments later, the hidden troops higher up opened fire. There was a roar of cannon, and the scouts dove for cover. There were shouts and the blasts of whistles from the rear.

One of Monnik's staff officers said, "That line will never hold them."

Able Hunter was saying into his headphones, ". . . The 000 Canadian first. The jumping, crawling, and burrowing later . . . Now, I should think it's about time to try the Spider Special and a couple cases of Sparky Willie on that pack before they get spread out too much—"

One of the other screens showed the first of the main force of kingmen coming up well spread out. Farther back, hosts of kingmen advanced in little groups. It was on these groups that miniature planes suddenly dove, trailing long pale strands that stuck and clung as the planes whipped around the groups, shot up, exuded more of the pale substance, and dove again. Behind the planes were left knots of men struggling with clinging filaments like so many flies trapped in webs. During the

confusion this caused, a number of pale blue parachutes drifted to earth, burst into flame and disappeared on touching the ground. Small devices with caterpillar treads and long whiplike antennae crept out toward the kingmen, who were now broken up into innumerable knots of individuals stuck together in a complex pattern with strands running in all directions. Just then, the long antennae of the creeping devices approached the struggling soldiers.

Monnik watched as the kingmen's triumphant army began to retreat.

One of Monnik's officers said dazedly, "It's victory, sir."

Monnik grunted. "If it lasts. Signal Karrif to open the attack in the south."

"Look there, sir," cried an officer.

Monnik looked around to see on another screen, a huge host of kingmen spread over the land within the river bend. Beneath the cloudy sky, some were still grimly coming forward. Others were hastily going backwards. These men were not stuck by sticky strands, but appeared to exist in the center of a faint swirling gray haze. The majority of them appeared demented, and shrugged their shoulders, coughed, nervously reached down inside their jackets, batted the air, slapped their wrists, necks, and ankles, gritted their teeth, hopped, rushed in and out of stalled groundcars, climbed on top, sprang off, and then began to dig as if their only hope was to melt into the earth.

Monnik looked up in awe. "That's nerve-gas, isn't it?"

"No," said Hunter, "that is a brand of tiny black fly, selected from a type found in northern swamps and forests on Earth, and specially bred for biting power, hardiness, and ease of incubation. You'd be surprised how many can be packed into the space occupied by a single bullet, and these things *seek* their targets. We're also dropping other insect pests to vary the agony."

Monnik squinted at the screen. "But—mere bugs can't stop an army."

Hunter turned away and said into his headphones, "Bombing raid, eh? Good. Get our plane with the enemy markings up, and see if you can sneak into their formation and go back with them—don't complain. You volunteered—A few of our Superstrength hornets and yellowjackets will keep the enemy pilots away and their planes down long enough for us to make a leaflet raid on the nearby cities and villages."

"Leaflet raid?" said Monnik.

Hunter wordlessly handed him a neatly-printed oblong of paper. At the same moment as Monnik started to read it, an officer rushed in.

"Sir! The wind's shifted! *Bugs*—"

"Aah!" said Monnik irritably. He waved the officer to silence, and began to read the paper.

A kind of swirling gray fog came in the door. Monnik ignored it. The staff officers looked to Monnik for guidance, and stood firm. Hunter went straight out a window on the opposite side of the room.

Monnik was reading in astonishment:

# CITIZENS!

For reasons of strategic rearrangement, your victorious army will, within the next day or two, move back through certain towns and villages in rear of the present lines.

You will, of course, firmly assist the military authorities in every way possible. For example:

1) Soldiers who have gone violently insane under pressure of enemy action will be cared for.

2) Troops suffering from vicious insect pests will be treated at houses designated by troop commanders.

3) Infested civilian houses will be burnt to the ground.

4) Citizens will borrow the guns of soldiers temporarily out of action, and turn out to resist roving bands of savage enemy.

Monnik became conscious of a peculiar fuzziness. The air before him seemed to be filled with innumerable tiny gray specks. He swept his hand through the air, and that rearranged the specks. He felt a surge of irritation and decided that the thing to do was to ignore the presence of the creatures. He looked up.

An officer with one hand across his face and the other fanning the air gave a guilty start. The room was filled with officers turning round and round, slapping wrists, necks, and ankles, snorting, coughing, and hopping from one foot to the other.

"Here," snapped Monnik. "Ignore these irritations. There's work—"

Something went down his throat to the entrance of his lungs. Monnik coughed desperately. That only made things worse till he remembered to keep his mouth shut as he inhaled. Meanwhile, from those few spots where he wasn't liberally covered by bandages, came an intense itching, and a sensation of being crawled over by countless tiny feet. Monnik grimly tried to ignore it. Now the things were going up his nostrils, crawling out onto his eyelids, and buzzing around inside his ears.

From outside came Hunter's voice. "Anyone who wants repellent, come on out here!"

Various officers began to edge for the door.

"None of that!" snarled Monnik. "Back to work!"

The officers milled around, futilely making an occasional grab at a report or fumbling with a movable symbol on the map.

The things were now biting Monnik on the eyes, on the face, in the ears and nostrils, on the lips, the backs of his hands and his wrists, and were working in from all directions to bite him through his thick fur, so that while it was bad now, it was bound to get worse shortly. Monnik estimated that he had killed possibly twenty of them, and the space around him plainly contained thousands eager to land.

Monnik told himself that a good general knows when to retreat. He growled, "Follow me, men!" and headed for the bug repellent.

It was only a few days later that the kingmen, their troops in flight before Monnik, and their civilians in flight before their troops, sent Monnik an emissary.

The emissary, his face puffed and bandaged, with eyes swollen nearly shut, stood swaying uncertainly as he glanced from Hunter to Monnik. The feathers at the back of his neck were badly rumpled—a sure sign of illness amongst the kingmen—and he looked as if he might collapse at any time. In a croaking voice, he said, "Where's the surrender terms? I want to sign."

Monnik had his staff draw up a suitable document, and meanwhile the kingman sat dozing in a camp chair, his head nodding forward and snapping upright, with one hand gripping the edge of the chair and the other swishing the empty air like a traveling fly-swatter.

The sight was beginning to unnerve Monnik when the document was brought over. He checked it carefully, then had an orderly shake the emissary awake.

"Here," said Monnik, "you can read this, and if—"

"Don't want to read it," the emissary interrupted. "I just want to sign it. *Then* you'll get rid of the bugs, won't you?"

Monnik glanced at Hunter, who nodded. "Yes," said Monnik.

The emissary scratched the pen rapidly across the bottom of the paper, then said, "We'll need an-

other signature." He stepped to the door.

A dignitary covered with poultices was carried in on a stretcher, and allowed his hand to be guided across the page. The kingmen then sham-bled back to their groundcar and were loaded in.

"Great space," said Monnik, "isn't that a pathetic sight?"

"They'll recover," said Hunter. "If we'd blown the battlefield off the planet, they might have cause for complaint."

Monnik watched the wavering groundcar for a moment.

"Well," he said, "we beat them, all right, and I'm glad that's settled. But I can't help wondering."

"About what?"

Monnik said uneasily, "Was it *war*?"

"An interesting question," said Hunter. "And if a 'layman' makes a new discovery or invention, a host of professionals will ask, 'But is it *scientific*?'"

He pointed down the road, where the kingmen's groundcar weaved around the curve and crept out of sight.

"As I told you when we got here, we aren't regular troops. We're irregulars. And there's only one yardstick you use to judge a job done by irregulars."

"What's that?" said Monnik.

"The simplest yardstick of all," said Hunter. "The performance test: "*Did it work?*"

THE END

# NEXT DOOR, NEXT WORLD

By **ROBERT  
DONALD  
LOCKE**

*Almost any phenomenon can  
be used—or act—for good or  
ill. Mutation usually brings ill  
—but it also brings greatness.  
Change can go any direction.*





UNGRILY, the cradled vessel's great steel nose pointed up to the distant stars. She was the *Cosmos XII*, newest and sleekest of the Space Service's rapidly-expanding wing of interstellar scout ships, and she was now ready for operational work.

Major Lance Cooper, a big man with space-tanned features, stood in the shadow of the control bunker and watched the swarm of ground crewmen working at last-minute speed atop the loading tower. Inside him burned a hunger, too.

Hunger, and another emotion—pride.

The pride swelled Lance's open-collared khaki shirt, as he envisioned himself at the ship's controls within a few minutes. Finally, after long years of study, sweat and dedication, he'd made it to the Big League. No more jockeying those tubby old rocket-pots to Luna! From here on, he was going to see, taste, feel what the universe was like way, way out—in Deep Space. The *Cosmos XII*, like her earlier sisters, was designed to plow through that shuddery nowhere the cookbooks identified as "hyper-space."

Lance's glance shifted upward, scanning the velvet backdrop of forsy white points of light against which the slender, silverish, almost wingless form stood framed. More stars than a man could visit in a lifetime! And some already within grasp!

His exultant feeling grew, and

Lance kept his head tilted backward. Alpha Centauri, the most popular target, was not visible at this latitude; and Barnard's star, besides being far too faint, lay on the other side of the sun. But there shone Sirius, just as bright as it had glittered for the Greeks, and frosty Procyon, a little to the north. Both orbs twinkled and beckoned, evoking strange and demanding dreams!

One day, Man would be able to make landings. Teams of scientists outfitted to the eyebrows and trained to cope with any environment or emergency, would explore unknown jungles, *llanos*, steppes; tramp up and down fertile vales and hills under blue-hot alien suns. Perhaps, they might even contact native species boasting human intelligence: mammalian hunters and fishers, city-building lizards, sky-probing arachnids—who knew what?

But now, of course, all that Headquarters permitted of flights was the most furtive of reconnoitering. You hoisted your scout ship aloft under high-gee, cleared the ecliptic, then swung out of normal space and *jumped*. When you materialized in the new sector, you set your cameras clicking, toggled all the other instruments into recording radiation, gravity pressures, spectroscopy, at slam-bang speed. The very instant your magnetic tapes got crammed to capacity, you pressed six dozen panic buttons and scooted like a scared jackrabbit for Home, Sweet Home.

Adventure? It wasn't even mentioned on the travel posters, yet.



But, adventure would follow.

Some day.

Meanwhile, at the taxpayers' expense, you—the guardian of the Peace—had enjoyed the billion-dollar thrill of viewing our Solar System from light-years and light-years of distance. Or so the manual said, right here on Insert Page 30-Dash-11-Dash 6.

Lance thought about those veteran hype-pilots who'd already poked around in the great black Cold out there. How was it they were always compensating for their frustration?

Now, he remembered.

Having few tall tales to spellbind audiences with when they swooped back down on Home Base after their missions, the hype-pilots got around it by bragging up Terra itself, and how at least you could always depend upon good old Earth to come up with something to relax this Warp-Weary generation!

"Something, for example, such as we now hold in our hand, brothers!" Lance could hear them now. "Name-ly, one of these superbly-programmed cocktails, as only Casey can turn out."

(Casey was the Officers Club bar-keep and much-beribboned mixologist.)

"A real 'Casey Special'—look at its pristine beauty! What better consolation can a man ask, for not having gotten to land at the apogee point of his orbit?"

"Besides"—this usually came out after two or three more tongue-loosening toasts had been quaffed to the beasts of Headquarters—"what's so

blasted special about landing on some God-forsaken rock *out there*?

"Hell's bells! Earth is a planet too, isn't it? And when you've been cooped up in a parsec-gobbling pot for a very, very long two weeks, any planet looming in your viewscope cries to be set down upon. Your own prosaic hunk of mud is good as any!"

Lance Cooper's rambling thoughts broke off their aimless tracking to swing one hundred and eighty degrees in midspace and dart right back to Earth.

Here at this very moment—and less than a hundred yards away—came Terra's foremost attraction for him. His hammering heartbeat would have placed him on the "grounded" list immediately, had there been a medico with a stethoscope hanging about to detect it.

The attraction's name was Carolyn Sagen, and she was hurrying directly across the concrete apron.

Even under the incandescent work-lamps of the crew scrambling up and down the ladders, she looked as fetching as a video starlet making her first personal-appearance tour of the nation. Only the fact she was Colonel "Hard-Head" Sagen's family pride and joy kept the helmeted and half-puckered up techs on the rungs from whistling themselves dry in their enthusiasm.

Now, she had completely bypassed the work area. Here, the lighting did not reach and the paler illumination of starshine took over. It seemed to render the girl's soft blond

hair and her full warm lips more intimately something belonging to Lance Cooper alone—and he liked that. He saw that she had turned up the collar of her tan coat against the night wind.

While still a step or two distant from him, Carolyn halted. Her worshipping eyes rested fully upon the big pilot. Lance thought he detected a troubled expression.

Then, the girl managed a tight smile that conveyed her outward resignation to all Man's absurd aspirations to own the galaxy:

"Don't worry about 'Security,' Lance. Dad wrote me out an O.K. to skitter up this close to the Launching Area. You know"—she gestured self-consciously—"big crucial moment . . . lovers' farewell . . . I pulled all the stops, but it worked."

"Matter of fact," she added, in an obvious attempt at facetiousness, "Dad opined he'd have walloped the daylights out of me, if I hadn't put up a struggle to get near my man."

Then suddenly, she was not at all brave, anymore.

Suddenly, she had burrowed into his arms. "Oh Lance, had there been no other way, I'd have clawed right through fence and revetments to get to you! Men, men! Just because something's *out there*, as you say . . . why is it so important to build ships and go out and look at it?" Her fingers dug into Lance's shoulders. "Women are saner . . . but maybe that's why men need us." The grip of her fingers shifted, tightened. "Kiss me, you big baboon."

Lance kissed her. A tender kiss, yet gusty enough that he lifted her from the ground and her high-heeled shoes kicked in free fall.

The pilot found his girl's breath warm, loving. Yet her cheeks seemed colder than even the crisp air should account for. And her body was trembling.

He planted a second kiss, then set her down.

"Hey! This is no way for a Space Service brat to carry on. Why, you're just about to—"

"To cry, Lance? No, I wasn't. It's just that . . . you'll be gone so long."

He punched her playfully. "Two measly weeks out, two weeks to astrogate her back home. And once I've got my feet wet at it, it'll be like shooting ducks in an alley."

Carolyn reached out, brushed a windswept tuft of hair from above the rock-steady eyes that looked at her.

"I know, Lance. I even realize that just ten years ago, women had to put up with separations from their sweethearts or husbands that lasted months. When the old pioneer ships used to limp back and forth to Mars and Venus. But I'm different, I guess. Weak, maybe. Or just plain scared—"

This didn't sound like the blithe-spirited girl he'd pursued for a year, then wooed and subdued. Lance studied her, then said slowly: "You're scared. About what? My first flight?"

Carolyn's head bobbed timidly. Lance flashed a reassuring grin. "Everything has to be a brand-new

experience, at some time or other. Me, I prefer to look at hype-flight from the point of view of the service. A routine thing. Just takes training. Otherwise," and he shrugged, "it's no more a risk than hauling groceries upstairs to some weather satellite."

"Is it, Lance? When one or two ships out of every ten never make it back at all. Just disappear . . . somewhere . . . while the others—"

"One out of thirty or forty, you mean. So hyperspace is a little tricky."

"And there's always pilot error to blame, too, I suppose?"

"Now that you mention it."

"Only my man is immune from everything?"

Lance smiled, a little wryly. "Any pilot can make boo-boos, Carolyn. I'm determined to try awfully hard not to." He added a slight qualification to his statement. "I've always been pretty lucky up to now, at not getting lost."

"I thought the guidance systems and the autopilot computers took care of all the astrogation corrections?"

"On a theoretically perfect flight, yes. It's equally true, however, that hyperspace's geometry doesn't always resemble the sort of lines and angles you find in our own universe—"

Lance abruptly stopped, realizing he was quoting text; his mind groped for a better way to explain. But Carolyn plunged in first:

"You see, there do sometimes develop special situations."

"Sure, sometimes." An exasperation crept into Lance Cooper's voice, despite his effort to keep it out. Hell, he was just a pilot; not a rated mathematician. He'd fly hyperspace by the seat of his pants, if he had to.

"Lance," said Carolyn.

"Yes?"

"You feel it too, don't you?"

"Feel what?"

"That there is danger involved. That something dreadfully, dreadfully wrong *can* happen to you while you're out there. No matter what the eggheads say about it." A paroxysm of sobs suddenly racked the girl's slender body. "Oh, darling, don't go!"

"Honey, honey!" Lance patted her thin shoulders.

"I love you so much."

"Love you, too, Carolyn. You know that."

"We shouldn't have postponed the wedding. It was wrong to set the date back."

Lance shook his head. "Sorry. I couldn't see it any other way."

He hugged the girl to him; she seemed more desperately frightened than he had realized. And again, as always when it came to comforting somebody, he felt as awkward and clumsy as some big lumbering repair-tug out in space—say—trying to patch a small trim patrol craft.

But especially, he felt helpless in the presence of this frail, clinging, lovely piece of femininity he wanted so dearly. Nevertheless he could keep on trying—blundering though his words and gestures might be.

"Carolyn, you think I wanted to

chance making you a widow twenty-four hours after you became a bride?" Lance took a deep breath. "So I did maintain the percentage wasn't great. Still, it does exist. I'm aware of that. I just don't let it concern me. But you, Carolyn—don't you see, hon? Lance Cooper couldn't let anything bad happen to his best girl."

"I'm trying to understand," said Carolyn.

Lance's blunt, serious face peered into hers. "Tell you what I will promise to do."

Hope cleared away some of the mistiness in Carolyn's eyes. She looked up at him. "What, Lance?"

"Once I've knocked off my shell-back trip through the hype, we'll stage the fanciest wedding this old space base ever goggled its eyes over. I'll even see to it, the chaplain samples the spiked punch. And you remember what a raconteur the padre proved to be when Light-Colonel Galache got spliced?"

Carolyn Sagen managed a wan smile.

Lance revved his pep-talk up a few hundred r.p.m. "After all, think of it this way. Suppose I hadn't beat my brains out to get into hype-training? I'd never have wound up at this base. You and me would never have met. I'd never have fallen for you like a ton of space-ballast."

