by LEWIS PADGETT

# The Fairy Chessmen

First of two parts.

The weirdest weapon ever conceived attacked not the mighty defensive screens, but the defending technical minds.

It was a simple idea—but simply devastating. All it did was deny the basis of the scientific method!

Illustrated by Orban

## I

The doorknob opened a blue eye and looked at him. Cameron stopped moving. He didn't touch the knob. He pulled back his hand and stood motionless, watching.

Then, when nothing happened, he stepped to one side. The black pupil of the eye swiveled in that direction. It watched him.

Deliberately he turned his back and walked slowly toward a window valve. The circular pane lightened to transparency as he approached. In a moment he stood before it, two fingers checking his pulse beat, while he automatically counted his respiration.

The window showed a green, rolling countryside, checkered with the shadows of drifting clouds. Golden sunlight brightened the spring flowers on the slopes. A helicopter moved silently across the blue sky.

The big, gray-haired man finished checking his pulse and waited, not wanting to turn around just yet. He stared at the peaceful landscape. Then, with a faint sound of impatience, he touched a stud. The pane swung aside into the wall.

Beyond the gap was red darkness, and the sound of thunder.

Shapes swam out of the gloom of the underground city, immense, blocky colossi of stone and metal. Somewhere a deep, rhythmic breathing made a distant roar; a mechanical rales rasped in the titan pump's beat. Static lightnings flickered occasionally, their duration too brief to show much of Low Chicago.

Cameron leaned forward, tilting his head back. Far above he could see only a deepening of the shadow, except when the necklaces of pallid lightning raced across the stone sky. And below was nothing but a pit of blackness.

Still, this was reality. The solid, sensible machines in the cavern made a sound foundation to logic, the logic on which the world was built today. A little heartened, Cameron drew back and closed the pane. Again blue skies

and green hills were apparently outside the window.

He turned. The doorknob was a doorknob, nothing more. It was plain, solid metal.

He rounded the desk and walked quickly forward. His hand reached out and closed firmly on the metal.

His fingers sank into it. It was half-solid jelly.

Robert Cameron, Civilian Director of Psychometrics, went back to his desk and sat down. He pulled a bottle from his desk and poured himself a shot. His gaze wasn't steady. It kept shifting around the desk, never settling steadily on any one object. Presently he pushed a button.

Ben DuBrose, Cameron's confidential secretary, came in, a short, heavy-set man of thirty, with pugnacious blue eyes and untidy taffy-colored hair. He seemed to have no trouble with the doorknob. Cameron didn't meet the gaze of those blue eyes.

He said sharply, "I just noticed my televisor's off. Did you do that?"

DuBrose grinned. "Why, chief —it doesn't matter, does it ? All the incoming calls come through my board anyway."

"Not all of them," Cameron said. "Not the ones from GHQ. You're getting too smart. Where's Seth?"

"I don't know," DuBrose said, frowning faintly. "Wish I did. He—"

"Shut up." Cameron had turned the visor to Receive. A hysterical buzzing sounded. The director looked up accusingly. DuBrose noticed the lines of tension about the older man's eyes, and cold, frantic panic struck into his stomach. He wondered if he could smash the visor—but that wouldn't help now. Where was Seth?

"Scrambler," a voice said.

"Scrambler on," Cameron grunted. His strong, big-knuckled hands moved lightly over switches. A face checkered in on the screen.

The Secretary of War said, ''Cameron? What's wrong with that office of yours? I've been trying to locate you—"

"Well, now you've got me. Since you're using this call number, it must be important. What's up?"

"I can't tell you over the visor.

Not even through the scrambler. Perhaps I made a mistake in explaining as much as I did to your man—DuBrose. Is he trustworthy ?"

Cameron met DuBrose's blank stare. "Yes," he said slowly. "Yes, DuBrose is all right. Well?"

"I'll have a man pick you up in half an hour. There's something I want you to see! Usual precautions. This is priority emergency. All right?"

"I'll be ready, Kalender," the director said, and broke the contact. He laid his hands flat on the desk and watched them.

"All right, have me court-martialed," DuBrose said.

"When did Kalender drop in?"

"This morning. Look, chief— I've got a reason. A good one. I tried to explain it to Kalender, but he's a brass hat. I didn't have enough stars on my shoulder to impress him."

"What did he tell you?"

"Something I don't think you should know yet. Seth would back me up on that, too. You'd trust him. And—look, I passed my psych tests with honors or I wouldn't be here with you. There's a psychological problem here and the factors indicate that you shouldn't know the set-up until—"

"Until what?”

DuBrose bit a thumbnail. "Anyway till I check with Seth. It's important that you shouldn't get mixed up in this affair right now. The whole thing's paradoxical. I may be all wrong, but if I'm right —you don't know how right that is!”

Cameron said, "So you think Kalender's making a mistake in approaching me directly. Why?"

"That's exactly what I don't want to tell you. Because if I did, it would—screw things up."

Cameron sighed and rubbed his forehead. "Forget it," he said, his voice tired. "I'm the guy in charge of this department, Ben. It's my responsibility." He stopped and looked sharply at DuBrose. "That word must have a plenty high emotional index to you."

"What word?" DuBrose said flatly.

"Responsibility. You reacted plenty."

"A flea bit me."

"So. Well, it's the truth. If there's a priority emergency in psych, it's my business to know about it. The war won't stop while I take a recess."

DuBrose picked up the bottle and shook it.

"Buy yourself one," Cameron said, shoving the cup forward. The secretary poured out amber fluid. He managed to drop the pill into the whiskey without attracting Cameron's attention.

But he didn't drink. He lifted the cup, sniffed, and set it down again. "Too early for me, I guess. I do my best drinking at night. Do you know where I can reach Seth?"

"Oh, shut up," Cameron said. He sat staring at the cup without seeing it. DuBrose went to the window and looked at the projected landscape there.

"Looks like rain."

"Not under here," Cameron said. "Nohow."

"On the surface, however . . . look. Let me go along, anyhow."

"No."

"Why not?"

"Because you make me sick," Cameron said tersely. DuBrose shrugged and went out. As he reached for the doorknob he felt the director's eyes upon him, but he didn't turn.

He went quickly to the communications board, ignoring the receptive smile of the girl who sat before the flickering panel.

"Get hold of Seth Pell," DuBrose said, curiously conscious of the tone of flat hopelessness in his voice. "Try everywhere. Keep trying."

"Important?"

"Yeah . . . plenty!"

"General broadcast?"

"I . . . no," DuBrose said. He ruffled his yellow hair distractedly. "I can't. No authorization. You'd think those pot-heads in charge would allow for—"

"The chief would O.K. it."

"That's what you think. No dice, Sally. Just try your best, that's all. I may be going out, but I'll call back. Find out where I can reach Seth, anyhow."

"Something must be up," Sally hinted. DuBrose gave her a thin, crooked smile and turned away. Praying silently, he went back to Cameron's office.

The director had the window open and was staring out at the red-lit darkness. DuBrose slanted a quick glance at the desk. The cup was empty of whiskey, and an uncontrollable tremor of relief shook him. Though even now—

Cameron didn't turn. He said, "Who is it?" A layman would not have noticed a difference in the director's voice, but DuBrose was no layman. He could tell that the alkaloid had already reached Cameron's brain, via the bloodstream.

"It's Ben."

"Oh."

DuBrose watched the slight swaying of the big figure at the window. That should wear off soon, though. The disorientation period was very brief. He blessed the lucky chance that he had had a package of Pix in his pocket. Not that it was a coincidence; most war-men carried them. When you work on desperately overtime schedules, the slow process of getting drunk is a nuisance and hangovers are an occupational risk. Some bright chemist had

taken time off to fool around with alkaloids and create Pix, tiny, tasteless pills that had all the impact of 100 proof Scotch. They created and maintained that roseate glow of synthetic euphoria which has been popular since man first noticed grapes fermenting. It was one of the reasons why war workers were willing to plug away at their interminable jobs indefinitely, in the long deadlock that had existed since both nations decentralized and dug in. The population in general, oddly enough, seemed to live a more secure and contented life than before the war; the actual job of battle planning and operation was limited to GHQ and its subsidiaries. In extremely specialized warfare, there is room only for specialists, especially since neither country used troops any more. Even PFCs were made of metal.

The set-up would have been impossible without the booster charge of World War II. As the first World War had stimulated the use of air power in the second inter-global conflict, so the war of the nineteen-forties had stimulated the techniques of electronics—among other things. And when the first blasting attack of the Falangists, on the other side of the planet, had come, the western hemisphere was not only prepared, but could work its war machine with slightly miraculous speed and precision.

War needs no motive. But probably imperialism, as much as anything, was the motive behind the Falangists' attack. They were a hybrid race, as Americans had once been; a new nation that had arisen after World War II. The social, political and economic tangle of Europe had ended in a free state, a completely new country. The blood of a dozen races, Croats, Germans, Spanish, Russian, French, English, mingled in the Falangists. For the Falangists were emigres from all Europe into a new free state with arbitrary and well-guarded borders. It was a new melting-pot of races.

And, in the end, the Falangists unified, drawing their name from Spain, their technology from Germany, and their philosophy from Japan. They were a melange as no other nation had ever been: black, yellow and white stirred up together in a cauldron under which a fire had been kindled. They spoke of a new racial unity; their enemy called them mongrels, and it was impossible to decide. Once American colonizers had pioneered westward. But there were no new lands for the Falangists.

So the last two great nations of the world had been locked for decades in a see-saw war, each with a knife against the other's armored throat. The social economy of both countries had gradually adjusted to war conditions—which led to such developments as Pix!

Morale Service, backed by Psych, had sponsored Pix. And there were plenty of other quick-action surrogates that kept the war workers happy. Like the Creeps, as someone had irreverently clubbed the subjective movies, with their trigger-action emotional shocks. And Deep Sleep, and the Fairylands that could partially compensate for the lack of children or pets—or could even act as a psychological curative. Few men could keep an inferiority complex when he could be Jehovah to a fantastically convincing illusion of a little world of his own, peopled with critters he could design and create himself. They weren't alive; they were simply gadgets; but so intricately constructed that many a man, watching a Fairyland come alive under his guiding hands on the controls, had found it difficult to come back to the real world. As an escape mechanism, the devices were plenty useful.

DuBrose watched Cameron. He wanted to make his point before the disorientation wore off.

"We'd better get ready."

"We?"

DuBrose put surprise in his voice. "Changed your mind? Don't you want me to go along, then?"

"Oh. Did I ... I thought—"

"Better not keep the window open. We might get some fumes in while we're gone."

"No dangerous gases in Low Chicago," Cameron said, taking it for granted that DuBrose was to accompany him. "Not even in the Spaces."

"Well, there are some mighty strong stinks," DuBrose said.

"An underground city—"

"I know. No matter how high-grade the technics are worked out, it's still underground. But you're the man who made the plans for the scanner windows in the first place. Why not use 'em?"

Cameron swung the pane back into place and stared at the green hillside, shadowed now under thickening rain-clouds. "Claustrophobia isn't my weakness," he said. "I can spend months underground without being bothered."

"That's more than I can do." DuBrose noticed that Cameron held his ersatz liquor well. That was fine; he hadn't hoped that the director would pass out. His plan was set for a longer range. Probably the emissary from the Secretary of War wouldn’t even notice Cameron's euphoria. He reminded himself to feed the chief a breath-purifier before—

He managed it just in time. A thin, sour-looking man with two weapons. strapped to his waist was ushered in, after the precautionary identifications.

"Name's Locke," he said. "Ready, Mr. Cameron?"

"Yes." The director was reoriented again. "Where are we going?"

''Sanatorium."

"Surface?"

“Surf ace."

Cameron nodded and started toward the door. Then he paused, frowning a little.

"Well?" he said.

"Sorry;" Locke opened the door and let Cameron precede him. When

DuBrose followed, the government man barred his path.

"You're not—"

"It's all right."

Locke shook his head. "Mr. Cameron. Is this man to come along?"

The director glanced back, his face puzzled. "He . . . what? Oh, yes. He's to come with us."

"If you say so." Locke looked sourer than ever, but fell in behind DuBrose.

They went past Communications, and the secretary raised his eyebrows at Sally. She made a hopeless gesture. DuBrose took a long breath. It was up to him now. And he was very much afraid of what they might see in that sanatorium.

The dropper took them to a lower level, and now Locke took the lead, herding the others toward an express crosstown Way. DuBrose settled back on the seat and tried to relax. He watched the ivory-pale, luminous ceiling of the tube slide past overhead, but that smooth synthetic substance made no barrier to his thoughts. They probed beyond, into the roaring clamor of the Spaces where the machines thundered in the heartbeat of the city, peopling those abysses with a clamorous life of their own. No men worked there. The men who ran the machines sat comfortably in the air-conditioned, soundproofed buildings, with the scanning windows giving them the illusion of a life that wasn't underground! Unless you opened one of the valves, you could spend your life in Low Chicago and never realize that it was more than a mile beneath the earth's surface.

Claustrophobia had been one of the first problems. And plenty of neuroses had ripened into full psychoses before certain necessities had been met and certain problems solved. Neuroses that only the warmen had, because the majority of the civilian population didn't have to live underground. Decentralization had saved them from being bomb targets.

"This station," Locke said over his shoulder. DuBrose touched a button under the chair's arm. The three seats slid off the fast belt into a spur track, slowed down and stopped. Locke silently led the way into a pneumocar that stood waiting. He closed the door and reached for the controls. DuBrose grabbed a strap just as a lean finger stabbed at top acceleration.

His stomach massaged his spine. By the time his sight came back, after the momentary blackout, he was automatically playing the old game every warman played—the hopeless task of trying to orient himself and guess the direction in which the car was plunging. It wasn't possible, of course. Only twenty men really knew where Low Chicago was located—top-rankers at GHQ. The labyrinth of tunnels that branched from the cavern ended in as many different spots, some a mile away, some five hundred miles. And, because of the winding course, all the cars took exactly fifteen minutes to reach their destinations.

Low Chicago might be under the cornfields of Indiana, under Lake Huron, or

under the ruins of old Chicago, for all the war workers knew. They simply went to one of the Gates known to them, were identified, and got into a pneumo-car. Then, a quarter of an hour later, they were in Low Chicago. As simple as that. Every underground city had the same system, a preventative measure against drill-bombs. There were other precautions, too, but DuBrose wasn't a technician. He had been told it was impossible to get a triangulated radio fix on any war city—and accepted the fact. War, these days, was more of a chess game than a series of battles.

The car stopped; they walked through a short tube into the cabin of a helicopter. The vanes shrieked. The plane rose and maneuvered jerkily in a quarter turn. Through a window DuBrose could see the feathery branches of trees slipping downward. Then, as they rose higher, an arid stretch of hills was visible. DuBrose wondered what state they were in. Illinois? Indiana? Ohio?