"Oh, I know you're right," said Carolyn, clinging more tightly than ever to Lance's solid frame. "You're always right, just like the Space Service is always right. But I have a woman's intuition. And I . . . I sense—"

Unable to finish, she released her grasp and once more withdrew into herself.

Lance's big muscular hand reached out, tilted the girl's chin upward. Her face was tear-stained for sure, now.

"Honey, this won't ever do."

"I can't help it."

"You're torturing yourself with useless premonitions." Lance wiped the briny shine from the girl's cheeks as he talked, his own voice getting hoarser. "Carolyn, I love you so much that I . . . well, you know I happen to hunger for you more than I do that Christmas tree on my control deck. But I just couldn't give up a chance to solo out to the stars. I couldn't, baby. I'd probably be court-martialed, anyhow," he added.

"No, Lance. They wouldn't do that. Not unless you actually got into space, then turned back. I asked Major Carmody."

"Carolyn! You didn't?"

The girl nodded, affirming the truth of what she said. "Lance, I had to. T—there are some things I know about that you don't." A note of sudden urgency now tinged her voice. "Strange unfathomable things. Many of the other pilots who've come back have not been right. I think it has something to do with their having been outside of normal space—"

He stared at her. "I just now realize you're trying to tell me something."

"Lance, I happened to overhear Dad telling Mother something one night. Apparently, he'd been rolling

and tossing in bed, couldn't sleep. And Mother's looked after him so long, she just had to know what was wrong. They went downstairs and she poured him a stiff drink. Then in return, Dad poured out his troubled soul to her. And Lance—"

"Yes, Carolyn?"

"The most probable reason why some hype-pilots never quite make it back to our world is that the men involved—"

"The men? You mean, the pilots?"

"No, the brass. They haven't told the pilots about the fissioning of anything that gets into hyperspace—"

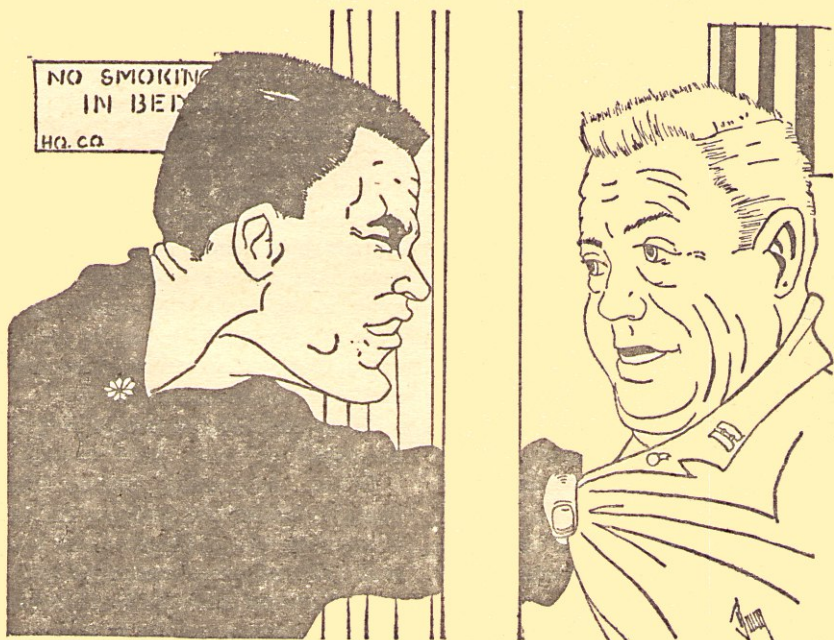
Carolyn's breath gave out in a sudden gasp. Her eyes moved away alarmed, and Lance's own glance

turned simultaneously. He saw Colonel "Hard-Head" Sagen and two other officers coming across the area.

Time had run out on them.

"Carolyn," Lance said, hurriedly. "I've gabbed with quite a few vets of hyperspace. At the Club and in my training, both. Sure, a man feels like he's been crammed into a concrete mixer when he's burning up light-years in a hyper ship. But after a while, I'm told, even your brains get used to being bounced around." Lance took the girl's hands and squeezed them between his. "So let's not worry, huh?"

Carolyn started to say something in rebuttal, but her father and his aides were already upon them.



Colonel Sagen was a tall thin man of erect military carriage. His features were crisscrossed with radiation scars and his voice boomed out like a military drum. Yet when one got to know him, he wasn't so gruff. On the base, he commanded two thousand military personnel and half that many scientists and techs: a tough job, and one that he was giving his best.

After returning Major Lance Cooper's brisk salute, the colonel unbent and gave his prospective son-in-law a hardy handshake.

"Lance, I hope you'll be able to keep more of a rein on this little space-filly of mine, than I've been able to. She was determined to see you off."

"I was glad to see her, colonel."

The colonel smiled. "Can't think of a man on this base I'd rather turn Carolyn over to."

"Thank you, sir," said Lance.

"Been counting the minutes to take-off, I suppose?"

"He's hardly had a chance to, Dad," Carolyn broke in. "What with me in his hair!"

One of the colonel's aides glanced at his watch, then opened up a brief case and took out a sealed envelope. The colonel relieved him of it and handed it to Lance.

"Your flight orders, Lance. Got the pre-set tapes installed and checked?"

"Yes, sir."

"Well, you should know your on-ions now, if you're ever going to. Best of luck, son."

"Thank you, colonel."

Lance turned. "Good-by, Carolyn. Just four weeks now, like I said."

"I'll be waiting."

"First jump's always the hardest, I hear," spoke up the second aide, cheerily. Like a great many other ex-ecs, the officer boasted no active space rating, though he did wear the winged moons of an observer.

But Lance and Carolyn were again quite busy, and did not hear.

Inside the shell of the *Cosmos XII*, Lance, sitting flat on his back against gravity, looked up at the sweep hands on the control deck clocks and hurried through his pre-jump check list. Tension mounted inside him. He contacted the Operations people in the bunker over the radio net. Colonel Sagen's voice came in clear: "Five minutes, Lance."

"I am receiving. Area cleared?"

Traffic broke into report: "Take-off will proceed on schedule."

The function lights on the "tree" in front of Lance shone green. Gyros were caged; the tapes were set to roll. Lance's big hands hovered lightly near the manual over-rides. He was ready to fly, and the autopilot lights were already winking out in count-down. But you never could be sure until the last moment.

What had Carolyn been trying to tell him,

Before he could pursue the thought, he felt the pressure of the rising ship take hold; gently at first as she cleared the ground; then heavier and heavier, until his face felt like a rubber mask under the acceleration

and his heart commenced pounding.

It didn't take long these days for any ship to build up a tremendous velocity in space. Lance cleared the ecliptic by a hundred million miles; then with the Solar System spread out flat below him, he opened up his flight orders. His destination, he discovered, was Groombridge 34, a visual double star. Right ascension: zero hours, thirteen minutes. Declination: forty-three and four-tenths degrees. Nearly twelve light-years distant.

Since the star's apparent location was nearly halfway up the sky from the celestial equator, Lance could begin the jump any time and not worry on his way about skewing too near the gravitational field of any large-massed body in his own immediate vicinity.

He permitted himself one brief glance at the blazing universe that hung all about him: the bright fixed lights that were innumerable suns against an eternal blackness, and the luminous dust in between that was even farther-flung. Confusion and chaos seemed to dwell here; if a man gazed too long, he could quietly go mad. But even more insane, he anticipated, would be the thick, writhing nothingness of hyperspace.

Lance Cooper made one final check of all the ship's operating components; then crossed his fingers and cut in the hype-drive.

Instantly, his teeth crashed together and clenched; his strapped-in body was jerked back in its cushioned seat; sweat beaded his brow. A thousand needles prickling his skin couldn't

have been worse. He had been told once that the switching-out from this known universe into an unknown one would feel just like a ten-thousand volt jolt in an old-fashioned electric chair; and now he could believe it. Every cell in his body had begun tingling; his stomach pitched under a racking nausea; and an involuntary trickle of saliva dripped from his mouth the moment he got his jaws working again.

But Lance fought the nausea, fought the sickness, and gradually as his flesh accommodated to the change, he felt better.

It was then that the most disturbing phenomenon of all took place. He felt for a moment as if he had been split into two persons. No, four persons, eight, sixteen, an infinity of other selves. They were all beside him, in him and out of him. His eyes ached. He shut them.

When he opened them again, everything was almost back to normal. The other selves had vanished. Only the constant throbbing vibration of the ship remained; yet it was a discomfort that had to be endured for four solid straight weeks now. There was no other means known, by which a man-made vessel could travel faster than light.

Funny about that four weeks, too, thought Lance. All distances in hyperspace were the same, no matter where you wished to go; it required no more than fourteen days and no less, regardless of whether you jumped one light-year or fifty. Lance had always understood there were

equations on file at HQ, which explained the paradox. But not being a math expert, he had never missed not being allowed to see them.

He flicked a switch and opened up his viewports again. The starry universe had vanished. The *Cosmos XII* was riding through a gray void. Alone and—

No, it wasn't alone!

Again, Lance's vision suffered a wrenching sickness. Out there in the colorless vacuum, hundreds of replicas of the *Cosmos XII* rode along beside him, above him, below him, stretched out in all directions.

There had been nothing in the manuals about this.

Lance stared at the meaningless phenomenon for a long time despite the fact it made his brain ill. At last, he decided it was harmless, whatever was causing it. He shook his head slowly and closed the ports down. He hoped Groombridge 34 would be less taxing.

The system was.

After the ship reverted to normal space in the vicinity of Groombridge 34, Lance hovered about it exactly twelve hours, following all the instructions in his manual to the letter. He started up the cameras and other recording instruments. All went well, there were no incidents, no vessels disturbed him; though had the two components of the binary been at periastron, it would have simplified the work with the position micrometer. If anything else of interest had been detected, it would have to be

deciphered from the film and tapes later. You can get as close as four billion miles to an Earth-sized planet in space—and it'll still show up fainter than a fourteenth magnitude star.

Somewhere in the galaxy, Lance supposed, there must be other races building spaceships and guiding them from sun to sun. But thus far, the scout ships from Terra—for all their magnified caution—had never run into signs of any.

The old veteran hype-pilots had the best philosophy after all. Earth was the choicest hunk of mud you were going to find. *Enjoy it, brethren.*

Well, he would certainly live it up when he got back, Lance swore. He would have his wedding; import Casey from the Club to spike the punch; and, perhaps after he'd gotten in his required number of scout-missions, he might even settle for a chair-borne exec's billet, himself.

Exactly twenty-eight days and twelve hours from the time of his departure from Earth, Lance Cooper was back home again. The *Cosmos XII* re-materialized out of hyperspace in the neighborhood of the Solar System with its fuel tanks scarcely a third depleted, but its pilot a drained man. Lance, truthfully, not only felt weary and torpid, but a great deal disappointed.

He contacted Traffic, asked for and got a landing trajectory. A few hours later, he had coasted home and the trip was over.

He scrambled down out of the ship, hungry for Carolyn.

The base hadn't changed any in a



month, that he could see. A couple of new floodlights put in, perhaps. Some brass were emerging from the control bunker. Colonel Sagen, several others. He recognized them all. Two were SSP's—Space Service Police.

When the colonel got close, Lance tossed off a salute and an insouciant grin: "Well, the Prodigal made it back home, sir. Hope that pessimistic daughter of yours is stashed around somewhere. Otherwise—"

"Otherwise, what?" returned the colonel, unsmiling.

"Why I'm liable to go busting right through that fence," said Lance. "And say, if anybody's worrying about the *Cosmos XII*, she flew like a dream, colonel. Matter of fact, she—"

Colonel Sagen's jaws snapped together. Wheeling, he barked at the two SSP's: "Spacemen, arrest this officer! Immediately!"

Lance couldn't believe his ears.

"Hey, wait a minute!" he protested. "What have I done?"

Nobody answered. Not at first.

"Well?" Lance asked again, a little more uneasy this time.

"I have no daughter, major," Hard-Head Sagen growled, standing with his legs braced apart and his ramrod shoulders looking businesslike. "I never have had."

The space cops sprang forward. One drew a pistol, held it on the returned pilot, while the other quickly moved behind Lance and pinioned his arms back.

"Is this a joke, colonel?" Lance demanded, straggling. "If it is, I don't appreciate it. You know you've got a daughter, and I'm going to marry her!"

The colonel's jaws clamped tight; and he shook his head from side to side, as if he were dealing with a person suddenly out of his mind. Then he acted.

"Put this man under close confinement," he ordered Lance's guards. "Allow no visitors of any kind." The colonel's tone was harsh and worried. "I've got to buck this matter to HQ. We can't have it blow up right now, God knows."

The space police nudged Lance. "All right, major. Let's go."

Lance's anger seethed to a boil. Hunching his shoulders, he rammed back against the guard holding him, sending him tumbling. What was inside his mind to do if he managed an escape, he couldn't have told. He only knew he had to get away. The colonel had flipped.

And where, by the way, was Carolyn? It seemed impossible she could be in on it, too.

He stood free for a moment, watching warily.

"Hold him!" shouted Colonel Sagen. "Don't let him run loose."

"We got gas pills, colonel" suggested the space cop Lance had bowled over. The man was rising to his feet.

"Use them."

Lance started to run. Over his shoulder, he saw the guard reach inside a small pocket in his webbed

pistol belt. The man gestured to the others to duck back out of harm's way. Then, his throwing arm reared back and sent a pellet sailing in a high arc. It landed at Lance's feet and burst instantly. Yellowish gas billowed out. Its acrid fumes penetrated Lance's throat and nostrils. He began coughing. Then, all the fight suddenly ebbed from him. His knees buckled. He was stumbling, falling. The sky reeled.

And very indistinctly, from far away, came the colonel's voice, barking: "Put him in the brig until he recovers. I repeat, let nobody see him. And another thing—I declare everything that's happened here today classified information. If a single word leaks out, I'll have every man-jack among you placed in solitary and held for court-martial."

Then, Lance knew nothing more.

When at last he recovered consciousness and was able to sit up in a kind of groggy stupor, Lance found himself, for the first time in fifteen service-devoted years, on the inside of a guardhouse looking out.

With sardonic melancholy, he recalled times on his O.D. and O.G. tours when he had inspected various prison areas, peered into the cells, and often felt mildly sorry for some poor spaceman doing time for some minor infraction. There had never been very many offenders. Discipline on space bases was not a pressing problem: the corps was an elite branch and intransigent candidates were weeded out quick.

Well, now he was a prisoner, himself. He, Lance Cooper, Major, Space Service, stood behind bars. And no matter how hard his face pressed against those bars, he could only see as far as the corridor extended in either direction.

It wasn't far enough.

Nor would anybody talk to him. He couldn't even get the time of day.

Not since his probation as a plebe, had he consorted with such a bunch of "hush-mouths." Had he no rights as a commissioned officer and a world citizen? He still didn't know why he was incarcerated, or what regulation he had broken.

But that wasn't his most nagging worry.

What preyed on his mind most was Carolyn.

*Where was she?*

*Where? Where? WHERE?*

He could have lowered his head and pounded it to a pulp against the wall, in his rage and frustration at being confined. But banging his brains out wouldn't help. Besides, he was going to stand deeply in need of his gray matter, if he hoped to get out of this one.

At evening time, a guardhouse trusty brought him his supper on a tray. Also, the man tossed him half a pack of cigarettes when Lance sought to bum just one. But when the pilot started pitching questions back, the trusty looked scared and unhappy and quickly limped away.

The night dragged on, as unending seemingly as one of Luna's two-week darkouts. Lance smoked, paced

the cell from wall to wall, occasionally plopped down on his cot and went over everything that had happened, trying to find some pattern to it.

But there was no pattern.

Next morning, he splashed up and shaved beard away from a tired, red-eyed face in the mirror. Then, he waited. No one came.

Finally, at noon a new officer checked in for duty at the guardhouse. Lance recognized him as a young ordinance captain he'd met before. He called out to the man. The officer, striding down the hallway, wheeled at the sound of his name and came back to the cell. His eyes bugged slightly, when he saw Lance: "Holy smoke, major! What've they got you in for?"

"Search me." Lance was overjoyed to find someone, at last, who didn't dummy up. "I thought maybe you might have a notion."

"I just came on duty. But if there's a charge sheet lying around, I might dig up something from it."

"Would you try?"

The captain held up two fingers and grinned. "No sweat."

Lance waited some more.

The captain did not come back, however, until several hours later. After Lance's evening meal, in fact. His face bore a puzzled frown.

Lance stood at his cell door, gripping the bars. "Well?"

"I checked. Seems the brass are holding you for observation until some headshrinker gets in from HQ.

A specialist in hyperspace medicine."

"Then, how come I'm not in a regular hospital? Why the jailhouse?"

"Beats me, major. I can tell you this, though. You're not the first hype-pilot who's been dragged in here screaming."

"But I wasn't screaming! I was perfectly calm and collected, when I climbed down out of my ship. All I did was ask about Carolyn."

"About who?"

"Carolyn Sagen. Old Hard-Head's daughter." Lance felt a sinking feeling. He stopped, cocked a wary eye at the other officer. "Don't look at me that way, man."

The captain had been staring hard at Lance. Now, he began shaking his head back and forth, slowly and sadly.

"What's that supposed to mean?" Lance asked.

"It means Colonel Sagen doesn't have a daughter."

Lance snorted. "Don't tell me that. I'm engaged to her."

"Sorry, major. I've been around the colonel and his wife since I was a kid. He got me the appointment to the Academy. They've never had any children of their own."

"Why, you—" Lance reached through the bars and grabbed the captain by his shirt collar, jerking him against the bars. "It's a lie! A conspiracy! Maybe you think I'm nuts. But I'm not!" He commenced pummeling the captain with his free fist. Then he thought of something better. He snatched the captain's gun from his holster and leveled it.



"I'm getting out of here," Lance announced. "Open up this door—or take the consequences!"

The captain, his face ashy white, submitted and unlocked the cell door. Lance stepped out, got behind the officer, and prodded him into the cell. Tearing a sheet into strips, he tied the man to the cot and gagged him. It took a very short time.