He leaned forward anxiously. There was something—

"Eh?" Cameron glanced at him.

DuBrose spun a dial on the window-frame; a circle in the plastic thickened to a lens, bringing the distant scene closer. He looked once and relaxed.

"Dud," Locke said. DuBrose had not thought the pilot had noticed his movement.

"One of the domes, that's all," Cameron said, settling back. But DuBrose didn't stop staring at the silvery, tattered thing on the hillside.

It was a hemisphere, a hundred feet in diameter, and there were seventy-four of then scattered over America, all exactly alike. DuBrose could not remember when they had been perfectly opaque, mirror-silvery shells; he had been eight years old when they had appeared out of nowhere, all at once, cryptic with their secret that had never been solved. No one had been able to get into them, and nothing tangible had ever come out. Seventy-four shining hemispheres had come from somewhere, causing a near-panic. Another secret weapon of the enemy.

An area thirty miles around each shell had been cleared of civilians, while experts tried to solve the problem, expecting at any moment that the things would blow up. A year later they were still working.

Five years later they continued their tests—more sporadically.

Then the unbroken smoothness of the domes began to be marred. Striae made networks across the polished substance that wasn't matter. And the webs broadened, as though quicksilver were flaking from the back of a mirror, until the shells were tattered and split. It was possible to see inside then, but there was nothing inside—simply bare ground.

Nevertheless no one had been able to get into a dome. The force, whatever it was, remained constant; something like solid energy made an impassable barrier to solids.

Long since the public, continuing to think the enigmas a secret weapon that

had failed, had named them Duds. The title stuck.

"Dud," Locke said, and turned on the auxiliary rockets. The landscape vanished in a blur.

DuBrose glanced at Cameron, wondering how soon the alkaloid surrogate would wear off. Pix weren't infallible. Sometimes—

But sight of the director's calm, relaxed face reassured him. It would he all right. It had to be.

Cameron was looking at the altitude gauge on the instrument panel. It was smiling at him.

## II.

Dr. Lomar Brann, the neuropsychiatrist in charge of the sanatorium, was a compact, dapper, alert man with a waxed moustache and sleek black hair. He had a way of clipping his words that made him seem brusquer than he was. Now his eyes narrowed a little at sight of Cameron, but if he noticed the director's euphoria, he didn't show it.

"Hello, Cameron," he said, tossing charts on his desk. "I've been expecting to see you. How are you, DuBrose?"

Cameron smiled. "I'm under sealed orders, Brann. I don't know what I'm here for."

"Well . . . I know. I've had my own orders. You're to examine Case M-204."

The director jerked his thumb toward a visor screen on the wall. It showed a patient fidgeting nervously in his chair, while the oval inset screen just above held a close-up of the man's face. The audio was saying softly:

"They were always after me and the birds whose ferds couldn't stop and the noises trees freeze sees words always go like words—"

Brann turned the visor off. The wire-tape spool stopped unreeling; the recording faded and died into silence. "That's not the one," Brann said. "He's—"

"Dementia praecox, eh?"

"Yes, d. p. Disoriented, rhymes words—usual case history. I'll have no trouble curing him, though. Two months and he'll be on a farm topside."

That was the usual procedure after psycho-patients had undergone treatment in the underground hospital-city. They were put into the care of specially selected sponsors, where the cure could progress under more normal conditions. DuBrose had made a survey of the system as part of his psych field work.

Brann looked slightly puzzled. He had noticed the euphoria, then—but he wouldn't comment on it while DuBrose and Locke were there. He said, "I suppose we may as well look at M-204."

Cameron said, "His identity is secret?"

"Not my field. The Secretary of War will tell you later, don't worry about that. I'm just supposed to show you the patient. Mr. Locke, if you'll wait here—"

The guide nodded and settled himself more comfortably into a chair. Brann ushered Cameron and DuBrose through a door into a cool, softly lighted corridor. "He's my own private case. Nobody else sees him, except the two nurses. Constant attendance, of course."

"Violent?"

"No," Brann said. "It—isn't my field, really. The man—" He unlocked a door. "Through here. The man has hallucinations. A perfectly ordinary case, except for one thing."

Cameron grunted. "What's the diagnosis?"

"Well, tentatively—paranoia. He's assumed another identity. A rather . . . ah . . . exalted one."

"Christ?"

"No. We've plenty of patients who've taken on that identity, Cameron. M-204 believes he's Mohammed.

"Symptoms?"

"Passive. We force-feed him. You see, he's Mohammed after Mohammed's death."

"Old stuff," Cameron said, "Retreat to the womb—escape mechanism?"

"What's his position?" DuBrose asked, and Brann nodded approvingly.

"Good point. Not the foetal posture at all. He stays on his back, legs extended, hands crossed on his chest. He doesn't talk, he keeps his eyes shut." The neuropsychiatrist unlocked another door, "He's in this private suite. Nurse!"

A husky red-headed male nurse appeared as they stepped into a well furnished, comfortable hospital room. A serving table stood in one corner; equipment for force-feeding was in its glass case, and there was a transparent-paneled plastic door in the further wall. The nurse nodded toward that door.

"The patient's being examined, sir."

Brann said, "A technician of some sort, Cameron. Not medical. I think his field's physics."

DuBrose was staring at a six-foot stepladder which seemed incongruously out of place in the neat, sterile chamber. The plastic door opened. A worried-looking man popped out, blinked at them through thick-lensed spectacles, and said, "I'll need this." He seized the ladder and disappeared.

"All right," Brann said. "Let's take a look."

The adjoining room was a solitary, but comfortable enough. A bed had been pushed out from the wall. A few pieces of technical equipment were on the floor, and the physicist was pushing the step-ladder toward the bed.

M-204 lay flat on his back, hands folded on his chest, his eyes closed and his lined face perfectly blank and expressionless. But he wasn't lying on the bed. He was floating in the air five feet above it.

Automatically DuBrose looked for wires, though he knew there was no reason for hocus-pocus here. There were no wires. Nor was M-204 supported by glass or transparent plastic, he—floated.

"Well?" Brann said.

Cameron said. "Mohammed's coffin . . . suspended halfway between heaven and earth. How's it done, Brann?"

The doctor touched his mustache. "That's out of my field. We've taken the usual tests. C.B.C., urinalysis, cardiograms, basal—and we had a time doing it." he added, grimacing. "We had to strap the patient down to run our X-rays. He floats!"

The physicist, perched precariously on the stepladder, was doing cryptic things with wires and gauges. He made a low, baffled noise. DuBrose watched the technician move a gadget slowly back and forth.

"This is crazy," he said.

"He's been here since yesterday morning," Brann said. "M-204 was found in his laboratory suspended in midair. He was irrational then, but he could talk. He explained he was Mohammed. After half an hour, he became completely passive."

"How did you get him here?" DuBrose asked.

The doctor fingered his mustache. "The same way we'd get a balloon here. We can maneuver him around. When we let go, he bobs up again. That's all."

Cameron stared at M-204. "Man of about forty . . . notice his fingernails?"

"I did," Brann said grimly. "Up to a week ago, they were well-kept."

"What was he doing this last week?"

"Working on something I'm not allowed to know about. Secret military information."

"So ... he discovered a means of neutralizing gravity . . . and the shock of it . . . no. Because he'd be expecting just such results. If he'd been working on—say—a bombsight, and suddenly found himself floating up off the floor—" Cameron scowled. "But how can a man—"

"He can't," the physicist said from the stepladder. "He just can't do it. Even

theoretical antigravity requires machines. My instruments must be bollixed up."

Cameron said, "How?"

The technician held up a gauge. "It's registering—see the needle? Now watch." He touched a metal-tipped wife to M-204's temple. The needle flipped back to zero. Then it shot wildly to the limit, wavered there, and subsided back to the zero mark again.

The technician descended. "Fine. My instruments don't work when I use them on that guy. They work all right elsewhere. But—I don't know. Maybe he's suffered some chemical or physical change. Though even then I should be able to make a qualitative analysis. It's crazy." Muttering, he repacked his equipment.

Cameron said, "It's theoretically possible for an object to float in air, though, isn't it?"

"You mean an object heavier than air. Sure. Helium will inflate a dirigible. Magnetism will hold up a chunk of iron. Theoretically it's quite possible for this man to float. That isn't the problem at all. Theoretically practically anything's possible. But there's got to be a logical reason. How can I find a reason when my instruments don't work?"

He made a despairing gesture, his wrinkled, gnomish face twisted in angry lines. "They want me to work blind, anyway. I've got to find out what this man was working on. That's where I'll find the explanation. Not here!"

Brann looked at Cameron. "Any questions?"

"No. Not yet, anyhow."

"Then let's go back to my office."

Locke was still waiting when they came in. He stood up impatiently.

"Ready, Mr. Cameron?"

"What next?"

"The secretary of War."

DuBrose groaned inaudibly.

III.

Within the next four hours—

A rocket engineer traced a circuit for the ninety-fourth time, sat back, and started to laugh. His laughter changed to a shrill, incessant screaming. The infirmary doctor finally shot apomorphine into the man's arm, before painting the raw throat. But when the engineer woke up he instantly began screaming again. As long as he made noises he was safe.

The circuit the engineer had been tracing was part of a gadget the enemy had dropped in quantity. Four of these gadgets exploded, killing seven

technicians and wrecking valuable equipment. The ones that exploded were the Duds.

A physicist rose from the papers on his desk, went quietly to his workroom, and rigged up an effective high-voltage circuit. Then he electrocuted himself.

Robert Cameron, a portfolio under his arm, returned to Low Chicago and hurried to his office. The doorknob felt normal as he touched it. He went to his desk and opened the portfolio, spreading out the photostats and charts. He looked at the clock and saw the hands standing at one minute to seven. He compared it with his wrist watch.

Cameron waited for the seven musical strokes. They did not come. Again he glanced up at the white, numbered dial.

A mouth had opened there. It said, "Seven o'clock."

Seth Pell was Cameron's aide and alter ego. He was thirty-four, had white hair, and a round, fresh face that might have belonged to a teenager. Next to the director, Pell was probably the most competent man in the psychometric field—probably better in neuropathology, though without Cameron's broader knowledge of technology.

He walked into his office with a reassuring smile for DuBrose. "What'll you have?" he asked. "A sedative or a stiff drink?"

DuBrose couldn't match that airy lightness. There was a dull pounding behind his eyes.

"Seth. If you hadn't shown up—"

"I know. The world would have come to an end."

"Did the chief tell you what happened?"

"I didn't let him," Pell said. "I persuaded him to take a dose of Deep Sleep and he settled for ten minutes' worth. Then I got psychonamical. He's thoroughly hypnotized by now."

DuBrose breathed deeply. Pell perched on the edge of his desk and began paring his fingernails.

"O.K.," he said. "I've taken your word that it's necessary to get the chief under hypnosis fast. You're the only guy I'd trust enough to do that blind. I don't usually buy a pig in a poke. So?"

DuBrose felt weak. If he couldn't convince Seth now—but he was certain he could. The danger was too real, too evident for misunderstandings.

He said, "The Secretary of War —Kalender, you know—came this morning. The chief was busy, so I asked Kalender if I could do anything. He was plenty upset or he wouldn't have talked to me, even though he knows I've got the chief's confidence. He talked a little—not much, but enough for me to smell trouble. There's a problem. But —here's the catch. Everyone who's tried to solve it has gone insane."

"Yeah," Pell said without looking up.

"I don't want the chief to go insane," DuBrose said flatly. "I managed to slip a Pix pill into his whiskey before Kalender got hold of him. It was all I could do. But it'll help if you think artificial amnesia is necessary."

"Mnemonic work is up my alley," Pell said. "However—let's go see." He slid off the desk.

DuBrose followed him. "Kalender wouldn't let me in when he talked to the chief a while ago. So I don't know what they discussed."

"We'll find out. Come on."

Cameron lay relaxed on the couch in his office, the Deep Sleep plate still pulled out from the wall. His breathing was slow and regular. Pell picked up the unconscious man's wrist, while DuBrose brought chairs.

"All right. Now for the mumbo-jumbo. Cameron—can you hear me?"

It didn't take long. Pell was an expert psychonamics man, and he had Cameron's complete confidence, which helped. Soon Pell leaned back, crossing his legs.

"What's all this about Secretary Kalender, Bob?"

"He—"

"You know who I am?"

"Seth. Yes. He . . . told me—"

"What?"

Cameron didn't open his eyes. "You have to walk in the other direction to meet the Red Queen," he said. 'The White Knight is sliding down the poker.'

Pell was startled. DuBrose whispered. "He balances very badly."

That drew a response. Cameron murmured, "Something on that order. Is that you, Seth?"

"Sure," Pell said. "What about Kalender?"

"It's big trouble. We've got hold of a formula that doesn't seem to mean anything. It means a lot to the enemy, though. I still don't know how the equation fell into our hands. Espionage, probably. But it's important, and it's got to be solved, and it doesn't make sense."

"What does it deal with?"

"There are general and specific applications. Like the law of gravitation. There are constants involved, but . . . the sum of the parts doesn't seem to equal the whole. The equation in toto doesn't make sense. In partis it does. You can suspend the laws of logic, apparently. And the enemy is doing just that. They've dropped some bombs that can pierce force-shells.

Which is impossible. When the bombs were examined, they didn't make sense either. But they tied up with that equation. The technicians are trying to solve that equation. But—they go crazy."

"Why?"

Cameron didn't answer directly. " M -204 was one of the first to work on the thing. He didn't solve it. He learned how to neutralize gravity, and went insane. Or the other way around. We've got to find a solution, Seth. I've been glancing over the equation . . . it's on my desk—"

Pell jerked his thumb; DuBrose rose and collected the papers, shuffling them into a compact stack. He gave them to Pell, who didn't look at them.

"We've got to find the answer," Cameron said. "Or else. The enemy will have unlimited power—"

"Have they solved the equation?"

"I doubt it. Partially, that's all. But they'll do it, unless we forestall them."

Pell was grinning, but DuBrose noticed diamonds of perspiration on the man's forehead below the silvery hair.

"We've got to solve it," Cameron said.

Pell stood up and beckoned DuBrose into his office. "Nice going,'' he said. "You did the smart thing." 'That takes a load off my mind. I wasn't sure—"

Pell said, "If a man's wife breaks her leg, he's half nuts till the doctor arrives. Then it's all right—he can shift the responsibility to more competent hands and relax. It isn't his job any more. But the doctor is equipped to handle a broken leg. The responsibility won't bother him."

"And in this case—we're not equipped?"

"I haven't looked at the equation," Pell said, tossing the sheets on his desk, "and I'm not sure I’m going to. I can just imagine what that fool Kalender told the chief. Fate of the nation rests in your hands. You're responsible for finding somebody to solve the problem. If you don't, you'll have lost the war for us. So. That shovels the responsibility right into the chief's lap—and he's got to solve the equation or go nuts. That the way you figured it?"