Then, he softly padded down the hallway. He caught the sergeant of the guard napping in his chair. In a moment, the sergeant, too, was trussed up, gagged, and whisked into a spare cell. Lance then tucked the captain's pistol inside his shirt and ventured outside.

It was a moonlit night. A patrol jeep was parked on the drive, begging to be commandeered. Lance hopped in. There was something he had to find out for himself, and only one way to do it: Go to the place where they kept the answers.

Wheeling the jeep along the military street fast as he dared, Lance headed for the base housing area. Colonel Sagen's trim two-story brick residence was where he hoped to pay a call. He knew the route by heart. He'd been a guest there often enough.

The colonel's driveway was empty of cars, he was happy to notice, when he reached the house. He parked,

sprinted up to the porch, and knocked on the door.

Presently, footsteps sounded inside and the door opened a few inches. But it was not Carolyn whom Lance saw peeping out at him. It was another woman, older. He recognized Mrs. Sagen.

Lance was blunt. "I've got to see Carolyn, and I haven't much time. You'd better let me in."

An apprehensive, almost shocked expression briefly flitted across the face of Carolyn's mother. It was as if she had never set eyes on Lance Cooper before. Even the gold oak leaves on his shoulders seemed to reassure her but slightly. She kept the door chain in place between them.

"I'm sorry, major. I'm not sure that I understand you."

"Don't malarkey me, please. You know who I am and who I want. Carolyn, your daughter."

"Oh," said Mrs. Sagen. It was said in a way that revealed nothing.

"Look," said Lance, impatiently. "You do have a daughter. I've dated her. So, all right," he waved his hands, "she's been spirited away for some reason. I still think I've got a right to know why."

"Oh, my!" said Mrs. Sagen, and her hand flew to her face. "You must be that scout-ship pilot who showed up yesterday. The one who—"

"Yeh, the one everybody figures for psycho. But I'm not, Mrs. Sagen. You know I'm not." Lance took a deep breath. "Can I come in? I just want some facts. After all, this crazy farce can't go on forever."

The colonel's wife still looked doubtful, but Lance Cooper had a way of pressing a point hard when his interests were at stake. He began talking rapidly and convincingly.

He got in.

The light indoors was better. Lance's eyes squinted, as they adjusted from the gloom of the porch. Somehow, Mrs. Sagen didn't look quite as he remembered. Her hair was much darker now; he was sure of that. Maybe she had dyed it. Yet her features were certainly harder and bonier. More like a replica of her husband's. And her breath smelled alcoholic. Could a mere month have made that much difference?

The house had been refurnished too, Lance noticed. The living-room decor was more severe and functional. And the pictures on the wall were garish. Not Mrs. Sagen's type, at all.

*Hey, wait a minute!* he told himself; *speaking of pictures*—his glance skipped to the far corner of the room. A triptych of photos of Carolyn had always been on display on the mantelpiece. *They would prove that—*

Lance's jaw dropped.

The photos had been removed.

"Can I get you anything?" Mrs. Sagen inquired. A little nervously, Lance thought. "A cup of coffee?"

"No, thanks. I'd rather hear about Carolyn."

"Coffee won't take a minute. I was just making some fresh in the kitchen."

Lance shrugged. "Well, O.K., if you've already got it ready."

Mrs. Sagen's mouth managed a fleeting smile; then she disappeared through a swinging door. Lance sat down in a wrought-iron chair. Finding it not comfortable, he sprang back to his feet and paced the floor. There sure was something wrong about the colonel's house. Something very oddly wrong. But he couldn't quite put his finger on it.

Suddenly, his quickened hearing caught the faint murmur of a human voice. Was it Carolyn? The talk seemed to be issuing from the kitchen—where her mother had gone. Lance tiptoed across the room, pushed the door slightly open.

Mrs. Sagen was on the phone. Her voice was excited; she was obviously straining to keep it at a low level. "I'm telling you, he's here! Right in our living room. And he insists I know somebody named Carolyn . . . Yes, that's right. But do hurry . . . Please. He's acting much odder than the others did."

Lance had eavesdropped enough. He turned away, glided rapidly out the front door and into the night.

Where should he go next? The jeep would serve to hustle him around the base for a while—but eventually he would be chased down and recaptured. And as for crashing any of the exit gates and thus attaining to greater freedom, he knew they would all be barricaded and heavily manned by now.

Lance was still burning over Mrs. Sagen's double-cross. Did he want coffee? she had asked. *Coffee!* his mind repeated, disgusted. What he

needed was something stronger. A good stiff drink.

That was it! The Officers Club. Casey would be on duty at this hour. Lance would ask him to mix him a double for old times' sake. Then, he'd meekly surrender and quietly go crazy in his cell, until the headshrinker came and confirmed it for real.

The pilot got back in the jeep and drove on. When he reached the Club, he wheeled the vehicle around to a rear entrance where bushes made the grounds shadier. Parking, he got out, strolled into the building as sneakily as if he'd been an inspector-general paying a surprise call from out of Space Service Headquarters.

Few officers lounged about. Most were at tables and engrossed in their own imbibing. Lance strode up to the bar, perched himself on a high stool. Casey, whose hair was red as a Martian desert, was rinsing glasses. He stopped at his task and came over, wiping the counter with a wet towel. "What'll it be, major?"

"One of your Specials, Casey, my friend."

"Beg pardon?"

"You know—one of your Casey Specials. Where you start off with half a glass of Irish whisky, add a dash or two of absinthe, a drop of—"

"I don't stock no absinthe, major." Casey's freckled face was abruptly hostile. "You know that. It's against regulations."

Lance fought down a tremor. Everybody was in on it. Everybody. He compromised for a minute: "Give me

a slug of Teacher's on the rocks, then."

Casey measured out the drink for him.

Lance downed it. His hand gripped the edge of the bar. "Casey, do you know me?"

He watched Casey study him. The thick reddish eyebrows knit. "It's a pretty big base, major. Lots of faces. Sometimes, I kind of forget the names."

Lance's blood pressure gave a spurt. "I'm Major Lance Cooper! Hell, you've rung up my chits often enough!"

And his mind added: *How could you forget?*

"Major." Casey's eyes narrowed, while the uneasy suspicion in them grew. "We don't have no chit system at this club."

Lance's head felt like it would explode. He could take no more.

"You're lying!" he shouted. His big hands reached over the mahogany counter and shook the bartender like a squawk-box that had refused to function properly. "Tell me you're lying in your teeth. If you don't, I'll push them down your throat—"

Suddenly, Lance sensed people behind him. A firm hand clamped down heavily on his shoulder.

The pilot stretched his neck around. What now? His hands did not relax their murderous grip on his victim.

The arresting party had entered the club quietly. Now, they were ganged up around him: Colonel Sagen, his two aides, a fourth man Lance recognized as Major Carmody,

the base legal officer—and a fifth man too, who wore the insignia of the Space Surgeon-General's Department. A psychiatrist.

"Better come peacefully, major," rasped Colonel Sagen. "You've been 'cleared' for an explanation—and if you're smart, you'll listen to the spiel and play ball."

The way it was said made Lance feel he could trust the Old Man for that long. Anyhow, what choice did he have?

"It's about time," Lance sighed. He set Casey down, to the latter's greatly exhaled relief. "Only how come all the suspense?"

"It was very necessary," broke in Major Carmody.

"Was it? Well, you had me about to crack—if that was your object. Now then, would any of you mind easing my worries about Carolyn. She's O.K., isn't she?"

His glance shifted from one to the other.

"Isn't she?"

Nobody would reply—neither Colonel Sagen, nor any of the officers bunched-up around him.

Sweat suddenly broke out on Lance's brow. The chilly feeling went through him that if and when an answer was provided him, he wasn't particularly going to like it.

Not in the slightest.

Shortly afterwards, Lance was driven across the base by his captors and escorted into his commanding officer's private office. The two aides were dismissed, but the psychiatrist-

officer, who also wore eagles on his shoulders, and Major Carmody remained.

Colonel Sagen seated himself behind his desk.

"Major," he began, clearing his throat, "you imagine me to have a daughter. You're positive of it. You even visualize her so well, that you remember something about how you were going to marry her."

"You're not going to talk me out of anything on that score," Lance shot back.

"Perhaps, we don't intend to. Colonel Nordsen, here," Sagen indicated the psychiatrist, "has flown in from HQ to chat with you. He can explain the technical aspects of the phenomenon that has thrown you better than I can. I'd advise you to listen to him. He's just what you need."

"Just what I need? What else do you intend to do? Hypnotize me, so you can erase all my past?"

The colonel scowled. "Look here, major. You co-operate and learn to keep your mouth shut, we may be able to restore you to duty. But if not . . . well, what happens then will be entirely up to Nordsen. It could mean a padded cell. The development of hyperspace exploration has to go on, whatever happens to you."

"I'll tell you one thing to your face, colonel," Lance replied, hotly. "I'm not off my rocker."

"No one has maintained you were," broke in Colonel Nordsen. "But Colonel Sagen had to throw a curtain around you fast."

"Why?"

Neither officer answered.

Finally, Colonel Sagen said, "I think you'd better continue with him, Colonel Nordsen."

Nordsen was a youthful-looking man for his rank, yet prematurely balding. He wore thick-shelled glasses.

"Major Cooper," Nordsen began, "let's go back to when you put the *Cosmos XII* through its first jump through hyperspace. How well do you recall your experience?"

"I'll never forget it. You Earth-bound kiwis should try it sometime."

"Did you experience a feeling . . . perhaps, rather uncanny . . . that the whole thing had happened to you before? What psychologists call the sense of *déjà vu*?"

"No, I don't think so."

"Perhaps some other type of phenomenon was manifested? A feeling you'd been split in half, maybe."

"That did happen."

"Describe it."

"It was more than just being split in half. I felt like I was suddenly hundreds of selves. I could see other replicas of 'me' all around."

Nordsen nodded, thoughtfully. "That was what we call the 'Infinite Fission' syndrome. All those other 'you's' were personality matrices of yourself in alternate worlds. Did you notice anything else?"

Lance nodded, grudgingly.

"What?"

"Look, colonel. If I answer your



questions, will you answer mine?"

"Any reasonable ones, yes. That's what we're here for."

"Well, there was the disturbing thing about the *Cosmos XII*, itself. I saw images of the ship riding along beside me, out there in the hype. Where nothing material could possibly exist. Where not even light could reflect back, or any other wave propagation." Lance shook his head, recalling the experience. "What could have caused a hallucination like that?"

"It was no hallucination, Lance. It was real and has happened before. We can rest you easy on that point."

Colonel Nordsen removed tobacco from a pouch, stuffed his pipe, lit up. Bluish smoke formed a halo about him.

"Lance, the Space Service has been sending ships through hyperspace for nearly two years now. Only recently did anybody notice something was seriously wrong with the pilots who came back. Up until then . . . oh, a pilot might act a little queer for a day or two. But who wouldn't, cooped up alone in a steel projectile for four weeks? We thought very little of it."

"Uh huh," was Lance Cooper's only comment.

Nordsen transferred his pipe to his hand. "But eventually, even the Space Service gets around to putting two and two together on the slipstick. The incidents kept piling up. A pilot comes back from Epsilon Eridani, for example, and insists on giving everybody left-handed salutes. Another has taken a scout ship to 61 Cygni.

He insists at the Officers Club that Colonel Sagen here has a nickname of 'Old Hard-Head'. Nobody else on the base is aware of any such thing. Then, still another pilot—"

"Wait a minute!" Lance interrupted. "Hasn't he?"

"Hasn't what? I don't follow you."

"Colonel Sagen. Hasn't he got that nickname? I mean, it was a term of respect and liking, of course. But—"

"No," said Nordsen.

"No?" Lance echoed, disbelieving. "Since when?"

"Not since *ever*, major. Not on this particular track."

"Colonel Nordsen, you're losing me."

"Patience, please. I was about to tell you that still another pilot lands on our base, and he wears a blue tie. Claims the Space Service has always worn blue ties."

"I take it back," said Lance. "I'm a pilot and all pilots are slowly going nuts." Then, it occurred to him to evince more interest or they might ship him back to the brig sooner than expected. "A blue tie, huh?"

"And blue suede chukkas, to match," Colonel Sagen's hoarse voice broke in. "Most unmilitary-looking uniform I ever saw on a space officer."

Colonel Nordsen, the psychiatrist, set his pipe aside. "Gradually, we began building up a file of such weird discrepancies. Another pilot landed wearing a handle-bar mustache. He couldn't possibly have grown so much lip-hair in a month. Yet, the man claimed he'd sported the mustache for years; and that every officer

in his squadron was decked out with one, too."

"Tell me just one thing," Lance pleaded. His nerves were gradually getting more on edge. "What has all this got to do with Carolyn Sagen? Why is she being kept from me?"

Nordsen's eyebrows met, evincing a little displeasure. "Don't you get the drift, major? I've been trying to accomplish two things at the same time. Cushion a shock for you—and explain why what has happened has happened. There is no Carolyn Sagen. The colonel and his wife have always been childless.

Lance got belligerent. "Say that again!"

"There is no Carolyn Sagen here."

"What d'you mean, when you say 'here'?"

Nordsen took off his shell-rimmed glasses, wiped them, restored them to his boyish face. "I would advise you to brace yourself. By 'here,' I mean on this particular time-track."

Lance stared at him.

"Doesn't the word have any significance for you?" Nordsen asked.

"Time-track? Sure, I've heard of the concept before. It's a theory that parallel worlds branch off when . . . hey!" Lance's tone rose to a shout. "You're not trying to imply that . . . that I'm on a diff—?"

"That's right. We're trying to tell you that you have obviously landed in another time-track. One that is parallel to—but just a slight bit different from the one you formerly knew. To you, we seem to be the

same officers as in that world; but of course, we're not. It isn't the same universe. Hyperspace is tricky stuff, as our men are finding out. You've just got bounced around by one of the trickiest things connected with it."

Lance groaned. "Now, I'm told!"

"I'm sorry. It's nothing new, only the information is classified top-secret in our world; and evidently in yours, too. It has to be withheld from hype trainees, otherwise they might deliberately flunk their course. We're running pilot classes here on our track, too. We have to keep them filled."

Lance was stunned. He hardly knew what he should say or do next.

Finally, he put forth a faltering question: "Is there any way I can get back to Home Base? My home base?"

All three officers in the room shook their heads in unison.

"You might as well look for a pebble in the beach," said Nordsen. He elucidated: "As a matter of fact, this is Home Base for you. The differences between one track and another are not usually too great; the resemblances are many. Sometimes even, the returned pilot accommodates himself to the new time-track without suspecting in the slightest what's happened to him."

"And in those cases, you seldom bother to enlighten him, I suppose."

"Naturally not. Security frowns on it."

"But in my case, you couldn't cover up."

"Your case manifests a much more serious slippage. Your path, evi-



dently, warped to a track several million or billion worlds further over than anybody from your world had previously experienced. Consequently, your luck has really been unfortunate. You've materialized out of hyperspace into a universe where someone you apparently knew quite closely simply was never born."

"But Carolyn did exist before . . . where I was? I'm not dreaming."

"No. Both our worlds are equally real."

Lance, though he felt the truth slowly and inexorably sink in, still could not quite grasp all its implications. He turned his numbed face to the other two officers in the room. Colonel Sagen and Major Carmody inclined their heads.

For one despairing moment, Lance felt almost like hurling himself through the window. Then, he straightened up. His mouth compressed into a thin line. "If I must face the facts, I must. But," his tone edged off into irony, "it sure isn't easy. You'll have to give me time."

Colonel Nordsen stood up, held out his hand. "I'm sorry, major, believe me. This is a hard blow to take and I wouldn't care to be on the receiving end, myself. But you'll adjust. If you like, I'll recommend you for convalescent leave. You understand, of course," the psychiatrist went on, "that we expect you to keep tight-lipped. Our hype-classes are still too small. We need a lot of sharp men, and they have to be volunteers. Right, Colonel Sagen?"

"Right."

Lance dropped the proffered hand. "I get it. Let the word get around how hyperspace messes you up, all your bright young jets will bug out on it. That's your main worry, isn't it? Not what happens to me."

"Frankly, yes," Nordsen acknowledged, without blinking. "But the Space Service is also concerned about individuals. Don't worry now, major. We'll look after you."

"Don't bother!" An uncontrolled bitterness crept into Lance's reply. "Far as I'm concerned, the Space Service can go to hell. What reason have I got to stay in it? You've conned me out of all that meant anything in my life."

Nobody said a word.

Lance rose to his feet, unsteadily. His sardonic glance swept over them. "I suppose it's back to the guardhouse for me now, huh? Well, I won't be sorry to go. I'll find better company. And I refuse your bribe of special leave-time."

Colonel Nordsen seemed unaffected. "You're making a mistake," he said, calmly.

"Am I?"

"Major, we're offering you a chance to get adjusted and assimilated. Take it or leave it. We can hold you in the brig until you see reason. But you're a good man. We need you."

"For what? More flights through that hyperspace muck?"

"If you can pass our mental stability tests, yes."

"And if not?"

"You'll be grounded."

Lance made a sudden decision.

"I want to go up right now."

"What?"

"You heard me. I want to go up in the *Cosmos XII* right now, tests or no tests. Ground me—and I'll never have a chance again. Don't you think I'm hep to that?"

"We'll see that you're not grounded," broke in Colonel Sagen, from behind his desk.

But Lance didn't believe him.

"Don't try to kid me, colonel," he snapped out. "You write me out flight orders for the *Cosmos XII*, or I'll blab everything I know. You can't hang me, you can't tear my tongue out—and I know I'll bust out of your guardhouse one way or another! You'll see! And then, how will you fill up your precious training classes? Then, how will you get new chumps to pilot your ships to the stars? The stars! Ha, ha! That's the biggest joke of all!"

Colonel Sagen began to splutter. Lance, watching him carefully, decided there wasn't much resemblance between the old boy and the fine Colonel Sagen he'd known in his own world. Maybe it'd been having the softening influence of normal family life and a growing daughter that had made old Hard-Head human.