"More or less." DuBrose chewed his lip. "That case—M-204—he learned how important the thing was, and took refuge in insanity. Paranoia in his case, you said. He must have solved part of it, and it couldn't have made much sense. The equation is the weapon, not its by-products."

"If nobody worked on it, the enemy might solve it first. Even as it is, they can penetrate force-fields. What they might do if they got all the answers . . .! No, we've got to keep working, but not the way Kalender has in mind. That idiot thinks you can cure leprosy with an order of the day."

DuBrose said slowly, "I figured we could erase the chief's memories of what's happened today. Implant pseudo-memories, harmless ones. And

then present the problem to him after we've yanked out the poison fangs."

"Smart boy," Pell nodded. The trick will be to keep the chief from realizing his responsibility. That'll be our job, I'm not sure just yet—" He glanced at his watch, "The first thing is to treat the chief. Wait for me."

He went out, DuBrose moved to the desk and shuffled the photostats and papers. Some of the symbols made sense; others didn't.

Still, he noticed that pi had been assigned an arbitrary and erroneous value. Was that a basic?

Better not look. He tried one of the windows, but the landscape blurred before his eyes. Could an equation cause insanity?

Of course. The equation was simply the concrete symbol of the abstract problem. The old test of the white rat and the anxiety neurosis. Slam the doors shut when the rat doesn't expect it, so he can't get at the food. After a while the rat simply huddles down and shivers. Nervous breakdown.

To have this interminable, unending war over might be a blessing. But to lose it—!

Not to the enemy. Generations of indoctrination had made that unthinkable. Men were conditioned to war now. They didn't even hate the enemy. But they knew, very thoroughly, that they must not lose.

Bombs dropped on both sides. The robots waged their pitched battles. But the real warriors were the technicians who moved the chessmen and created new gambits. There were no more diplomats; there was no need for them. There was no communication with the enemy, except the sudden messages that roared out of the sky.

Messages were received—and sent. But they were not convincing. Aerial torpedoes could not harm the protected nerve-centers of either country.

The annunciator said “Mr. Pell. A courier from the Secretary of War.”

"Mr. Pell's busy," DuBrose said. "Have him wait."

"He says it's an emergency."

"Have him wait!"

There was a brief silence. Then—

"Mr. DuBrose, he won't. He wanted to see the director, but Mr. Pell ordered all messages relayed through his office, so—"

"Send him in here," DuBrose said, and turned to the door as it opened.

The courier's brown-and-black uniform meant something; he was Secret Service. Men who wore the arrow insignia on their lapels were rare—and got their authority directly from GHQ. This man—

He was sturdily built, neckless, and with cropped bronze hair that glistened metallically in the cool light. But it was his eyes that held DuBrose. They

held an odd look of restrained excitement, of joyous, wild exultation held rigidly in leash. The thin mouth was well under control. Only the black eyes were betraying.

He held out his disk. "Daniel Ridgeley," DuBrose read, and automatically compared the portrait with the man's face. That was scarcely necessary; when an identification badge was removed from the wrist of its owner, it went blank permanently.

"Mr. Ridgeley," DuBrose said. "Mr. Pell will be free in a few minutes."

Ridgeley's deep, slow voice held impatience, "Priority. Where is he?"

"I told you—"

The courier glanced at the door and took a step toward it. DuBrose barred his way. The strange, febrile excitement flamed behind the jet eyes.

"You can't go in there."

"Get out of my way. I have my orders."

DuBrose didn't move. The courier made a quick, apparently casual motion, and the secretary went staggering across the room. He didn't try to intercept Ridgeley; instead, he plunged toward Pell's desk and jerked open a drawer. A vibro-pistol was there, a lovely, intricate mechanism of sturdy crystal and shining metal.

DuBrose's hands felt clumsy, like mush-filled gloves, as he fumbled with the weapon. He felt ridiculously melodramatic; odd that in this war of attrition men had so little experience with physical combat. As far as he knew, this vibro-pistol had never been used.

He leveled it at the courier and said, "Take it easy!"

Ridgeler was facing him, the heavy shoulders bent, the stocky body crouched a little. That inexplicable devil of half-mocking delight burned behind the man's eyes, and with it was something like fast, icy calculation.

Then Ridgeley walked toward DuBrose.

He shifted catlike on his feet as he moved, and four feet from the secretary he stopped, quite motionless, his expression blank and intent. DuBrose felt sweat trickle coldly down his ribs.

Ridgeley said, "I've my orders."

"You can wait."

"No," the courier said. "I can't." And his whole body seemed to draw inward, like a huge cat gathering itself together. Though he was holding no weapon, he seemed more formidable than the armed DuBrose.

A lock clicked. The door to Pell's consultation room opened. On the threshhold stood a young man of about twenty, thin, pale and stooped in his wrinkled tunic and shorts. His eyes were closed. He was making a

hacking, unpleasant noise in his throat, moving his lips jerkily as the sound rose and fell without cessation.

"K-k-k-k-k-k-kuk!"

He came forward. There was a chair in his way. He walked around it and avoided the desk, though his eyes were still tightly shut.

"K-k-k-k-kuk! Kuk-kkkkk!"

DuBrose moved too late. The vibropistol was deftly jerked from his grip. Ridgeley stepped back, his gaze flashing from DuBrose to the young man.

"Who's that?" he asked.

DuBrose said, "I don't know. I didn't know Pell had a patient—he must be a patient. But—"

"K-k-k-k-k-kuk!"

The boy's excitement was rising. He stopped, his whole body beginning to shake uncontrollably. That unpleasant sound rose to a harsh thick croaking.

"Kuk-k-k-k-k-kuk!"

"Well," Ridgeley said, "I've got to see the director. Is he in there?"

"He's busy," Seth Pell said. "You can talk to me. I'm second in charge."

The aide was standing by Cameron's door, smiling casually, ignoring the vibropistol in Ridgeley's hand. "Ben," he said, "will you take that patient back in his room? Give him a light shot if necessary. But a sedative should be enough."

DuBrose gulped, nodded, and took the boy's arm.

"K-k-k-kkkk!"

He led the jerking, shaking figure back into the examining office and swiftly got him on the table. A heated blanket, a pink pill, and the boy lay quiet, his shivering subsiding. DuBrose adjusted an alarm to ring if the patient got off the table and hurriedly returned to Pell's office.

The vibropistol lay on the desk. Ridgeley was arguing quietly. Pell hadn't moved.

"—my orders. I'm to deliver this case to the director. The Secretary of War told me that himself."

Pell said, "Ben, get Kalender on my visor, will you?" He nodded at Ridgeley, turned, and disappeared through the door behind him. By the time he came back, Kalender's heavy, hard face was on the screen.

The courier took a cylindrical metal case from his pocket. Robert Cameron, behind Pell, ignored it. The director went straight to the televisor and faced Kalendar.

"Oh—Cameron," the Secretary of War said. "Did you get that—"

Cameron said, "Listen. All messages and contacts are to be filtered through my aide, Seth Pell, until further notice. I want nothing delivered directly to me. Hereafter all calls to me must reach Pell first. Including GHQ and priority calls."

"What?" Kalender was taken aback. His strong jaw thrust forward. "Yes, yes," he said impatiently. "But I want to talk to you. My courier—"

"I haven't talked to him. He must deal with Pell."

Kalender snapped; "This is official business, Cameron—and priority! I don't want this handled by subordinates! I want—"

"Mr. Secretary," Cameron said quietly. "Listen to me. I'm not under GHQ. I'm running the Department of Psychometrics my way, and I don't permit my authority here to be questioned. If I wish to use Seth Pell as a filter, that is my affair. Until the government gives you more authority than you've got now, you'll allow me to handle my own business in my own way. That's all!"

He snapped the switch on the apoplectic Secretary of War and turned to his office. The courier stepped forward.

"Mr. Cameron—"

Cameron gave him a cold stare. "Did you hear what I told Mr. Kalender?"

Ridgeley said, "I've got my orders." He held out the metal case.

The director hesitated. Then he took it. "All right," he said. "You've done your job."

He handed the case to Pell and walked back into his office. The door closed softly.

Pell tapped the metal cylinder against his knuckles. He waited, watching Ridgeley.

"Well," the courier said, "I gave it to the director, anyhow." His eyes met DuBrose's briefly; then he saluted casually and went out.

Pell tossed the cylinder on the desk. "Nice going," he said. "Lucky the chief backed me up."

DuBrose touched the vibropistol with an exploratory finger. "I . . . did the chief—"

"It's all right." Pell smiled. "We've time to work on the problem now. I gave our director the works—a complete quick mnemonic treatment. He doesn't remember anything that's happened today I gave him some phony memories instead. Now we can let him have the problem without the responsibility—if we can figure out how to do that."

"You didn't rouse his suspicions?"

"The chief trusts me. Completely, I told him I wanted to be a filter for a while, and not to ask me why. He'll wonder, of course, but he can't guess the right answer. I've wiped out the dangerous memories."

"Completely?"

"Completely."

Cameron opened the window and watched the red darkness pulse and shift. A vague memory troubled him, but not too much. It was simply part of this thing that had come on him—the thing he had to fight out by himself. There must be a reason. There had to be. If he submitted himself to psychiatric examination, he'd ... no. That wasn't the way. Visual and auditory—and tactile—hallucinations . . .

That dim memory came back. It was impossible to place its sequence in the day's events—a fairly dull and ordinary day. He hadn't budged from the office, there had been few callers—but this memory, like the doorknob and the clock and the smiling altitude gauge, probed with soft insistence into his mind.

A man floating in midair.

Hallucination.

IV.

"The chief's gone home," DuBrose said.

"Fair enough." Pell spread papers on his desk.

"Shouldn't one of us—"

The aide glanced sharply at DuBrose. "Relax, Ben," he said lightly. "Hypertension's setting in. The chief won't receive any calls. He'll have 'em routed to me. Mm-m—" He hesitated. "Look. Take these cards and alphabetize 'em while we talk. Or else have some Deep Sleep."

DuBroM accepted the cards, shuffling them automatically into sequence. "Sorry," he said, “this thing’s got me a bit, I guess.”

Pell’s white hair glistened as he bent forward over the charts. “Why should it?”

“I don’t know. Empathy—“

“Orbs,” Pell said, “I could be as jittery as you if I wanted to. But I’ve studied history and literature. And architecture, and a lot of things, just to balance this psycho work. There's a lot more perfection in a Doric column than in you."

"Yeah. But I can build a Doric column."

"You can also build a backhouse. That's the trouble. You're as likely to do one as the other." He chuckled. " 'I do not like the human race ... I do not like its silly face.' "

"What's that?"

"A guy named Nash. You never heard of him. The thing is, I'm part misogynist, Ben. If somebody wants me to like him, he's got to prove he's worth liking. Few people do."

"Oh, philosophy," DuBrosc growled, dropping a card. "What's this? Palate deformation developing at twenty with—"

"Group of cases I've been investigating," Pell said. "Academic value only, I'm afraid. No, it isn't philosophy; I just can't get excited over anything that threatens people in the aggregate. Humans aren't selective. They lost selectivity when they gave up instinct for intelligence. And so far they haven't learned to discipline their creative powers. A bird will build a nest that's a beautiful piece of engineering."

"Dead end."

"I'm not infatuated with birds either." Pell remarked. "They're too reptilian for my taste. But people—in fifty thousand years or three times that time, they may have learned the art of selectivity. They'll be worth knowing—all of them. At present genus homo is struggling up through the mire, and I'm fastidious."

"Proving what?" DuBrose asked, irritated.

"Proving my egotism," Pell laughed. "And explaining why I'm not hot and bothered over this particular danger." But, DuBrose thought, it didn't explain why Pell seemed so unconcerned about the danger threatening the director. Cameron was Pell's closest friend; there was a warm affection between the two men. It was something else in the aide's mind, a latent strength, a steel discipline, that enabled him to keep his balance.

DuBrose didn't know Pell. He admired and trusted him, but had never tried to encroach on a certain deep restraint that Pell kept buried, under his casual flippancy. Often he wondered. There were rumors, scandalous even in these amoral days, about Seth Pell's private life—

"Uh-huh," the aide said. "Quite a problem. Everybody who's worked on this equation is either showing signs of strain or going nuts. Unless—here's a factor—unless they could delegate the responsibility. The enemy's been dropping bombs that penetrate force-fields. A few have exploded. Most haven't. Apparently the hookup's impossible. There's one gadget that can't possibly work on the same circuit with another gadget. Twelve men in various fields have already gone insane. Two with suicidal tendencies have committed suicide. Somebody named Pastor—physicist—says he'll have the equation solved within a few days. No way of checking that at the moment. And so on, and so on. We'll have to make some personal interviews. Our job is to gather the data and correlate it. Including the fact that part of the equation can nullify gravity."

DuBrose had finished alphabetizing the cards. He flipped them idly.

"How can we present the problem to the chief?"

"Well—he mustn't realize its importance. I think the best way is to bury it. Handle the whole affair casually. But not give him the equation. He's too good a general scientist to be trusted with that. If he tried to solve it himself . . . and it seems to have some sort of fascination. No, we've got to gather all the information that's pertinent, make sure it's innocuous, and hand it over to the chief. That means leg work."

"Can we handle it that way? Isn't there a danger of emasculating the vital factors so much that—"

Pell said, "We've got to find out exactly why technicians go crazy when they try to solve the equation. And the chief has to think of somebody who can solve it."

He stood up. "That's enough for now. Let's wind up the day." He tossed the papers into a drawer and made adjustments. A dome of icy white light sprang into existence around the desk.

DuBrose said, "Force-fields may not be so safe any more, if the enemy can drop bombs through them.'"

"I set the incendiary, too," Pell said. "But who'd want to steal that equation? The enemy's got it already." He went into the examination room, DuBrose following. The boy still lay asleep on the padded table, his eyes closed, his breathing even.

"Who is he?" DuBrose asked.

"Name's Billy Van Ness. Typical case—one of that group on the cards you were juggling. Delayed puberty, age twenty-two now, sudden physical and mental changes started two months ago. Only constant is the fact that all the cases were born within a radius of two miles from a Dud."

"Radiation affecting the genes of the parents?" DuBrose was picturing the silvery, tattered dome on the arid hillside.

"Could be."

"Enemy?"

"A weapon that didn't work, then. Only about forty cases in all. It's odd; they were all perfectly normal up to two months ago— except for delayed maturation. Then they matured and some curious physiological changes set in. Deformation of the palate . . . but it's the mental metamorphoses which are more interesting. They never open their eyes—a familiar enough symptom. Recognize it?"

"Naturally."

"But—"

"Wait a minute," DuBrose said. That boy could see. He walked around a chair that was in his way."

"A little trick they have," Pell smiled. "ESP for all I know. They never bump into anything when they walk about—which is seldom—but they never go in

a straight line. A twisting, erratic pattern always, as though they're walking around things that aren't there as well as things that are."