"You'll never get away with this," Sagen warned. "We're three against one."

"Won't I?" Lance's hand darted inside his shirt. "Maybe this'll equalize us." He brought out the pistol he'd taken off the captain in the guard-

house. Sagen, Nordsen, and Carmody backed off from it.

"The *Cosmos XII* is still two-thirds' fueled," Lance said. "And well-stocked on provisions. Besides, I'm a light eater in hyperspace—as who isn't? I intend to take that ship out again, and you're going to help me, gentlemen."

Lance flicked off the safety and waved the gun back and forth, to demonstrate what he meant.

It worked.

Lance got his ship, using Colonel Sagen as both shield and go-between after he had first tied up the other two officers in a closet. He kept a close watch, of course, for the SSP's and their gas pellets; but apparently an alarm was not raised soon enough for the base police to hurl into action.

After having the colonel authorize a space clearance for him by contacting Traffic directly over the ship's mike, Lance finally released him.

The colonel scooted down the ladder. Lance gave him time to clear the pad, but little more; then he went to work pushing buttons on the manual desk. The *Cosmos XII* blasted loose from her moorings and soared aloft into space.

At five thousand miles above Earth's surface, Lance re-checked his tapes. Groombridge 34 was the only possible destination the autopilot could take him to. Somehow, he didn't mind taking one more look at the double-star system. He cut into hyper-

space as quickly as he dared; then sat back and relaxed. That is, as much as any man could in hype.

When he reached Groombridge 34, all Lance did was pop out into normal space long enough to assure himself he had reached the proper checkpoint for turning back. The tapes were in good order, and there had been no hitches. Grunting, he threw in the switch-over and once more found himself plowing through hyperspace. Only this time, he was homeward bound.

If he were lucky, just real lucky, he told himself, there might be a Carolyn Sagen alive and waiting for him in whatever time-track he wound up in this time.

At last, he materialized again in the Solar System. Or *some* Solar System, anyhow. As far as he could tell, all the planets looked unchanged. It was just four weeks to the day, since his escape from World Two. This would be World Three. He had been gone eight weeks and two days from World One.

Lance cut the ecliptic at a different angle than before, and Terra was farther along in her journey around Sol. He needed a new landing trajectory. His eye swept his panel, to see if anything had been preset. There was no green flashing on the deck, where there should have been green.

Oh, well. There could have been cruisers waiting in space, too, to pot him with ship-to-ship missiles. He'd taken one chance, he could take another.

Lance opened a switch and called

Base Traffic's frequency. "This is the *Cosmos XII*, Major Lance Cooper piloting. Just broke out of hype. Can you read me?"

He repeated the message for several minutes.

Finally, he got an answer. A startled voice whipped back at him through crackling static: "*Cosmos XII*, this is Traffic. Who did you say you were up there?"

Lance hardly knew whether he felt more like laughing or crying. He was fairly close to home, anyhow. They did have space traffic here. And being pretty much of an optimist, he also decided that it was a time-track where he had been known. Only being so long overdue, he had probably been given up for lost.

On this premise, he could visualize all the consternation and excitement now in progress downstairs; the personnel were likely falling all over each other in the stampede to pass the word around.

"I'm Major Lance Cooper," he announced over the mike.

There was a long pause.

"Repeat that, please."

"This is Lance Cooper, Major, Space Service. I'm up here in the *Cosmos XII*."

"B-b-but you can't be."

"Who says I can't. Say, what's the matter with you monkeys? I want to come in."

Another voice took over on the channel. "The lieutenant's right. You actually do sound like Cooper, whoever you are!"

Lance laughed openly. "I've lived with him all my life, why shouldn't I? You think I'm a ghost?"

"Well . . . no. We know you're real. We're getting a blip from you. Only thing is—"

"Let's talk about it when I get down," Lance interrupted. "I need a program fast. Get those G.S. computers working and read me an orbit."

"W-will do."

"And one more thing: Is Colonel Sagen around?"

"Not today, major. He had to fly to Luna."

"How about his daughter?"

"Who?"

*Oh, no!* Lance felt his heart almost stop. Had the big try been for nothing? He chanced a repeat.

"His daughter. Carolyn Sagen."

This time, he got results.

"Oh! You mean Hard-Head's daughter. The one who . . . say, wasn't she all set to marry you?"

"You bet your last commendation ribbon she was. And she's going to! Hey!" Lance shouted. "Anything wrong with her? She's not sick or—"

The voice of the first operator at Traffic came back on. "The captain had to take off. No sir, major. She's not sick. We just don't know how she's gonna take this, is all."

"With bells on, Junior. Wedding bells! Get her out to meet me when I land, will you? And snap it up on that trajectory."

Again, the traffic crackled in Lance's ear. There seemed to be a great deal of excitement going on down there. And then the great night

rim of Earth swung under him, blocking out further radio communication.

Presently, a relayed beam from Luna came in. The Luna spaceport read him a series of figures to punch into his autopilot. The new orbit would edge him in close enough to Terra, that he could pick up an assist from the G.A. system of his home base.

Lance rubbed his hands together in his joy. He was cooking on all burners, now. At last.

Six hours later, the *Cosmos XII* settled down in her landing cradle. Major Lance Cooper kicked open the air-lock door and began climbing down to solid ground.

It was just barely twilight. Ordinarily, there would have been long purplish shadows at the far ends of the field; but now the entire space base was flooded with lights. Were the beacons sweeping back and forth just to welcome him? It hardly seemed possible. Yet, the apron itself, was swarming with people. Here they came now! A whole mob racing towards him, and the noise of their swelling shouts preceded them, rolling forward like the breakers upon a shore.

*Oh, oh! What was that in the far corner of the field?* A big pile of crumpled metal, already rusted and ready for the bulldozers. Some poor devil had crashed his hype-ship. Lance wondered vaguely which of his buddies it had been. Then he shut it out of his mind.

A jeep swung out ahead of the ad-

vancing crowd and came speeding down the concrete. Brakes squealed; rubber tires bit in hard, and the vehicle plunged to a halt near him. Lance recognized Major Carmody in the driver's seat. Or another Major Carmody. What difference did it make? None, now that he was able to identify so very well the other figure in the jeep—a slight blond figure in a trench coat seated next to Carmody.

Carolyn!

He saw her get out. He saw her commence walking towards him. But too slowly, he thought. And he was too paralyzed to move.

"Lance?" she called to him. "Is it you? Is it really you, darling?"

The girl's step almost faltered. Major Carmody's hand reached out, steadied her.

Something was wrong again. But what? He could not guess.

Lance came out of his paralysis. He began running towards her.

And in a moment, they were in each other's arms without caring why or how: Lance Cooper and the girl he loved. Kissing, hugging, unable to believe for a moment in each other's reality.

Then, Carolyn had to have breath and she drew apart for a moment. Then, she kissed him again. And Lance, for the first time, listened and made sense out of the welter of hysterical sobbing words that were pouring forth:

"Darling, darling, darling Lance! I cried so much, and now it's all over. I don't care if you're not real. I love you, I love you! I don't care if you are somebody from another time-track like Major Carmody says! You're my Lance and you belong to me. It's you I love and want now; no matter how shameless I sound! . . . Yes, darling, it's you I want, not that poor broken thing we buried two months ago. Not the—"

Lance's feeling of impending horror was great, but not so great that he shrank from the question that now rose and beat and beat at his brain. The overwhelming question that had to be asked.

"Carolyn!" He held her so tight he thought for a moment he'd cracked her ribs. His half-shook gaze penetrated her retreating eyes, forcing her to meet him.

"Carolyn! What do you mean—it's *me* you want now, not that poor broken thing you buried? Tell me. TELL ME!"

"Don't you know, darling Lance? When you took off that night eight weeks ago, that night I kissed you good-by, your ship . . . oh don't you comprehend? . . . Your ship, it—"

"Tell me, Carolyn!"

"Your ship, Lance, that's it over there—the wreckage of it! The *Cosmos XII* crashed on take-off that night, Lance. You were killed outright. We buried you two days later."

THE END



with you. Our regular agents have several well-established identities, and we've kept Rastadt uninformed or misinformed about much of our activity here. We'll all disappear into niches the co-ordinator doesn't know about, and we'll be perfectly safe. But you have no established identity and you haven't been here long enough to know your way around. We must get you out of Kurra immediately, and that won't be easy. Yes, Ann? Come on down."

The venerable hag tripped lightly down the steps and approached with a smile. "You didn't know me?" she said to Forzon.

"Maybe it was the bad light," he said. "I'd swear I'd recognize that turned-up nose anywhere."

She laughed gaily, and then turned to Leblanc. "Howard's place has been raided. Evidently Rastadt's men are comparing notes. I'm certain one of them knew about this place. Joe is getting ready to leave."

"Everything under control?"

"Nicely. Howard was watching from across the court."

"We were wondering what to do with Forzon. He'd be safer outside of Kurra, don't you think?"

"I don't know," Ann said. "King Rovva isn't going to take this gracefully. He's lost his element of surprise, and he didn't take a single agent. He'll start tearing his kingdom apart. A stranger is conspicuous in the villages, and every stranger will be suspect."

"True," Leblanc said. "It'll be devilishly hard to get him out, too. Every wagon is being searched at the gates, and the people are getting a good going over. Anders thinks they're looking for vaccination scars, and like everyone else in Team B, I suppose Forzon has at least one that's obvious. We have some places on the walls, but we'll have to be certain they're clear before we can use them. Any ideas?"

The fat proprietor, now mysteriously slender, ran lightly down the steps. "They're watching from the street," he said. "They'll be inside in a minute. And they might know about this hole."

"All right, Joe," Leblanc said. "Need any money?"

"I have plenty."

"We might as well go, then." He got up wearily, and stood for a moment, idly smacking a fist into an open hand. "A lot of good work has gone up in this," he said.

They filed into a dark, narrow tunnel, Joe leading with a light, and Leblanc bringing up the rear. Twice Forzon saw passages branching off, but they moved straight ahead for perhaps a hundred yards, when the tunnel curved and slanted sharply upwards. They came out into an empty house, climbed to an upper story, and passed through into the house next door. For the next hour they followed a tortuous route through concealed panels and hidden passageways, occasionally emerging to walk a short distance along one of Kur-

ra's narrow streets. Their destination was a tastily furnished basement apartment.

"Home," Ann announced. "I'd better change." She disappeared behind a beautifully hand-painted screen.

They made themselves at home around a table, and Leblanc poured drinks. Forzon found the Kurrian beer bitter and not quite drinkable, but the carved tankard was a work of art. He was delightedly studying the delicate bas-relief when Leblanc jerked him back to the problem at hand.

"You might be safe here," he said. "But I hate to take the chance. You'd be alone a good part of the time, and if they should run some house-to-house searches—"

"What can he do?" Joe asked.

"That's a thought. A good cover would solve the problem. Cultural Survey . . . can you paint? A painter can wander around anywhere, and no questions asked."

"I can paint," Forzon said. "But my technique wouldn't be up to these artists, and it'd take a lot of practice to be able to use that paint of theirs. My first efforts would probably be a mess."

"Your first efforts would have to be adequate," Leblanc said. "What else?"

Ann emerged from behind the screen. She had changed—not only her clothing, but also her face and figure. She was a red-faced, bosomy matron, and she sauntered across the room, slapped Joe on the back, and

laughed coarsely, in the manner of red-faced, bosomy matrons.

"I know what to do with Forzon," she said. "We'll send him to a one-hand village."

Forzon winced. "I hope you're joking!"

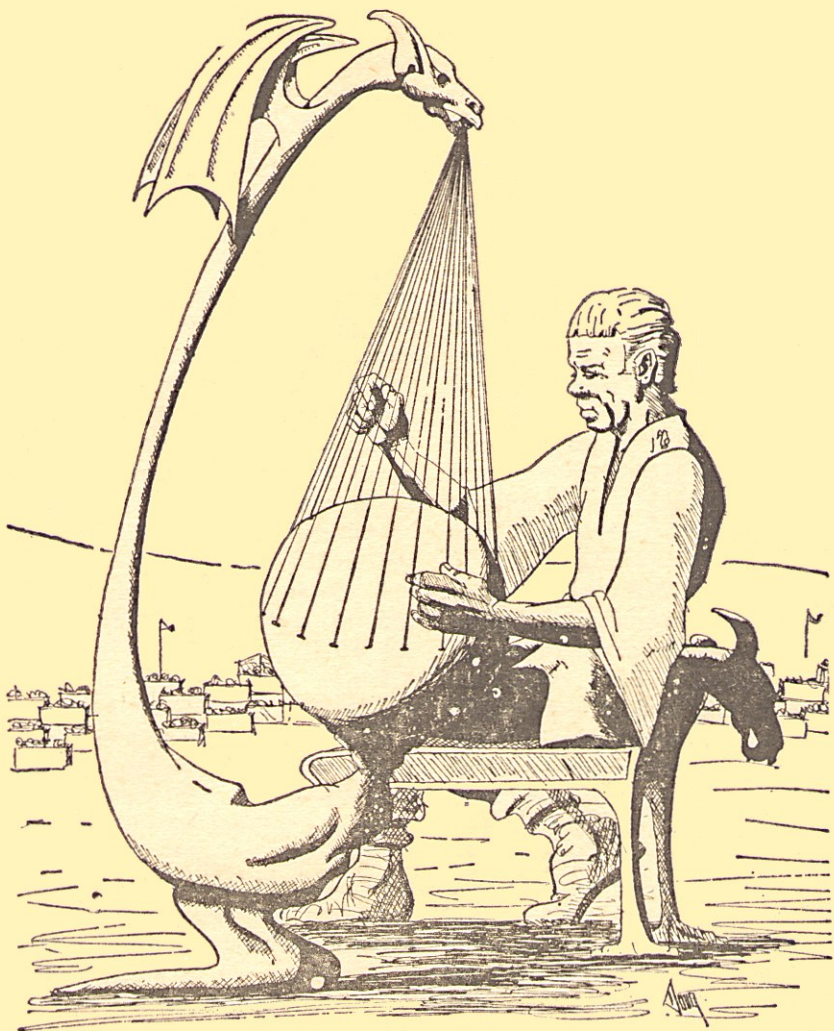
But she was not joking, and Leblanc, studying Forzon gravely, was nodding his head. "The very thing. We'll send him out through the south gate tomorrow morning, and the guards will turn their backs on him. And once outside Kurra . . . well, he can go to a one-hand village. There wouldn't be a safer place in Kurr. He'll need a uniform, though. One of the royal services would be best. Valet, maybe. Supposing he spilled a platter of Sullux. Everyone knows Sullux is King Rovva's favorite dish. That would be guaranteed to get him a fast initiation into the one-hand clan. Joe?"

"I can get the uniform," Joe said.

"The coat will have to be oversized. He'll wear his left arm inside the coat, and we'll strap a phony half-arm to his shoulder. You can start now, Forzon, learning to do everything with your right hand."

Forzon left Kurra at dawn, moving haltingly along the stone paved street with the dejected, uncertain stride of the banished. At the gate one guard stepped toward him, saw the empty flapping sleeve, and turned on his heel. Forzon moved on through the gate, and down the dusty road heading south.

He was on his own, in a strange



land, with a price on his head. If this situation were not distressing enough to a member of the Cultural Survey, he also had an assignment to carry out. He had to convert Kurr into a democracy—without apparent outside interference.

STILL, SMALL VOICE

"Think about it," Leblanc had said in parting. "As soon as we're reorganized, we'll go to work on any plans you have."

He thought about it as he walked along, carefully placing one foot before the other and keeping his eyes

on the sifting dust. He met no one. Traffic turned off the road and waited for him to pass. Those who overtook him turned to the fields to go around, and did not look back.

The caressing warmth of the morning sun soon became a sweltering torment. Perspiration dampened his scarlet uniform, which lost its brilliancy as the dust settled on it. The forced inertness of his left arm tantalized him. He struggled to concentrate. Culture in Kurr. Painting? How the devil could you incite anyone to revolt over painting? Music? They were an intensely musical race. The entire people sang beautifully and loved music passionately, Ulman had said. But—revolution?

Literature? There might be possibilities there. An inflammatory popular literature, denouncing the evil deeds of the king. But it would have to be popular stuff. A dry political discourse on the rights of man wouldn't excite anyone—wouldn't even get read, with only a quarter of the population being able to read. Songs might be the answer. Songs with catchy music and popular words. One song that really became popular could do more damage than an unfair tax. But he doubted that he could write such a song. It would have to be done with a sure feeling for the Kurrian musical idiom, and the words would have to be ingenious.

And one song, or even a hundred, wouldn't do the job without some potent assistance from another quarter. What else was there? Popular

prints of the king hacking off a man's arm? But the people wouldn't be interested in popular prints, not with the quality of painting that was available to everyone, and anyway, the prints would have to be mass produced. The Rule of One. Damn.

A sudden awareness of danger brought him to a halt. A cart was approaching him from the rear. Unlike all of the others, it had not turned off to go around him. It overtook him at a steady, plodding pace, bouncing noisily over the ruts.

He dared not look back. He started to walk again, lengthening his stride, moving quickly. The ugly, horselike animal came abreast of him and pulled ahead. Forzon slowed suddenly to allow the cart to pass, and at that instant the animal stopped.

Forzon turned slowly. It was a shabby cart, a typical Kurrian cart, with two wheels and a box formed of rough, unpainted, pegged boards. The driver sat on a board placed across the forward end of the cart. He clutched the guide ropes in his right hand. He did not meet Forzon's gaze, but stared ahead of him at the impatiently stomping animal.

In the cart was a single object, richly carved and polished, inlaid with gold—a *torril*. Forzon looked dumbly from the *torril* to the driver, and to the driver's empty left sleeve that flapped pathetically in the stirring wind.

Helping himself awkwardly with his right hand, Forzon climbed onto the cart. Tor, great musician the

previous evening, and now a miserable outcast, flecked the guide ropes. The animal moved forward.

For three days and nights they were on the road. They dozed at night, sitting on the cart as the animal alternately slept and plodded sturdily onward. Food and drink were given to them when they wanted it. They had only to halt by a farmhouse, or an inn, or in a village street. Presently a basket and jug would be thrust into the cart, and the bearer would hurry away. Through the long, exhausting journey no one spoke to them, and they spoke to no one, not even to each other.

At dawn on the fourth day they approached one of the king's garrisons—one of many located along the road at regular intervals. It was a low stone building with a uniformed sentry on duty. Invariably the sentry had turned his back as they passed, but this sentry, when he saw their empty sleeves, stepped into the road and pointed. They turned from the main road and followed a narrow, winding cart track back into the hills. At noon they reached the one-hand village.

It was a sprawling group of buildings in a shallow valley. Animals grazed on the surrounding hills. The setting was peaceful, almost lovely. It was also horrible.

"So large," Forzon muttered. Then he remembered that this village was but one of many.

Tor halted the cart by the first

building. An elderly man hobbled out, a one-handed man. Two younger men followed him. No words were spoken. They guided animal and cart through the village streets, and stopped by one of many long, low, many-chimneyed stone buildings. Forzon counted a dozen doors facing on the street. The building looked new, and beside it another was being built. The village was growing.

Forzon climbed down from the cart. The elderly man opened a door, and pointed. Forzon entered a small, barren room, with fireplace, a chair, a bed mat.

For the first time the old man spoke. "Does your arm need attention? We have a doctor."

"It does not need attention," Forzon said.

"You are fortunate. Usually an arm does not heal so quickly."

With a vivid memory of Tor's feverish agony during much of the journey, Forzon agreed that he was fortunate.

Later that afternoon a committee of village elders called formally. They gave him an issue of clothing, coarse gray cloth and every left sleeve half-length. He could work if he chose, they told him, at anything he liked. Some men worked on new buildings. Some cultivated the fields or looked after the flocks. There were artisans of all kinds who might consider taking him as an apprentice. There were also artists who accepted helpers, though they were restrained by oath from disclosing the secrets of their skills to outsiders.

If he preferred, he could do nothing at all. No one would interfere with him, and the one law of the village was that he must interfere with no one.

The great king, in his noble generosity, provided anything that the village lacked. If he became an artisan, all that he produced that the village did not need would be taken away and sold by the king, and some of the money returned to the village to buy luxuries for all. It was, the elders told him, speaking slowly as if to convince themselves, a good life. And while Forzon could remain idle if he wished, they thought he would be happier if he worked.

Forzon thanked them for their advice. In the next room the doctor was visiting Tor, and the elders seemed as eager to escape from the muffled cries and sobs as Forzon was to have them leave.

High on the opposite hillside were four dormitories, starkly apart from the rest of the village. From these there came at dawn a slender procession of women, one-handed women, to work in the community kitchens. Four times daily they set forth food, and the men came and served themselves, and carried their meals to their quarters to eat. There seemed to be no social contacts between men and women, and few between men. Artisans worked in pairs if a job required two hands, but their conversation was limited to a word of instruction, a muttered question, an answering gesture.

Forzon wandered about the silent village. He watched the skillful metalsmiths shaping beautifully engraved objects of gleaming copper for the king's trade. He watched an elderly artist produce painting after painting of a small stone cottage whose model existed only in his memory. He watched wood carvers and weavers and cobblers and potters and carpenters and masons, but among all those men of varied talents he was most interested in his neighbor Tor, who was doing nothing.

The *torril* stood in the center of his tiny room. Tor sat nearby on a wooden stool, misery etched indelibly on his good-looking young face. Several times Forzon heard—or thought he heard—the pleasant twang of a plucked string. But he could not be certain. He asked himself: Is it possible to play a *torril* with one hand? It should be, he thought, if the music were simple and of limited range. Whether a musician of Tor's consummate skill could be satisfied with that was another matter.

When he noticed that Tor was not eating regularly, he began to stop by for his bowl when he went to the kitchen, and bring it back filled. Tor responded with a nod of thanks, though he ate little. They spoke for the first time when Forzon, on an impulse, asked for music lessons. "Could you teach me to play?" he said.

Interest flashed in Tor's face, and faded. "No," he said curtly.

"I could sit opposite you," Forzon said. "Your hand on one side and mine on the other. We could play together."

"It would not be possible."

Even in a village of the living dead, Tor remained faithful to his musician's oath.

"The man's a musical genius," Forzon thought. "He should be able to find something musical to occupy him."

He remembered his idea about songs to stir up the people of Kurr. Could Tor write music for such songs? Certainly Tor, of all the musicians in the land, had ample grievance against the king. But there must be words, humorous, with just the proper touch of satire. He had found no poet in the village. He would have to write them himself.

After a prolonged struggle, he produced a single stanza:

*A man of trust*

*Inhaled some dust*

*And sneezed.*

*He meant no harm,*

*But—"Off with his arm!"*

*King Rovva wheezed.*

Not much, he thought, but perhaps it would do for a start. To get Tor interested—that was the important thing.

He took the lines to Tor. "Have you ever created music for a song?" he asked.

Tor gazed at him dumbly, his face sullen, his eyes dull.

"I have some lines I would like to have sung," Forzon said. "Could you create the music?"

Tor reached out with his right hand and took the paper. As Forzon waited eagerly he read the words. His head jerked back, and he stared, eyes wide with astonishment. "Treason!" he blurted out.

Forzon recovered his verse, and departed hastily.

He began to worry. Any day he might receive word that Team B had completed its reorganization and was ready to go to work on his plan. And he had no plan. How was it possible to plan revolt in a land where even the victims of a king's hideous cruelty blanched in horror at a whisper of treason?

And then there was Tor, wasting away with his *torril* standing mute before him. Kurr must have some musical instrument that could be played with only one hand. He would have to ask someone in Team B. That was his difficulty—one of his difficulties. He knew so little about the land, and he was expected to solve a problem that had baffled competent IPR agents for centuries.

But to incite a people to revolt—

In the darkness he would leave his room and stumble about the rolling countryside, squinting at Kurr's diminutive moon and searching vainly for an inspiration, any kind of inspiration. And inspiration proved fully as elusive as the Kurrian moon.

Newcomers arrived at the village in a steady, terrifying trickle, one, two, three a week. Forzon's dormitory, with its double row of twelve rooms, gradually filled. A new build-

ing was ready when the last room was occupied, and the incessant trickle of newcomers continued.

He had been in the one-hand village for a Kurrian month, thirty-seven days, when he first witnessed the arrival of a woman. She was received with the usual silent indifference. An elder led her cart towards the women's dormitories on the hillside, and as they passed Forzon he noted that she was middle-aged, that her face was ravaged with weeping, and finally—that she possessed a turned-up nose of a type he had sworn never to forget.

At the same moment she turned slyly, and winked. It was Ann Cory, B627. Forzon followed along and watched the elder assign her to her quarters.

He met her after dark, and they walked together in the dim moonlight to the top of a hill and sat looking down on the flickering candle lights of the village. Ann was in jovial spirits. King Rovva—and Rastadt—had been thoroughly frustrated, she said. It had taken some time to straighten out Team B's communications, because of the destroyed communication centers. They would have to rely on messengers, now, and of course Team B was completely cut off from the outside. Rastadt would continue to send reports, perhaps putting Forzon's name to some of them. He might fool IPR Headquarters indefinitely.

"It doesn't matter," Ann said. "Any IPR team is self-sufficient. Rastadt will get his eventually, and

he knows it. What do you have for us to work on?"

"Not much," Forzon said lamely. He told her of his idea about the songs, and of Tor's reaction.

"It wouldn't work anyway," she said. "That sort of thing comes out spontaneously when the people are ready for it. Even if you got a song written, anyone hearing it would howl for a king's officer. First we must make revolution a necessity. Once that happens the people won't be shocked at the thought of treason."

"The Bureau's Ninth Law, I suppose," he said glumly. He was turned sideways, looking at her profile and conjuring up a recollection of the lovely young girl she had been at Gurnil Headquarters Base.

She seemed to sense what he was thinking. "It's a terrible disguise," she said. "It makes my shoulders too broad, and I have an urge all the time to punch someone with my left hand. I suppose you're used to it. What else do you have?"

In desperation he sought to change the subject. "Is there a musical instrument in Kurr that can be played with one hand?"

"I can't think of any. What did you have in mind?"

"It's the *torril* player, Tor. The man is a musical genius, and not being able to produce music is killing him. I'd like to find something he can play."

"I don't think there is anything. Not on an art level. What angle are you working on?"



"No angle. I'd just like to give him an instrument to play. I'll have to think of something."

"Is that what's been occupying your time?" she demanded. "An instrument for Tor to play on?"

The violence of her question startled him. He said, "Yes—"

"Do you consider Team B's mission as unimportant as all that? Men and women have been risking their lives daily just to be ready to carry out your orders. Paul has been working furiously to get a messenger service functioning, so we'll be able to move quickly. We're all ready, now, and what have you been doing? Worrying about the morale of an ex-musician. It's a noble, humanitarian feeling, I suppose—but what is Tor to Team B?" She got to her feet abruptly, walked a few feet down the slope, and stood with her back to him looking out across the valley.

His resentment flared sharply, and then faded as he considered her question. Just what was Tor to Team B? Ulman had called him a national hero. The cruel action of the king must be common knowledge—or would several thousand witnesses remain silent?

"I'm sorry," Ann said. "Your training has been different from ours. Naturally you'd look at things differently. We should have realized—Bureau should have realized. But you seemed like such an alert, resourceful person—"

"Ann," Forzon said, "I'm going to invoke the Rule of One."

She spun around and gazed at



him. Her features were indistinct in the darkness, but her tone was incredulous. "You can't—just like that. You have to submit the suggestion to Headquarters, and tell them just what you want to do, and why it's necessary to your plan, and what the probable technological impact might be, and why the job can't be done some other way. They file the request away for a few years, and by the time they get around to rejecting it you've already thought of some other approach. No one has *ever* used the Rule of One."

"I'm cut off from Headquarters," Forzon said. "And I'm in charge here. I'm going to give Tor a trumpet to play on."

She took a step towards him. "You fool! Haven't you at least a vague notion of the number of technological innovations involved in a trumpet? Rule of One, indeed!"

"A primitive trumpet," Forzon said. "Without valves. Its use is widespread. Most peoples have some variant of it, and it can be a splendid art instrument. There's even some old Terran music written for the valveless trumpet. Good music. All that's involved is a metal tube bent into the proper shape. The metal workers already have the principle of the tube. I'm not sure I would be giving them any technological innovation, except perhaps the mouthpiece. The mouthpiece is important—has to be kind of a flat-cupped affair, to be really effective. Strange that they have no similar instruments. But then—the trumpet

evolves from the horn, and the earliest horns are usually animal horns, and these animals I've seen are hornless. Some primitive peoples have a shell trumpet, though. That's something Cultural Survey will have to investigate."

She interrupted his musing. "Good-by," she said.

"You're going back?"

"I'm leaving. I only came here to see you—to get those great plans of yours. I'll tell them you're too busy ministering to a sick musician to be bothered. There's really no need for me to wait around. Joe's waiting for me in an inn at the nearest village, and we of Team B have work to do. So—good-by."

"Wait," Forzon pleaded. "This business about Tor—"

"Is very interesting, I'm sure. You'll have plenty of time for it, because I'm afraid it'll be a long time before we can get you out. But we'll let you know as soon as we're able to contact Bureau Headquarters and straighten out this Rastadt mess. In the meantime you'll be perfectly safe here."

He stood looking after her until she disappeared into the night.

The metal workers were skeptical when Forzon told them what he wanted, but they set to work willingly. The bell occasioned arguments, as they could not understand its function; the first mouthpiece was a perfectly formed cup without an air passage. In due time Forzon had an approximation of the trum-

pet he wanted, and after the workers had exhausted their artistic urge in engraving it elaborately, they surrendered it to him.

Forzon carried it to Tor's room, with the metal workers trailing behind him curiously. Tor, startled at the unwelcome intrusion, held the trumpet awkwardly when Forzon handed it to him, puzzled briefly over its possible use, and handed it back. Forzon raised it to his lips, and blew.

The tone was curiously mellow—due, Forzon thought, to the narrow bell and the peculiar shape the workers had given to the mouthpiece. But the instrument blew easily, and Forzon had no difficulty in playing a simple Kurrian folk song he remembered.

Tor listened wonderingly. He took the trumpet, made a fumbling effort to blow, and finally produced a tone. Delight touched his face. He blew again, and again. Forzon quietly turned away, and left him.

In the street outside, one of the metal workers scratched his head and regarded Forzon with open admiration. "You know," he said, "I'd like one of those things for myself."

As the days drifted by, Forzon listened with increasing satisfaction to Tor's struggles to master the trumpet. He suffered pangs of conscience only when he considered the possible impact on Kurrian music. The *torril* employed an inflected pentatonic scale, and Tor labored incessantly to fit the trumpet tones into that pat-

tern. But the trumpet stubbornly persisted in producing a natural overtone series. Eventually he surrendered to the peculiarities of the instrument, or perhaps he came to like them. Now he was writing music for trumpet, writing in a weirdly cryptic notation that made no sense to Forzon, even when he followed the music as Tor played.

With two dozen enthusiastic trumpeters practicing in all parts of the village, and more taking up the instrument as fast as the metal workers could turn them out, the next step seemed inevitable. He would have to form a trumpet band. By the time Cultural Survey came to Kurr, the great tradition of Kurrian music might be corrupted beyond recognition. But it had to be done.

It was nearly a month after the visit of Ann Cory when her disappearance caused a ripple of excitement in the village. Because of the custom of strict individual privacy, days had passed before anyone suspected that she was no longer among the village residents. But then her room was examined. Obviously it had not been used. The clothing issued to her had not been worn. The elders began making cautious inquiries, and finally reached the reluctant decision that their latest feminine arrival was missing.

The entire village was organized to search the surrounding countryside. As an elder sadly explained to Forzon, most people were able to accept the one-hand village, and even-

tually become happy there. But it did happen that a severed arm produced a deeper wound, and a weak person might turn to death as the ultimate cure. And of course it was always possible that the woman had met with an accident.

Forzon diligently joined in the search, and when, after three days, no trace of the girl had been found, the elders returned to their councils and life in the village went on as before—with trumpets.

The village residents took to the trumpet with an avidity that startled Forzon. In reflecting upon this phenomenon, he decided that the answer lay in the guild and family systems. All the people loved music and art, but only the son of a musician could study music; and only the son of a painter could learn painting. But now here was a new instrument, which had no guild. Anyone could play. One wanted only a teacher, and here was Tor, a great musician, eager for pupils. The entire village responded. Work was neglected. The metal workers produced only trumpets.

The king's agent, coming in with his loads of supplies and expecting to pick up objects made in the village for sale, had to depart with half-empty wagons. The elders conferred with him at length, and there was much shaking of heads over the situation. The king's agent, who received a lush commission on the sale of village products, left in a stormy mood.

Forzon decided that this could lead to trouble, and that the time had come to make definite plans. He went for a conference with Tor.

"We do not want the displeasure of the king or his officers," he said. "Life in the village must go on as before. Only the best musicians should spend their days in music. The rest must do their tasks as usual, and make music when the tasks are completed."

Tor agreed. "I shall see to it," he said. "Otherwise, the king's agent might interfere."

"From the best musicians, you are developing a group of skilled players. What are you going to do with them?"

"They shall play. What else is there to do with them?"

"Music must be heard," Forzon said. "When your trumpeters have sufficient skill, you must take them to Kurra."

Tor paled, and raised his right hand in protest. "We would not dare!"

"There is no law against it," Forzon said gently. "There is no law that restricts us to the one-hand village. We are here only because we could not live elsewhere. It would be different with the trumpeters. Those who love music would welcome them."

"No one would listen!"

"Can people help listening if music is played for them? Surely it would do no harm to try. You cannot lose your left hand twice."

"We could try," Tor admitted. "I

do not think the people will listen, but we could try. When we are ready—”

“When will you be ready?”

Tor reflected, gazing absently at the quaint musical script scattered about his room. “Soon,” he announced.

It was mid-morning, and in the street outside Forzon’s door the trumpet band, the elite of the village trumpeters, was entering upon its third hour of rehearsal. Tor had discovered the fanfare, and made brilliant use of it in his music. Forzon no longer feared for Kurr’s musical tradition. Instead of destroying it, the trumpet had given it a new dimension. The guild of *torril* players would ignore trumpet music—Tor was certain of that. And the music Tor was producing for trumpet, in an alien music system and for an alien instrument, was uniquely Kurr-ian.

A new guild was in the making, a guild of one-handed trumpeters. Tor had already sent a few of his musicians out to find other one-hand villages and give them the trumpet. It suited Forzon’s plans, and he had not objected.

As Forzon listened, marveling at the trumpeters’ endurance, the music stopped abruptly. Forzon went to his door, and found the street filling with mounted king’s officers. The king’s agent was among them, talking quietly with the village elders. The one-handed men left their tasks and watched curiously.

The elders separated, and made the rounds of the village buildings. “The king’s agent would speak to us,” they announced, and the villagers nodded indifferently and began to drift towards the open square at the end of the village street.

“You were right,” Tor said to Forzon. “The agent is angry. We must promise a full load for his next trip.”

The villagers crowded the square. It was the first time Forzon had seen them assembled, a thousand or more, and he was more than slightly awed as he took his place among them.

The agent did not waste time. He shouted from his mount, “In the full moon of the fourth month past, a woman came to this village, a woman with one hand. She came and then she vanished. Do any of you know of her, or where she went?”

The crowd was silent.

“We have examined the palace records,” the agent went on, “and we find that no woman has merited punishment since the last harvest but one. No woman was sent to this village, and yet one came here. You are warned to speak now if you know of her.”

His pause was brief, as if he expected no response. “Very well,” he continued. “We have checked the records of all of the one-hand villages, and we find that this village also has a man who did not merit punishment. He was not sent here, but he is here. I order him to step forward.”

“Records!” Forzon thought num-

bly. "Team B didn't know there were records!"

"Very well," the agent said again. "All those who have arrived at this village since the last harvest will step forward."