"Balance distortion?"

"No, they're steady. They just walk as though they're threading a path through a roomful of eggs. What excited this boy?"

DuBrose made a few guesses.

"It's unusual," Pell said. "They seldom rouse from their passivity unless they're near a Dud. That seems to excite them. They make that funny noise. Unpleasant, isn't it?"

"Any prognosis yet, Seth?"

Pell shook his head. "I'm going to try mnemonic probing. If nothing else works. I may be able to throw this boy's mind back to his more normal past. Well, let's have those cards." He tossed them on a table and rang for an attendant. "Billy can stay in the infirmary tonight—private room. Get your cloak. Ben. We're going out."

DuBrose said, "Any equipment—"

Pell chuckled. "Not for this therapeutic work, brother. We're going to extrovert for a few hours —but good. You've got a bad case of hypertension. Deep Sleep won't cure it. If I told you to go out and eat Pix, you'd do it, but you'd still feel subconscious anxiety. This way you'll be able to relax, because I'm your superior, and the responsibility's mine."

"But ... look, Seth—"

"You're going through the mill tonight," Pell said. "Tomorrow we'll go crazy together."

Only a helicopter could have landed on this outcrop of the Rockies. A drill-press had run wild across the sky: the rarefied atmosphere made even low-magnitude stars brilliant. The path of the Milky Way splashed its cataract toward the Wyoming horizon eastward, and the frigid wind made DuBrose's jaw muscles tighten. Then the force-field lifted again, blotting out the sky in a curdled dome of silently crackling light.

The house under the field looked like a chalet, but those steeply sloping roofs were functional in a region where the snowfall was measured in yards. It wasn't snowing now; bare, brittle ground crunched under DuBrose's feet. He went on with Pell toward the porch and presently was standing in a huge room that might have been furnished by a color-blind man. A dozen periods of furniture were represented; a Louis XIV sofa sat under a Gobelin tapestry, and the tapering sleekness of Brancusi's "Bird in Space" perched incongruously on a Victorian marble-topped pedestal. Oriental rugs clashed violently with bearskins on the floor and trophy heads on the wall. One whole side of the room was a segmented projection screen. Beneath it was a Fairyland box and control panel, one of the most complicated DuBrose had ever seen.

"Wonder if Pastor furnished this place himself?" DuBrose muttered.

"Sure," a voice behind him said, "just the way I wanted it. It scares people sometimes. Make your landing all right? The thermals are tricky around here."

"We managed," Pell said. DuBrose was staring at the gnomish little man, with his wrinkled nutcracker face. And Dr. Emil Pastor stared back, blinking through heavy lenses.

"Oh, it's you," he said. "I never did catch your name."

"DuBrose. Ben DuBrose. Dr. Pastor and I met at the sanatorium, Seth—he was examining that patient, M-204. The one who floated."

"Floated," Pastor said, blowing out his cheeks expressively. "You don't know half of it. I found out what part of the equation he was working on. Lovely stuff, pure symbolic logic, except for one thing. Two things, rather. If you neutralize gravity completely, centrifugal force will shoot you out in space at a tangent. Right? But M-204 just floated. According to his figures—based on that equation—the trick's theoretically possible. All you have to do is utilize the arbitrary values the equation assigns to two symbols—orbital velocity of the earth and the power necessary to lift a body out of the earth's gravitational influence."

"Arbitrary values?" DuBrose asked.

"Sure. They're really constants. 66,600 m.p.h. for the first, 6,000,000 kilogram-meters for the second. The equation says it only takes 10 kilometers to get away from gravity, and the first constant can be ignored.

It's zero. The earth doesn't revolve at all."

"What?" Pell said.

Pastor made a significant gesture. "I know. M-204 is insane. But his insanity is based on something peculiar. He thinks he can float because the earth doesn't revolve. And—he floats. Nevertheless it moves!"

The aide said, "What about those 10 kilometers? Energy—"

Pastor nodded. "That, too. Energy has to be expended constantly to maintain a balance like that—antigravity. Unless you have enough orbital velocity to keep moving, like the moon. But M-204 doesn't expend energy, does he? Or does he?"

"Your instruments went haywire, you said," DuBrose suggested.

"Which is significant," the little physicist agreed. "Perhaps from where M-204's sitting, the earth doesn't revolve. But my instruments aren't able to register that; they were built on an earth that does revolve." He laughed shortly. "I'm so immersed in this business that I've forgotten my manners. Take off your cloaks. Drink? Deep Sleep?"

DuBrose demagnetized his throat-fastener and tossed his cloak toward a rack that caught it deftly. "Thanks, no. We won't keep you long. You're—"

"I'd have solved the equation before this," Pastor said, "if the big-shots

hadn't moved me out of Low Manhattan. They found out some bombs were exploding and figured I might wreck the cave. So I came up here. If I do detonate, the force-field will limit the casualties."

Pell said, "Those bombs could penetrate force-fields, couldn't they?"

"They could indeed. Come in here," Pastor herded them into a cluttered laboratory, much of it singularly unorthodox and jerry-built. He searched a messy table for a photostat blueprint. "Here's a diagram of the bomb's mechanism. Know anything about electronics?"

"Very little," Pell said, while DuBrose merely shook his head.

"Oh. Well. Anyhow, see this tricky business? It'll work on one type of circuit, but not on another. This other gadget will work on the other type of circuit only. But they're both functioning perfectly on the same circuit. We've tried reversing them, we've tried standing on our heads and looking cross-eyed, but the fact remains. Two mutually incompatible elements are functioning beautifully together. It can't be. But it is."

Pell stared at the diagram. Pastor said, "What do you think of that?"

"I think it's tough on the engineers who had to figure out how and why the bombs got through force-fields."

The physicist said, "The equation, as far as I can tell yet, is founded on something like variable logic. It's full of mutually incompatible basics."

"Two and two make five?" Du Brose said.

"Two and whee make diddle plus," Pastor corrected. "It can't be expressed in basic English. A semantics expert would give up in disgust. It says here"—he indicated a paper—"that a free-falling body drops at the rate of five hundred feet a second. Later on in the equation that body is dropping at nine inches a second. And that's a basic!"

"Does it make any sense at all to you?" Pell asked.

"There are glimmerings," Pastor admitted. He went to a basin and began washing his hands. "I'm going to knock off for a bit. I could use some Deep Sleep—but we can talk first. Though I don't know what I can tell you yet."

Pell hesitated. "These variables —our science takes certain constants as foundation-stones, truisms on which that science is built."

"What is truth?" Pastor asked, rinsing his hands. "Sometimes I wonder. Anyhow—"

They went back into the big, cluttered room. The physicist wandered over to the Fairyland control panel, idly touching the studs. "I don't know," he said. "I'm trying to keep an open mind. It certainly isn't logical that bombs could penetrate force-fields, especially bombs that can't possibly work."

DuBrose said, "Could this have any connection with the Duds? They're supposed to be enemy weapons that failed. And they're unbreakable force-fields."

Pastor didn't turn. "Unbreakable, yes. Force-fields—I'm not so sure. I was on a couple of commissions delegated to study the Duds, and I had a theory or two nobody wanted to accept. Of course twenty-two years ago my mind was more elastic—" He grinned. "If you go through the files on that business, you'll find a man named Bruno said he'd detected hard radiations from one of the Duds."

Pell leaned forward on the couch. "Matter of fact, I did run across that reference. But it wasn't too detailed."

"There was no proof," Pastor said. "The radiations lasted for about an hour, Bruno's instrument was the only one set up at that time, and you can't chart a graph from one point. The radiations formed a pattern of sorts, though. Bruno thought it might be an attempt at communication."