Forzon was jostled forward with the others, twenty-five or thirty, a few apprehensive, most merely puzzled. Officers dismounted and surrounded them.

"Search them," the agent commanded.

Forzon had no time to react. It happened too quickly—his outer garment jerked away, the officer's startled exclamation when the dummy left arm came with it, Forzon stripped to the waist and his hidden left arm bared to view.

The agent leaned forward and shouted triumphantly. "So you wish to live in a one-hand village! I promise that the king will grant your wish—after he has discussed certain matters with you. Mount him!"

A mount was brought forward, the stupid, mangy animal that did the work of a horse on this planet. Forzon mounted, assisted by kicks from below. A moment later they had turned their backs on the village and were loping away down the valley road. They had not gone five hundred yards before they heard the sound of trumpets. The musicians had returned to their rehearsal.

Forzon had heard much evil about jails and dungeons of this technological level. The reports proved to

be substantially correct. He was thrust into a damp, filthy cell in the lower reaches of the king's palace in Kurra. His bed was a moldy pile of straw. Tiny, evil-looking rodents ran about unhindered. Forzon's need for sleep was so urgent that he managed to ignore them. On the nightmarish return to Kurra his escort had eaten and slept at the king's garrisons along the way. Forzon had eaten infrequently and lain on the ground outside, under guard. He was exhausted when he reached Kurra, and not even his foul surroundings could interfere with his sleep.

It was day when he awoke. Light came through a slit in the wall, high above his head. The rodents were finishing off some food that had been thrown into his cell. He watched them indifferently. A guard paced by at regular intervals. From a neighboring cell came the unnerving sound of a man sobbing.

Time crawled tortuously. Forzon paced his cell, which meant taking three steps in one direction and two in the other. He counted the drops of water that oozed from the ceiling. He tried to engage the guard in conversation, and in return got a sword thrust into his cell. He turned his attention to the prisoner who was sobbing, and the guard returned and drenched him with a bucket of slop. Late in the afternoon they brought food, a piece of coarse, dry bread and a bowl of bitter-tasting mush. As for water—there was plenty of water in his cell, the guard told him.

So it went. Two days, three, four.

It was dark when they came for him. He was led under guard up long, narrow flights of stairs, along winding, torch-lit corridors, and finally into the presence of the king's agent.

"Come in, Forzon," the agent said. He grinned fiendishly. "You don't deny that your name is Forzon? We are wiser than you know."

He held up a picture. Forzon's picture. Such was the treachery of Co-ordinator Rastadt.

"We know," the agent went on, "that you are the leader of Team B. You will now tell me where every member of Team B is to be found." He sat back and waited.

Forzon could not suppress a grin. Of all the two hundred IPR agents in Kurr, they had captured the one man who could tell them the least. And that man was officially the Team commander!

The agent placed a box on the table in front of Forzon. "This small device is very persuasive," he said. "First it removes the nails from your left hand, one at a time. If further persuasion is needed, it can be adjusted to remove the fingers. Unfortunately, it is not completely versatile. Another device is needed to remove the arm. This was designed for use on the left hand. We have never needed a device for the right hand, but I believe this could be adjusted to serve the purpose. King Rovva has never authorized the removal of a right arm, but he might be inclined to make an exception in your case. Which leads us to another

problem: If a man has both arms removed, is he eligible for residence in a one-hand village? I think not. But then, it must be the king who decides. Where are the members of Team B to be found?"

Forzon remained silent. He knew nothing that could harm Team B, but if he told them anything at all they would assume that he knew more. It was better to say nothing.

"I could persuade you now," the agent said. "But I do not wish to deprive the king of the pleasure of watching. I shall talk to you again when the king returns. Then you will tell me what I wish to know, or —" He patted the box. "Take him back."

They escorted him from the room —four guards with drawn swords, two in front and two following. As they followed the winding corridors the guards behind him prodded him with their swords from time to time, but it seemed to be more for amusement than to make him hurry.

They rounded a corner, and the guards in front suddenly sprawled to the floor. A muffled, black figure leaped towards them. A stun gun flashed in the torch light. Forzon hurled himself to one side, whirled, saw the rear guards topple. The figure slipped out of the black cloak, tossed it aside. "Quickly!" he hissed.

Forzon raced after him. It was a slim, elderly man in the scarlet uniform of the king's house servants. He led Forzon on a wildly meandering trail through the palace. Miracu-

lously, they met no one. They dashed into a room, barred the door, and Forzon waited in the darkness as the servant hurried to the window and flung it open. He flashed a light, and from the night beyond came an answering flash.

"Hurry," the servant called. "I didn't give them much of a charge."

Forzon reached his side, and found him lowering a rope. "Team B?" he asked.

"Team B. Down you go."

Forzon scrambled through the window. The rope tore at his hands as he plummeted downwards. He

was fighting to slow his descent with his feet when he struck the ground with a jolt that numbed his legs and sent him sprawling. Hands gripped him and hauled him to his feet.

"This way!"

They dashed away into the night. Forzon stumbled through the street door of a building, and sank back limply against a wall. The other stood in the open doorway, peering out at the street.

"Nice going," he said. "I think we brought it off."

He barred the door, and led Forzon down to a basement room. He





lit a candle, and turned to Forzon. The face was that of Joe, the former innkeeper—an unhandsome face, but to Forzon a thing of beauty.

"Many thanks," Forzon said. "They were about to start removing my arm an inch at a time."

Joe shrugged. "We knew when you were brought in. Just a matter of waiting for the best opportunity. What the devil went wrong?"

Forzon told him about the turmoil set in motion by Ann's disappearance. Joe lifted both hands wearily. "Dames!" he said. "She was supposed to stay there and help you work out a plan. Instead she comes trooping back and says you had no plan and won't never have no plan and all you want to do is walk in the meadow and smell the pretty flowers. Nuts! What goes with the trumpets?"

"You knew about that, then?"

"Knew about it the first time this morning when a bunch of one-armed trumpeters turned up in the south market place. Practically took the populace by storm. Coins rained for twenty minutes after the first number. What have you got up your sleeve?"

Leblanc appeared at noon the next day, with scattered bits of news. King Rovva had returned, and expressed his displeasure at Forzon's escape by dispatching eight men to the one-hand villages. The agent was among them.

"Maybe he'll make a good trumpet player," Forzon said.

"Just what angle are you working on with these trumpets?"

"No angle. Just a wild hunch. I wish I could have seen them."

"They emptied the market place when they came marching in," Leblanc said. "Then when they started playing, the crowd came running back and practically mobbed them. I'm no CS man, but I thought they played pretty darned well."

"These Kurrians seem to be innately musical."

"They like trumpet music. Your boys were over in the north market place this morning. All the shops closed up, the farmers packed their produce back on the carts, and everyone stood around listening and yelling his head off between numbers. A few weeks of this and your trumpeters will be independently wealthy."

"Rastadt gave the king our pictures," Forzon said. "They knew who I was—even knew my name."

"We'll have to rig up a disguise for you. None of the rest of us look like our pictures. We'll move you to a safer place tonight—out by the city walls."

"How about a place near one of the markets? I'd like to hear the music."

"I guess we could manage that. Joe?"

"Wilks has an alternate place off the south market."

"See Wilks, then, and take a look at it. But no public appearances, Forzon, until those hands heal. The king's men aren't stupid, and they'll

have some idea of how you got out of the palace. They might be on the lookout for a man with sore hands."

"What's Ann doing?" Forzon asked.

"Barmaid. When she isn't telling people what she thinks of CS men. What happened between you two?"

"I don't know."

"Dames get funny ideas," Joe said. "I'll go look for Wilks."

There were a mere half-dozen trumpeters in the south market place the next morning, and Tor was not among them. "They've split up," Joe explained. "Guess they figured they could reach a bigger audience that way. They're playing all the market places, and the square in front of the palace, and a few other places where there's room for crowds. Every hour on the hour."

Forzon sat by an open window, listening to the music and the cheers. The people had lost none of their enthusiasm. Every number closed to a tumultuous ovation.

Leblanc came bounding in excitedly. "I think I see the pattern," he said, rubbing his hands. "I just think maybe I see it. I don't suppose you'd want to tell me—"

"Tell you what?"

"Never mind. The king has ordered a special festival for tonight. Your trumpeters will be the star attraction. They'll probably draw a record crowd. Too bad you can't go."

"It doesn't matter. I've heard them play before. I'll stay here with Joe, and work on disguises."

"You would," Joe muttered.

The trumpeters stopped the show, Leblanc reported later. They were third on the program, and the king canceled the other acts and let them play the rest of the evening. For all his evil nature, King Rovva possessed the Kurrian love for music.

Forzon settled down to a maddening routine of waiting. He listened to the trumpet music drifting up from the market place. He quizzed Leblanc at length on the attitudes of the Kurrian population, and shrugged off the pointed questions he got in return. He wanted to talk to Ann, and Joe good-naturedly took the message and brought back the reply.

"She says she's busy," he said with a shrug. "And—she thinks the trumpet music is real pretty. Personally I think she's suffering from guilty conscience, and is too embarrassed to see you. Paul got onto her good about walking out on you, and he got onto her again when it resulted in your getting hooked. That could have been serious, you know, if the king had happened to be in Kurra. They'd have rushed you right to the execution chamber. So I think that's why she don't want to see you, but you never know. Dames is funny. You're still the boss here. Want me to bring her?"

Forzon shrugged in turn. "No," he said.

There was nothing he could do but wait. And wait. Three days, four, a dozen.

Leblanc exploded into the room

with an abruptness that sent Forzon scurrying for the escape panel. Leblanc hauled him back, and, when he had caught his breath, exclaimed, "You sly devil!"

"What is it?" Forzon said. "What's the matter?"

"The king has just delivered himself of an edict. No more trumpet music. All the musicians are ordered back to the one-hand village. People are forbidden to listen to trumpets under the threat of dire consequences. Now don't tell me that's a surprise. You've been expecting it. What's the next move?"

"Send a messenger to Tor," Forzon said. "Give him greetings from the Giver of Trumpets. Tell him to march his men through the streets to the palace, and petition the king."

Looking across at the palace, Forzon reflected that the one art in which the Kurrians were deficient was architecture. The palace had been built as a fortress, but it had none of the picturesqueness of fortresses on other planets. "Ugliness multiplied by mass," Forzon murmured. His brief sojourn within had told him little about its inner design; from without it was an enormous, rectangular stone monstrosity, with a massive gate fronting on the square, and no windows lower than thirty feet above the ground. A balcony was recessed high above the gate.

Tor and his musicians had not yet appeared, but the square was already jammed with people. "We did a lit-

tle rumor mongering," Leblanc said with a grin.

Forzon looked down from an upper-story window, and doubtfully studied the milling crowd. It was a matter of deep regret to him that he still knew so little about these people. The IPR Bureau should have given him some preliminary training. Tossing him into the problem unprepared was like placing an ignorant person in a chemical laboratory, and telling him to construct a bomb. He could put various chemicals together, and light the fuse and run for cover. But unless through some happy accident he chose the right chemicals, nothing would happen.

But Forzon had lit the fuse, and now he would see. The expectant murmuring changed suddenly to cheers. The one-handed trumpet players marched out into the square, their upright instruments trailing colored streamers. The crowd made way for them, and surged after them as they passed. Streets opening onto the square were filled from side to side. Throngs had followed the musicians through Kurra, and other throngs, in response to Leblanc's excellently placed rumors, were converging on the palace. They struggled to push their way into the square as late-comers built up pressure behind them.

The crowd stilled abruptly. The bulky figure of the king had appeared on the balcony. Tor, at the head of his musicians, began to speak. His voice reached Forzon fit-

fully, faint and untelligible. When he had finished the noise of the crowd fluttered and swelled as the citizens of Kurra murmured approval, or perhaps asked their neighbors just what had been said.

The king raised both hands for silence, got it instantly, and delivered a brief reply. The musicians turned and began to make their way back through the crowd.

"So it was a dud," Forzon said.

"Dud?" Leblanc said. "Do you realize that this is the first time in four hundred years that we've managed as much as a public demonstration? What comes next?"

"I don't know," Forzon said.

The trumpeters had reached the center of the square, and those at the rear and in the streets, who had seen and heard nothing, began to chant. "Music!"

The cry was taken up eagerly. "Music!" the crowd shouted.

The trumpeters had halted. Forzon waited tensely. Would they defy the king, and play? They had to, if anything was to be salvaged from the rapidly fizzling demonstration. He kept his eyes on the shining trumpets, waiting, hoping that they would suddenly be lowered to playing position. Would Tor dare?

The question was never answered. The palace gate opened, and the king's officers poured forth to disperse the crowd. Mounted and afoot they pushed forward, flailing wildly with swords and clubs. The amazed crowd was silent for a moment, and then it turned with a roar. The offi-

cers were pushed over or hauled from their mounts and trampled. The air near the palace filled with flying objects. The mob milled about uncertainly for a moment, and then it rushed the gate. Those within rushed to close it—too late. The crowd poured in—poured from the square and from the streets beyond, and kept coming. And then, above the angry, pulsating uproar, came the triumphant sound of trumpets.

Leblanc reached out and closed the shutters. He turned to Forzon, his eyes alight with excitement. "For the first time in four hundred years," he said, "a king of Kurr has committed a stupid act. Score one for Cultural Survey."

Team B had work to do—the kind of work for which it was superbly prepared. A spontaneous protest had to be turned into a genuine revolution. There were rumors to sow, sly moves under the cover of darkness, clandestine negotiations, subtle sabotage to hasten the destruction of the king's crumbling prestige. The ideas of democracy had to be implanted.

Crowds continued to surge through the streets shouting, "Music!" and on the second day King Rovva decided to take a brief vacation from Kurra. Leblanc soon had a roaring revolution underway in the capital. Forzon sent groups of trumpeters about the country to follow the spreading rumors and show the people just what this forbidden music was that the king did not want them to hear. Leblanc was working feverishly, fear-

ing that Rastadt might attempt to intervene.

But the co-ordinator had problems of his own. A loyal communications man, worried when the communication centers in Kurr went silent, smuggled out a report to IPR Headquarters. At the very moment that King Rovva was being hunted down in the Kurrian mountains, a squadron of the Federation navy was orbiting on Gurnil. Rastadt was taken into custody. A few days later contact was re-established with Team B, and Forzon was invited back to Gurnil Base Headquarters to make his report in person.

The first man to greet him when he stepped out of the plane was the Cultural Survey chief.

"Some IPR brass wants you," he said. "But I claim priority. They tell me you've made yourself a blasted hero, and as if that weren't enough, that you're getting married. IPR is jumping with excitement. They want us to assign a CS man to every IPR team, which is the break we've been wanting for a long, long time. Now would you mind telling me how the devil you used trumpets to bring off a revolution?"

"It wasn't very complicated," Forzon said. "We had a profoundly musical people, and a king who lacked a conscience."

"Sounds like a puzzle."

"It wasn't. When you stop and think about it, it's quite simple."

"Well," the chief said helplessly, "I'm glad it worked out."

Later, facing a committee of IPR Officers with Ann watching proudly, Forzon encountered the same degree of confusion. Speaking easily, he tried to make the Kurrian revolution understandable to them. There were just two elements involved, he said. First there was the musical population, which became enamored of trumpet music and could see no harm in it. And then there was the king, long accustomed to having his victims out of sight and mind, and then suddenly seeing them everywhere he went, playing music and surrounded by enthusiastic crowds. It was inevitable that he would banish them, and was just as inevitable that the people wouldn't let them go.

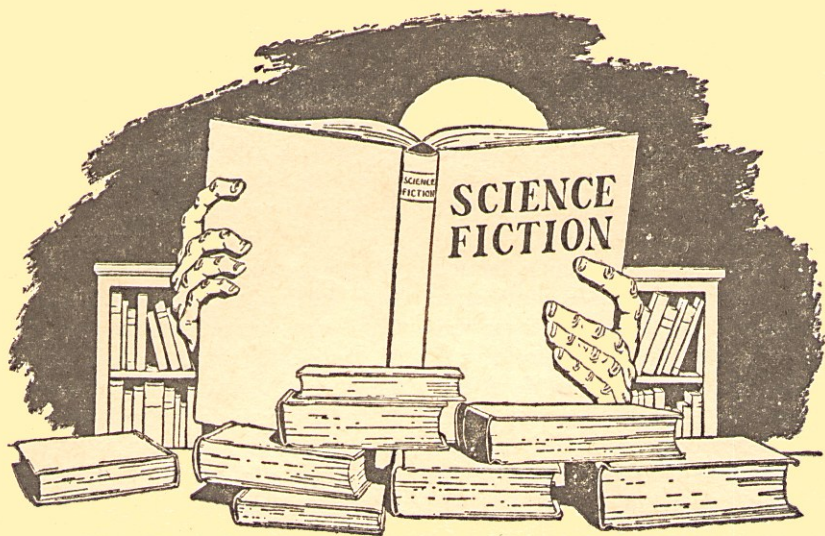
Silence followed his words, as puzzled as it was respectful.

The Director of the Interplanetary Relations Bureau twiddled his thumbs thoughtfully. "What we really want, administrator . . . ah, did you know that we've promoted you? We have. What we really want is the underlying principle of the thing. Do you understand?"

Forzon understood. They wanted something they could put in large black type in a field manual, like DEMOCRACY IMPOSED FROM WITHOUT, and all the rest.

"You might look at it this way," he said. "Even an unprincipled king is bothered by his conscience when it starts sounding off on trumpets."

THE END



# THE REFERENCE LIBRARY

By P. SCHUYLER MILLER

## SEXING IT UP



ONE OF the principal accusations made by intellectuals in general and high-literary critics in particular is that science fiction has an unrealistic attitude toward sex, and in most cases no attitude at all. In judging this criticism, I think that we can assume that what our detractors would like to see is

something like Tennessee Williams' ever-so-adult probings into psychopathology, and not a science fictional equivalent of the current school of sex-and-bloodshed private-eye mysteries, so beautifully self-parodied in Henry Kane's Pyramid paperback, "Private Eyeful."

I think a case could be made by someone more deft at citation than I, labeling our whole current insistence on sex and violence as a wholesale retreat from responsibility, which began with the wild Twenties after the

first World War and is spilling over into our present juvenile delinquency. Anything we do is justified, this attitude pleads, because Pappa Freud has said that we just can't help ourselves. So how can you ask us to be responsible for ourselves, for other people, or for the world?

Laying this aside, however, as a post-Victorian, crypto-Republican archaism, let's become pragmatic about sex in science fiction. First off, the critics have this on their side: as a kind of magazine fiction, published for a cross-section readership and sold on the country's newsstands, science fiction is subject to the least-common-denominator rather than the greatest-common-denominator criterion of public attitudes. Whatever we do in private, and whatever we buy under the counter, we insist on public conformity to a puritanical set of values. They're lightening—or loosening—but only slowly. As part of that lightening, we do now have a much greater emphasis on sex in some kinds of science fiction, primarily in the paperback books. One line, the Beacon Books line which has taken over the *Galaxy Novels*, openly solicits sex-centered originals and demands the right to insert sexy sections in reprints. At that, they are restrained compared with such books as Monarch Books' "Konga"—allegedly the novelization of a monster-movie script, and some even more raunchy titles that haven't been on sale in Pittsburgh, at least over a counter.

Before dissecting a few of the cur-

rent crop, let's take one more look at the science-fiction field in general, and ask ourselves: "Should the best science fiction be sex-centered?"

A great part of run-of-the-mill science fiction has to do with relatively violent action. Another major chunk has to do with violent thinking—outsmarting someone you can't clobber, or solving a scientific or other intellectual puzzle. This is Amis' "idea as hero" type of story. Now, I submit that even the most unregenerate members of the Forty-and-Eight won't pretend that they fought the hottest battles of World War I—or II—mounted on a wench, with a gun in each hand. Wishful jokes at professional smokers to the contrary, the average scientist spends much more of his career bent over a meter or a microscope than over his lab technician. Overt sex is simply out of place in a large part of science fiction, and its absence *is* realism.

But mankind is by no means sexless, or he wouldn't be here, nor will he be in the future, unless certain science fiction becomes reality. So where does sex belong in science fiction?

In the first place, it can be treated maturely, casually, and incidentally to a story of the problems of real people in a real science-fictional situation, without "lookit me" exhibitionism or slaving. The best of this kind that we've had in the last year was in two Pyramid books of Judith Merrill's, "Out of Bounds" and "The Tomorrow People." This is what I'm thinking of when I agree with

the critics that sex isn't properly treated in science fiction—but I suspect some of the most outspoken critics are thinking more in terms of Tennessee Williams than Judith Meril.

Now we come to the great category that it is certainly science fiction's function to probe and explore, as it can and does every field of ideas. This is the category of sexual gimmicks, and it is the category in which the greatest expansion seems to be taking place now. Again, the treatment can be serious or it can be for laughs.

To take the latter first, Pat Frank's "Mr. Adam" still stands out as the classic of the "Last Man in a world of women" theme. It played for guffaws, and got 'em—but it wasn't "dirty" by my standards. L. Sprague de Camp's "Rogue Queen" is another classic, this time of dead-pan humor: a heroine, literally without sex, who discovers it to her consternation. Recently we've had Benjamin Appel's satire on the pleasure state, "The Fun House," and Poul Anderson's lightly handled "Virgin Planet."

Newest to join this category is Harold Livingston's "The Climacticon"—Ballantine No. 406K; 191 pp; 35¢. The machine of the title is an emotion-meter with a built-in direction finder that answers, quantitatively, the classic question: "Will she or won't she?" This could have been ready-made for Beacon, except that the author uses this sexual gimmick primarily for a bludgeoning satire on

advertising, and thereby lifts his story a notch or two toward the exalted novel of social criticism. He never quite persuades me that the simple answer to this question is an infallible trigger to bring about immediate action, but maybe that's the post-Victorian speaking, and anyway I don't know Madison Avenue that well. It's strung out a little too long, and parts are a little too obvious by our seasoned standards, but on the whole it's well done.

Then there are the books and stories in which sexual gimmicks are handled seriously. I suppose the classic is Philip José Farmer's novelette, "The Lovers," which for complex reasons still has not been reprinted in either paper or hard covers. You'll also find strange sexual variations handled expertly and maturely in most of the stories in Farmer's "Strange Relations," again for Ballantine. These stories, like Farmer's best, you can read on two or more levels: as straight stories of sexual oddities in far places, and as fantasies of sexual symbolism. Chances are there are a couple of levels I didn't get.

Farmer also, in his original novel "Flesh" for the *Galaxy Novels* series published by sex-'em-up Beacon—no connection with Beacon Press, the religious publishers of Boston—showed us a sex-centered future society, with "inventions" aplenty and a hero forced to undergo one long siege of stud service. The society was legitimate but less well worked out than those in some of the short stories in the Ballantine collection, and the



book seemed to me to be played for sensation and leers, which puts it in my final category rather than here.

On the other hand, Philip José Farmer has a new Beacon original with the flaunting title "A Woman a Day" and a near-rape on the cover, which amazingly enough plays down its principal sex gimmick and plays up a wonderfully complete portrait of a complex future society. This is Beacon Book No. 291 and Galaxy Novel No. 43; 160 pp. for 35¢ and a lot better than you'd think. We're taken into a twenty-fifth century, post-atomic-holocaust world that has been reshaped on utterly unfamiliar grounds, and that has developed conflicting societies to correspond. The hero, Dr. Leif Barker, is an underground agent for the March, a neutral zone between the Israeli Republics of the Mediterranean region and the Haijac Union of Hawaii, Australia, Iceland, Japan, America and Caspasia. There is also a Malay Democracy in southern Asia, and a Bantu nation in Africa. All of these, except possibly the Malays, are smoothly and completely individualized through action.

The purely sexual gimmick that arouses Barker's interest and stirs up trouble for him is a strange organ implanted in the bodies of two women he encounters in the line of medical and espionage duties. Put crudely, they exert something of the effect of an old-fashioned Ford spark coil during intercourse, and shock the religious puritanism of the Haijacs to its foundations. But they are incidental

to the fascination of the world Farmer has created and shows us teasingly, a bit at a time.

Another book with a strange sexual gimmick is Theodore Sturgeon's original novel for Pyramid Books—No. G-544; 160 pp.; 35¢—"Venus Plus X." Unfortunately, because Sturgeon is one of the most talented serious writers in science fiction, it somehow fails to be as good as it should. It still helps boost Pyramid's score as publisher of some mighty fine science fiction.

"Venus Plus X" is a work of very carefully planned technical structure, in which two stories are told side by side, in successive scenes. In one set of scenes we are gradually shown the perverse sexual attitudes of some ordinary people in our own society. In the other, a man of our time who has apparently been transported into the future gradually becomes acquainted with an utterly strange society synthesized in reaction to the sickness of our era. It is a strange Eden inhabited by bisexual beings, in which strange undercurrents beat and flow. Although I can't say much more without revealing Sturgeon's gimmick within a gimmick, I can say that I feel he would have had a better book if he'd played it straight, as he did the psi-optics of "More Than Human." The book is disappointing because we expect so much more of Theodore Sturgeon, just as "A Woman a Day" stands out because it is so much better than the other books with which Philip José Farmer has been contenting himself.

I have one more category, and these are the books on science fiction themes which are openly salacious, and intentionally so. There may be the saving grace of humor as in "Pagan Passions," by Randall Garrett and Larry M. Harris, another Beacon sexed-to-order production issued in the ordinarily good name of *Galaxy*. It's another fertility book, so absurd as to make Farmer's "Flesh" seem sober. There are also the two recent novelizations of the scripts for bad films, published by Monarch Books: "Gorgo," by Carson Bingham, in which the hero occasionally has at the heroine for the sake of the exercise and to pass the time while a monster is snuffling at them, and Dean Owen's "Konga," in which the monster—a bush-league Kong—is dragged in as a threadbare excuse for the professor "hero's" rutting. These are the books that, in the hands of a censorship squad, can undermine not only the maturity of books like Judith Merrill's and the imagination of Farmer's and Sturgeon's, but the whole field of science fiction.

**THE SWORDSMAN OF MARS**, by Otis Adelbert Kline. Avalon Books, New York. 1960. 218 pp. \$2.95

I am told by Bob Hyde, president of the newly organized "Burroughs Bibliophiles," that Edgar Rice Burroughs rated this the best imitation of his Mars books when it first appeared in *Argosy* in 1933. In fact, it is good enough for Brad Day to have credited it to Burroughs in his "In-

dex on the Weird & Fantastica in Magazines" and for Donald Tuck to have perpetuated the boner in his "Handbook of Science Fiction and Fantasy."

Kline's Mars isn't exactly Barsoom, but the resemblance is striking; maybe it's in a parallel time-world, like. The Martians are assorted humans—though they don't lay eggs—with names like Lal Vak and Yirl Du, that sound very Barsoomian. They operate mainly with sword and brawn, but have a potent science in the wings.

Harry Thorne, the hero, is an unsuccessful suicide who agrees to switch personalities with a Martian noble, Borgen Takkor, and cut down a previous swappie who has been running amuck there. He is, needless to say, a superb swordsman, though he doesn't have John Carter's terrestrial muscles to help him out, being in a native Martian body. There are blunders; there is villainy; there are heroines—two, by count—and monsters both friendly and unfriendly; there are even fairies, gossamer wings and all. But somehow it was more fun in 1933—and Kline never really got the foothold on Mars that he had established on Venus a jump ahead of Burroughs.

**AGENT OF VEGA**, by James A. Schmitz. Gnome Press, Hicksville, N.Y. 1960. 191 pp. \$3.00

I suppose I have been in a daze over Pagadan for the whole twelve years since I met her here, in this

magazine, in July of 1949. That silver-eyed, feather-topped humanoid appeared in a story called "Agent of Vega," and it's hard to believe that she was in only one other and that the whole saga of the Vegan Confederacy's Department of Galactic Zones was completed in the four stories now gathered in this book—three from *Astounding*, one from *Galaxy*. I've wondered for a long time why nobody had reprinted them, and I'm glad Gnome now has.

Here is galactic intrigue on a truly van Vogtian scale, with quite as much going on at once as that master ever tried to juggle, yet all knitted together with a smoothness and plausibility that makes the most outrageous goings-on believable. Schmitz never limits himself to one plot per story: he crams in enough for three or four.

Take the opening episode and title story. Zone Agent Iliff has been recuperating from a terrific mental drubbing he took some time since from a master-criminal, U-1. He's ready for duty, so he's sent to a minor world to look into a minor bit of skulduggery which Pagadan has had difficulty in handling. *Zing*—and we go behind the scenes to discover that the trouble is not so minor after all. A parasitic intelligence known as a Ceetal has dug in and is running things. That menace is disposed of by page 34, but there are some puzzling loose ends untied and Pagadan has been kidnaped by a minor villain. So Iliff starts to polish that one off, and finds that the vil-

lain is his old pal, U-1 So—but find out for yourself how much can be packed into how little space, with a fascinating picture of the Vegan bureaucracy meticulously penciled in in the background, almost as subtle and fully as in a Heinlein story and as outrageously as in one of "Doc" Smith's or, as I've already said, van Vogt's.

Episode 2, now called "The Illusionists," was "Space Fear" when it was published here in March 1951, and was the last of the Vegan series to appear. This is Pagadan's story, but she's too busy now as a Zone Agent to be quite as fascinating as in that first lovely yarn. Now she's involved with more telepathic crooks, with a mysterious, thoroughly naive eight-foot lovely from the Department of Cultures who has seen more than she should, with a rather retiring trainee, and with another mess of total trouble, multiple of course.

Round 3, "The Truth About Cushgar," was here in November '50, and in point of time it belongs at the end of the book, because among the characters who take part in the damndest attack ever to envelop a lot of the ungodly—to steal a tag from "The Saint"—are Grandma Wannatel and young Grimp from the last story, "The Second Night of Summer," which *Galaxy* had in December '50. That tale, though the menace may be inferior, is my second favorite because of Grandma's delightfully competent way of handling things, helped by a "pony" that

seems to have been bred from a titanother, and by the boy, Grimp, who has joined forces with her against Cushgar in the other story.

What a frolic! If only there were more!

**30-DAY WONDER**, by Richard Wilson. Ballantine Books, New York. No. 434K. 1960. 158 pp. 35¢

The best part of this yarn about all-conquering aliens is the effortless atmosphere of a minor news service in which the hero operates for most of the book. I don't know whether Richard Wilson ever worked in a counterpart of *World Wide*, but his story sounds as if he knew the business from the inside.

Sam Kent of *World Wide* is at the news desk on a dull July morning when the Monolithians arrive at the Burning Tree Country Club, haven of Presidents and Senators. They are humans from outer space, brimming with good will, and in no time they are honorary citizens of the United States and applicants for membership in the United Nations. They are also, it soon appears, champions of law and order. They won't permit the most stupid ordinance of the smallest town to be violated, even to preventing a preacher from delivering his Sunday sermon and Sam Kent from phoning in a story.

Up to this point it appears that we have another deftly handled "Humanoids" or "Watchbirds" or any of their formula. But Sam is then trapped by the Monolithians and dis-

covers that they have a stock of doubles for himself and for the leaders of every nation on Earth. All too clearly there is to be a switch . . .

It's impossible to go any further without giving away the assorted gimmicks around which the plot is spun. Read the book for fun, and you'll have it. Start arguing over the merits of the Monolithians' plan for mankind, and you just may have a row the size of the one stirred up by "The Humanoids."

**THE GAMES OF NEITH**, by Margaret St. Clair. **THE EARTH GODS ARE COMING**, by Kenneth Bulmer. Ace Books, New York. No. D-453. 149 + 107 pp. 35¢

Both these stories, whether by accident or design, are variants of the same broad theme: an artificial religion has been concocted to keep mankind in line. Both are "good old-fashioned" intrigue/adventure-type yarns, handled with strictly modern finesse.

"The Games of Neith"—and the games of the title are all but incidental to the plot—is the kind of story that might have gone great guns in the old *All Story*, in the grand old days of Merritt and Cummings and Burroughs and Kline. It has exotic detail, it has color, it has mystery, it has action, it has beautiful women and diabolical villains, it has traces of an Old Race—yet it's unmistakably modern in handling. The people who came to the planet Gwethym brought a violent and jealous god, Jovis, with them. When he

grew too demanding, the psychologists invented Neith and made her the world's state goddess. Then an energy leak starts slowing things down in some quarters, while would-be assassins speed things up in others, and Anassa, priestess of Neith, finds herself involved in quite a hurly-burly of world-saving. It's fun.

English writer Kenneth Bulmer, on the other hand, has Earth out in the midst of the galaxy softening up strange planets by dropping android missionaries to preach the cult of the Earth Gods, so that the natives will be ready to be peaceably dominated. Then an even greater, older race of galactic imperialists turns up, using exactly the same technique—and converting some of Earth's own missionaries along with the natives. The seafaring race, on whose water-world all this takes place, are a captivating creation.

Fun, both sides.

**THE FIRMAMENT OF TIME**, by Loren Eiseley. Atheneum Publishers, New York. 1960. 184 pp. \$3.50

The author of this series of connected essays, and of the even more fascinating volume, "The Immense Journey," is Provost of the University of Pennsylvania and a distinguished anthropologist. These are six lectures delivered in the Fall of 1959 at the University of Cincinnati. They explore the gradual growth of our knowledge of life on Earth, and of ourselves as a species. You'll find star-

ting, challenging ideas everywhere.

The titles of the six sections may give you an idea of Dr. Eiseley's approach: "How the World Became Natural," "How Death Became Natural," "How Life Became Natural," "How Man Became Natural," "How Human Is Man?" and "How Natural is 'Natural?'". You may also be a bit chagrined to discover that some of the "fresh" and "striking" concepts and attitudes that have embedded themselves solidly in science fiction are actually survivals of untenable attitudes of former centuries.

**THE MAN WHO ATE THE WORLD**, by Frederik Pohl. Ballantine Books No. 397K. 144 pp. 35¢

Over-familiar or not, this collection of rare samples of "selective exaggeration" and the "comic inferno"—quoting Kingsley Amis, who considers Pohl the best modern SF writer—should have begun with the classic "Midas Plague." The present opener, the title story, is a sequel to that tale of compulsory consumption and inverted status values and piles irony on its satire.

The next two of the five stories, "The Wizards of Pung's Corners" and "The Waging of the Peace," are also companion stories about another facet of the same kind of world. In the first, after the decimation of atomic war, the Advertising Society tries to recapture a small town which has slipped back into non-consumptive conservatism. In the second, there is a bitter war against the auto-

matic factories, which have dug themselves in and which protect themselves valiantly.

"The Snowmen" takes us into the beginning of a new glacial era, when a predatory society feeds on friend and stranger alike. A visitor from Space, with the implied power to save mankind, comes up hard against custom. This is the shortest story in the book, and almost as cutting as Fritz Leiber's "Coming Attraction."

Finally, "The Day the Icicle Works Closed" is actually a plot story, set in another distorted society. When the Icicle Works—the antibiotic factory on Altair Nine—closed down, the populace was forced to such things as body-renting. A young lawyer, trying to help teen-agers, who have plotted a kidnaping, finds that powerful forces are moving behind the facade of his crumbling society.

These stories are intended to and do function like an electric goad to jolt the complacency out of our urban social order of super-advertising, forced production, status consumption, and the rest. If you give Simak to ordinary people who like good stories, show this one to the intellectuals down the street. It will go well with their espresso.

NOTIONS UNLIMITED, by Robert Sheckley. Bantam Books No. A-2003. 1960. 170 pp. 35¢

While I'm pinning Amis tags on tion, and the rest. If you give Simak writers, I may as well include the

fiction's premier gadfly." You get eleven stories for your money, mostly from *Galaxy* and all from other magazines than this. Unlike the Pohl collection, these are not all social satires; some are straight stories. Also, Sheckley's weapon is the rapier rather than the saber.

"Gray Flannel Armor," the opener, is a comedy of future Friendship Clubs for the lonely. "Watchbird" I'm sure you know by this time: it describes the way in which the guardians of the public morals protected mankind against himself with infallible robots. "Morning After" devastates our trend toward political bread-and-circuses. "The Native Problem" satirizes the colonial mind. "The Language of Love" reduces that noble emotion to shreds.

Then there are the good plot and problem yarns. "The Leech" is a rather routine one about the monster from space that absorbs any energies brought against it, but "A Wind is Rising" is a really nice little tale about the capacity for nastiness of a nasty world. "Feeding Time" is a slight fantasy that has only to be explained to be destroyed. "Paradise II" is another strange-planet yarn with a kicker in the last paragraph. "Double Indemnity" is a comedy of time travel and a would-be swindler tripped up. "Holdout" is a gag-comedy of racism. And "Dawn Invader" describes a strange duel between races and philosophies.

Nothing memorable here, but it's all quite pleasant.

THE END

pretty generally homogenous people—the British—showed, under three different conditions, the three extreme responses to the colonist-native problem, it begins to appear fairly probable that the nature of the natives has a great deal to do with the thing! The British in New Zealand responded by working shoulder to shoulder with the Maori; in Australia, they drove out the aborigines, but at no time sought to enslave them to work for them. Yet these same British, in Africa, enslaved the Africans.

It's at least reasonable to raise the question whether or not the Africans were, themselves, responsible for that situation.

The British had gone in in another section of the planet. Now, the African colonization is quite clearly in very dire straits. Australia and New Zealand are certainly healthy and happy and successful. And so is the British-founded North American colonization. By contrast, the Spanish-founded North American colonization achieved nowhere near as high a level of success in the same period.

The United States represents a colony of the Type 1 system—the natives were pushed out and destroyed . . . in major measure.

At this point, I think it's necessary to introduce a new term. "Genocide" has been defined as the murder of a people. I want to suggest something else; "geneocide"—the killing off of a gene, a *particular characteristic* of a people.

In the United States today, the Mohawk people are, very definitely, not killed off! Outside my office window, a new skyscraper is going up—with Mohawk high-steel workers completely dominating the scene. The Mohawk Valley in New York State is still a Mohawk valley, with neat and prosperous, well-managed farms run by Mohawk families.

But the deadly Mohawk raiders, the killers that the colonists of two centuries ago feared and hated, are dead. *That characteristic* of the Mohawk people has been destroyed. The Mohawk high-steel workers have their work, because the Mohawk appears to be blessed with a genetic immunity to fear of heights—which leaves his mind free to pay attention to what he's doing five hundred feet above the ground, instead of battling his internal self-doubts and so missing his step. As one who cannot climb a twenty-foot ladder happily, I sincerely envy the Mohawk.

In other words, in a high-level technical culture, the tendency-to-be-a-raider is a highly contra-survival characteristic, while that genetic immunity to fear of heights is a highly pro-survival characteristic. The interaction of the Mohawk people and the highly successful European cultural system produced a geneocidal effect—but *not* a genocidal effect.

Thus when a high-level culture colonizes an area where Type 3 cooperative interchange is not possible, the natives may be driven out and destroyed—not, however, as a *people*, but as a *genetic type*.

In an individual, the characteristic "homocidal mania" makes co-operation impossible; in rejecting that individual, we are not rejecting him, actually, but the intolerable characteristic that we are unable to separate him from.

If the natives of an area are driven out and destroyed, it's usually because genocide is necessary; genocide is not intended or wanted.

Type 3 cultural interchange can exist only when there is mutual respect and mutual faith-and-trust. Such interchange with a group such as warrior-raiders is self-evidently impossible. They have homocidal mania as a Way of Life; you can't establish faith-and-trust respect with them.

What are the conditions that do produce a mutual co-operative hybrid cultural system?

When the Puritans first landed here, they learned, and learned rapidly from the local Indians. They adopted the Town Meeting system, the technique of planting corn in hills, with a fish for fertilizer. Both social and technical lessons were freely accepted and learned.

The Indians did not learn anywhere nearly as rapidly from the Europeans. The Indians were happy to teach—to be superior to the stupid immigrants. But they weren't at all willing to be taught. The Mohawks were one of the most advanced Indian tribes; many of them did learn from the "stupid immigrants."

The Maori were willing to teach . . . *and be taught.*

Now you *must* respect a man to learn from him. You do *not* have to respect a man to teach him.

But this doesn't mean that you have to respect a man in all things to learn some things from him. The true test of mutual respect, then, works out to the test of mutual learning-and-teaching. Where that exists, men can work side by side. Where it does not exist, co-operative co-endeavor becomes impossible. And the failure lies with the side that will not learn.

The American Indians were pushed out by the white colonists in North America, because it proved impossible to establish co-endeavor. The Indian would not learn from the White . . . the Indian wanted to be a Noble Savage, which included not working for his living, not grubbing in mines for metals, or slaving in workshops to forge and shape steel, or stewing vile chemical brews to make gunpowder.

For some reason, the Noble Savage lost his homeland as a result. Oh, he liked and happily used the White Man's guns; what he didn't accept was the White Man's hard work that produced those guns.

We might add a new Beatitude: Blessed are the do-it-yourselfers, for they shall inherit the planets!

The Spanish, in the Conquest of America, never got anywhere at all in any of the areas where there was not an already-developed hard-working civilization. The Aztecs, the Mayans, the Incas—these people worked and built their cities. The North American Indians had not reached



that level of cultural evolution; the North American Indians could not be enslaved, and the Spanish wanted only slave-worked areas. They were definitely not do-it-yourself addicts.

The Spanish enslaved the less-highly-evolved cultures they encountered . . . and here, the Spanish were playing the Noble Savage! They didn't want to work; they made the Aztecs and the Incas work, they taught the natives to build with new techniques, to mine iron, make steel tools, and establish industry.

Curiously, the Noble Spanish lost their new homelands, as a result.

Recommended reading on the situation in Africa today is Louis E. Lomax's small and very cogent book, "The Reluctant African." Lomax is an American Negro reporter, and a professor of Philosophy; he was in a position to observe data, and to evaluate what he observed, when he went through the length of Africa in 1960. He reports one interesting and revealing incident—of a Ghana representative somewhat sneeringly commenting on the lower standards of living in Liberia and Ethiopia, the two African nations that have been independent for more than a few years. The Liberian representative replied, "We have not had the benefits of colonialism, as you have."

It was the Ghana natives who built the roads, the cities, the telephone exchanges, the power plants . . . but it was Europeans who taught them how, and supplied the capital



## MOVING?

### GOING TO HAVE A NEW ADDRESS?

We can't send your regular copies along if you don't warn us ahead of time. If you're going to move, let us know six weeks in advance. Be sure to tell us: your name, your old street address, city, zone, and state, AND your new street address, city, zone, and state.

Write Subscription Dept.

**ANALOG**

P.O. BOX 5000

Greenwich, Connecticut

—which means the tools to make those tools, and the skilled labor to use them properly.

The Africans are in a somewhat peculiar position; they were not willing learners—as were the Maori—nor did they build what they now have themselves. (As the Aztecs and Incas had built even before the Spanish came.)

It rather looks as though whether Colonization System 1, 2, or 3 is installed depends far more on the nature of the natives, than on the determination or choice of the colonists. It was not a British policy to enslave the local natives—it was a Kenya policy, an African-area policy. But the same British acted differently in Australia, North America and New Zealand . . . because the natives were entirely different.

When colonists go into an area—whether it be a continent or an alien planet—where the natives are too far below the cultural level of the colonists, the natives will be pushed aside. Type 1 colonization system results.

When the natives are somewhat higher, they will be enslaved—whether the colonists so choose or not, it appears. And that will, inevitably, result in the destruction of the colony, and a rapid rise in the cultural and living standards of the enslaved natives! In the long run the natives benefit far more than the enslaving colonists!

If the cultural gap between natives

and colonists is not too great, the colonists and natives will fall into the third pattern—mutual teaching and learning, and co-endeavor to establish a new, and vigorous hybrid culture. New Zealand, Hawaii, and Alaska all represent that pattern.

At first glance, it may appear that the Eskimo had a very primitive culture indeed; in many respects he certainly did. But the Eskimo was a technologist *par excellence*; in his environment, a highly evolved social pattern wasn't essential to survival—but a highly evolved technology darned well was! The Eskimo has proven to have a fantastic degree of innate mechanical aptitude; a group of Eskimos who had never before seen an outboard engine or any other gasoline engine has been known to disassemble the device completely, and reassemble it in perfect running order. The Eskimo may have been retarded in his social development—but the masterpieces of mechanical engineering the Eskimo achieved demonstrate beyond doubt that they were a highly developed people. They have been delighted to study and learn the White Man's engineering technology—and willing too, to teach the White Man their highly developed skills of arctic survival.

In consequence, the Eskimo, like the Maori, has neither been driven out, nor enslaved. People don't tend to enslave or deport their schoolmates—their fellow-learners.

The Editor.

# Why Some People Almost Always Make Money in the Stock Market

**WHY DO SOME** "foolhardy" people make money in the stock market, while some of the most cautious people "lose their shirts"? What is the *basic* secret of preserving and multiplying your family nest egg?

After 38 years as a stock market investor, writer, broker and adviser, G. M. Loeb is more convinced than ever of the answer: *most investors have mistaken ideas about true financial safety.*

According to Mr. Loeb, who is a partner in the famed brokerage firm of E. F. Hutton & Company, it is actually *safer* to put a small portion of your capital in a well chosen speculative stock *and keep the rest of it uninvested* — than it is to put all of it in a supposedly "safe" blue-chip stock. And he tells why, based upon his wealth of successful experience.

This is just *some* of the startling advice given in his unusual how-to-invest book, "THE BATTLE FOR INVESTMENT SURVIVAL." (175,000 copies have *already* been sold!) And here is some more:

- Diversification can limit profits.
- The fact that a stock is widely held by investment trusts is *not* always a good reason for buying.
- "Dollar averaging" is, frequently,

throwing good money after bad.

-It's *safer* to aim at doubling your money than to aim at investing it for a 4% to 6% return.

What makes Mr. Loeb's daring rules so impressive is that he is not an ivory-tower theorist who merely tested his ideas "on paper." Instead, he is one teacher who for 38 years has practiced with cold cash what he preaches. And with big-profit results — for, as *Newsweek* says, this book is "written by a man who has outsmarted the market for years."

In this book he warns of Pitfalls for the Inexperienced . . . tells What to Look For in Security Programs . . . What to Buy—and When . . . Advantages of Switching Stocks . . . How to Gain Profits by Taking Losses . . . and many other "insiders'" secrets. No wonder the *Wall Street Journal* says: "His book is a *must*."

## TEN DAY FREE TRIAL OFFER

Send no money. Just mail coupon for a free-trial copy of Mr. Loeb's book (together with a FREE copy of the Neill book). If not convinced within ten days that it can repay its low price many times over, return books and pay nothing. But don't delay. This book tells things you should be doing *now*—in today's market!



G. M. LOEB,  
Partner,  
E. F. Hutton & Co.

## FREE

"Tape Reading  
and Market Tactics"  
by Humphrey Neill

This book is a detailed course on how you may make money in the stock market, by reading the tape as professionals do. Usually available only in private editions at \$6 — but yours FREE with your order of Loeb book.

Simon and Schuster, Dept. 354, 630 Fifth Ave., N. Y. 20

Please send me "The Battle for Investment Survival," and a FREE copy of "Tape Reading and Market Tactics." If not convinced that Mr. Loeb's book can repay its cost many times over, I may return books within ten days and pay nothing. Otherwise I will send only \$3.95 plus a few cents postage as payment in full.

Name.....  
(PLEASE PRINT)

Address.....

City.....Zone.....State.....

SAVE POSTAGE: Check here if you ENCLOSE payment in full — then WE PAY POSTAGE. Same 10-day return privilege with full refund GUARANTEED. N. Y. City residents please add 3% sales tax.

GET READY FOR THE SPACE and SCIENCE ERA! SEE SATELLITES, MOON ROCKETS CLOSE UP!

# AMAZING SCIENCE BUYS

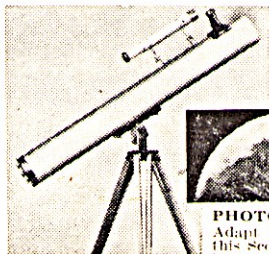
for FUN, STUDY or PROFIT



## ... SEE THE STARS, MOON, PLANETS CLOSE UP

### 3" Astronomical Reflecting Telescope

Assembled and ready to use! 60- to 180-Power  
An Unusual Buy—Famous Mt. Palomar Type



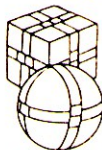
**PHOTOGRAPHERS!**  
Adapt your camera to this Scope for excellent  
Telephone shots and fasci-  
nating photos of moon

Assembled — Ready to use! You'll see the Rings of Saturn—the fascinating planet Mars, huge craters on the Moon, Star Clusters, Moons of Jupiter in detail, Galaxies! Equatorial mount with lock on both axes. Aluminized and over-coated 3" diameter high-speed f/10 mirror. Telescope comes equipped with a 60X eyepiece and a mounted Barlow Lens, giving you 60- to 180-power. An Optical Finder Telescope, always so essential is also included. Sturdy, hardwood portable tripod, FREE with Scope. Valuable STAR CHART plus 222-page "PLANETARY BOOK OF HEAVENS" plus "HOW TO USE YOUR TELESCOPE" BOOK.

Stock No. 85,050-A ..... \$29.95 Postpaid

## WOODEN SOLIDS PUZZLES

12 Different Puzzles That Will  
Stimulate Your Ability to  
Think and Reason



Here is a fascinating assortment of wood puzzles that will provide hours of pleasure. Twelve different puzzles, animals and geometric forms, to take apart and reassemble, give a chance for all the family, young or old, to test skill, patience, and, best of all to stimulate ability to think and reason while having lots of fun. Order yours now.

Stock No. 70,205-A ..... \$3.00 Postpaid

## BEAUTIFUL CIRCULAR

### DIFFRACTION GRATING JEWELRY

A Dazzling Rainbow of Color.  
As a scientific phenomenon, this new kind of jewelry is capturing attention everywhere, shimmering rainbows of gem-like color in jewelry of exquisite beauty — made with CIRCULAR DIFFRACTION GRATING REPLICAS. Just as a prism

breaks up light into its full range of individual colors, so does the DIFFRACTION GRATING.  
Stock No. 40,349-A Earrings ..... \$2.75 Ppd.  
Stock No. 40,350-A Cuff Links ..... \$2.75 Ppd.  
Stock No. 40,372-A Pendant ..... \$2.75 Ppd.  
Stock No. 40,390-A Tie-Clasp ..... \$2.75 Ppd.



## LIFE-SIZE HUMAN SKULL

Skull is anatomically correct — made of natural bone color, bone hard, life-time plastic. Parts snap together — take apart. Spring-action lower jaw, removable skull cap for examination of skull cavity, nasal passages, etc. Stand and Instruction and Anatomy Chart included.

Stock No. 70,294-A ..... \$4.95 Postpaid

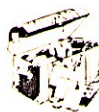
## TERRIFIC BUY! AMERICAN MADE!

### OPAQUE PROJECTOR

Projects illustrations up to 3" x 3 1/2" and enlarges them. No film or negatives needed. Projects charts, diagrams, pictures, photos, lettering in full color or black-and-white. Operates on 115 volt, A.C. current, 6-ft. extension cord and plug included. Operates on 60-watt bulb, not included. Approved by Underwriters' Laboratories, Inc. Size 12" x 8" x 4 1/2" wide, Wt. 1 lb., 2 oz. Plastic case with built-in handle.  
Stock No. 70,199-A ..... \$7.95 Postpaid



## SCIENCE TREASURE CHEST



Science Treasure Chest — Extra-powerful magnets, polarizing filters, compass, one-way-mirror film, prism, diffraction grating, and lots of other items for hundreds of thrilling experiments, plus a Ten-Lens Kit for making telescopes, microscopes, etc. Full instructions included.

Stock No. 70,342-A ..... \$5.00 Ppd.

Science Treasure Chest DeLuxe — Everything in Chest above plus exciting additional items for more advanced experiments including crystal-growing kit, electric motor, molecular models set, first-surface mirrors, and lots more.

Stock No. 70,343-A ..... \$10.00 Postpaid

## CRYSTAL GROWING KIT



(See article in Oct. 1960 issue of Analog Science Fact & Fiction) "Self Requiring Robot."

Do a crystallography project illustrated with large beautiful crystals you grow yourself. Kit includes the book "Crystals and Crystal Growing" and a generous supply of the chemicals you need to grow large display crystals of potassium aluminum sulfate (clear), potassium chromium sulfate (purple), potassium sodium tartrate (clear), nickel sulfate hexahydrate (blue green) or heptahydrate (green), potassium ferrioxalate (red), and copper acetate (blue green).

No. 70,336-A ..... \$9.50 Postpaid



## ANALOG COMPUTER KIT

Demonstrates basic analog computing principles — can be used for multiplication, division, powers, roots, log operations, trig problems, physics formulae, electricity and magnetism problems. Easily assembled with screw-driver and pliers. Operates on 2 flashlight batteries. Electric motor and 3 potentiometers are mounted on die-cut box. Answer is indicated on dial. Computer is 20" long, 9" wide, 2" deep.

Stock No. 70,341-A ..... \$14.95 Postpaid

## Get FREE CATALOG "A"

### 144 PAGES—OVER 1000 BARGAINS

World's largest variety of Optical Items, Bargains galore. . . . War surplus — Imported — Domestic! Microscopes, Telescopes, Satellite Telescopes, Infrared superscopes and parts, Prisms, Lenses, R-ticles, Mirrors and dozens of other hard-to-get Optical Items.

Write for Free Catalog "A"



ORDER BY STOCK NUMBER. SEND CHECK OR MONEY ORDER. SATISFACTION GUARANTEED!

# EDMUND SCIENTIFIC CO., BARRINGTON, N. J.