"Yes, I know," Pell said. "The report stopped there."

"The rest was guesswork. Who'd use hard radiations to communicate?"

DuBrose was remembering Billy Van Ness, with his closed eyes and his rasping "K-k-k-kuk!" noise. Warping of the basic genes, latent until delayed maturity, emerging as a so-far inexplicable psychopathic condition—

He said, "There's no radiation from the Duds now?"

"We can't detect any."

Then why did cases like Billy Van Ness rouse from their stupor when they were near one of the tattered silver domes? Scarcely recognition, even through ESP. Such a memory would have to be acquired, not hereditary.

Pastor said, "Oh, I suppose there's some sort of energy, or the Duds wouldn't still be impermeable. But we can't detect it. I doubt if the Duds can be connected with—this equation."

"As long as you solve it—" Pell said. "There is an occupational hazard, you know."

"Insanity. Want to test my knee-jerks?"

"As a matter of fact, I would," the aide said. "Got any objection?"

"None at all."

"Ben."

This was routine. DuBrose made notes and watched as Pell questioned the physicist, apparently irrelevant questions that all made sense, in the aggregate pattern. Finally they had finished, and Pastor sat back grinning.

"Normal enough. You're an asocial type anyhow."

"But not antisocial. I've a wife and two kids"—he pointed to tri-di cube portrait of transparent plastic —"and I adjust all right, with one thing and another."

Pell said, "I've never seen such a complicated Fairyland set. Use it much?"

"Often." Pastor went to the controls. "I got away from the company patterns years ago. I create my own systems and paradoxes—"

Flashing bands and streaks of color flamed across the screen. They almost made sense.

The physicist said, "In this sequence, I've assigned human emotions to colors. I make up the plot as I go along."

For a while they watched the coruscating screen. Then Pell stood up.

"We'll leave you to Deep Sleep, Dr. Pastor. Will you call us if anything breaks?"

"Sure." Pastor switched off the Fairyland. "But I'll have that equation solved within a few days. I'm certain of it."

"How certain?" DuBrose asked later in the helicopter.

"I don't think he's whistling in the dark. But he's juggling plenty inside that head of his. A queer fish, Ben."

"No sense of esthetic values."

"I wonder. His own, maybe. I want a detailed psych report on Pastor from what we've observed tonight. Wax it and let me have it for additions as soon as you can, will you? If Pastor solves the equation, every thing's fine. But if he doesn't—"

"Do you think he’s a psychopathic type?"

"Everybody can go crazy, in one way or another. He's not potentially suicidal or homicidal. Possibly schizophrenic—I don't know. We'll head back to Low Chicago now. If we can integrate enough dope by morning, we can put it on the chief's desk."

DuBrose pulled out a smoke-tube from the instrument panel and inhaled deeply. His mouth was tight. Pell chuckled.

"Getting you, Ben?"

"A little." More than that, really, when the disphragm is stiff and unsteady, and invisible bugs are crawling along the skin. DuBrose moved uneasily in the cushioned seat, while cogs slipped together without meshing in his thoughts.

"Cui bono?" Pell said. "It's not our responsibility, remember."

"Isn't it?"

"We can't solve the equation. We can't find the man who can— unless Pastor's the one. Only the chief is qualified to integrate the final factors."

"Yeah," DuRrose said, while the little bugs crept down his arms.

V.

Ripples broadened in the mirror. Concentric circles fled out from the locus, distorting Cameron's face. He moved aside, watching the ripples gradually subside.

Then he moved again, directly before the mirror. When the image of his face hit the glass, the ripples started once more. He waited. They lessened and stopped.

Each time he blinked, however, minor circles began, one for each eye, spreading out over the smooth surface.

The angle of incidence is equal to—

Cameron looked at the tired face under its thatch of gray hair. He tried to keep his eyelids immobile.

Blink.

Ripple.

Quite impossible.

He turned away. He looked around the room. It was no longer a room to be taken for granted. Not the room he had known for years, in this house he had known for years. If the mirror betrayed him, so might the contoured, yielding floor. So might the billiard table. So might the glowing ceiling, and—

He turned sharply and mounted the stairs, without touching the escalator control. He wanted solidity under his feet, not the soft sliding motion that reminded him the earth was no longer quite as firm as usual.

His whole body jolted violently. Only rigid control kept him from—

It had been nothing much. He had mounted a top step that wasn't there. That could happen.

Had he seen that intangible top step? He tried to remember and couldn't.

This wasn't the first time. When he was off guard, when he had forgotten, then that top step that wasn't there would be there. Not tangibly. Not even visually, perhaps.

The visor was humming. Cameron reached it before Nela did. She shrugged and turned away, her sleek dark head suddenly terrible. Cameron stood with his hand on the switch, watching Nela walk back to her seat. He was wondering what he would do if a face, Nela's face, should suddenly appear on the back of her head.

Or not Nela's face.

He waited. He was afraid to stop looking until she had turned around. But it was Nela, with her cool, amused dark eyes and her tilted nose. He was glad she had never undergone rejuvenation. Old, wise eyes were wrong, somehow, in too young a face. Attractive as Nela was, her face was mature, and very comforting now.

"Well?” she said, lifting her eyebrows. "Are you taking it?"

"Eh? Oh—" Cameron pressed the switch. The blunt, dark face of Daniel Ridgeley, the courier, checkered in, wrist raised to show the identification disk.

"Priority. Message from the Secretary of War—"

Cameron said coldly, "Seth Pell will receive it."

Something exultant and gleeful flickered in those jet eyes. "The Secretary insists, sir—"

Cameron snapped the switch. The screen blanked. After a moment the humming started again. Cameron turned off the set.

He put an elbow on the mantle and looked at nothing. His elbow slowly began to sink through the wood. He jerked away, glancing hastily at Nela. She was patting pillows into shape on the couch behind her.

She hadn't noticed. No one noticed, ever. You couldn't expect them to notice.

"You're nervous," Nela said. "Come and lie down here."

"You're the only one who's seen it," Cameron said. "Nela, I—"

"What?"

"Well—nothing. I think I'm overworked a bit. I'll furlough pretty soon."

He walked to the one-way windows. He could see out, into the moonlight speckling the tree-shadowed hillside, but no light filtered through those panes to attract enemy aircraft. If any aircraft could get past the coast barrages.

"Come and lie down."

If he did, the couch might melt away beneath him. This room was too familiar. It was charged with latent horror. The familiar things were the ones that had betrayed him.

Better to be among unfamiliar things. If they behaved strangely, he might not notice it so easily. Was that fallacious reasoning? Too specious? At least it was worth acting on.

He came behind the couch and kissed the top of Nela's head. "I'm going out for a bit. Don't wait up."

"The boys called today. You haven't seen the recording."

"It'll keep. How do they like the school?"

"They kicked, as usual. But they like it. They're growing, darling. In those school uniforms—" Nela laughed softly. "Remember?"

He remembered. Twins, fourteen years ago. They'd both been surprised. But

they'd made plans, long-range plans—

He kissed Nela again and went out quickly. The copter took him to a Gate. A pneumocar shot him to Low Chicago, but not to his office. That, too, would have been familiar.

He found a valve and went out into the Spaces, automatically taking a light-tube from its rack, but slipping the cylinder into his pocket. Behind him the giant artery of the Way was a great Midgard Serpent coiling into the darkness.

Low thunders muttered around him. Under his feet the ground was gritty and hard. He went on slowly, staring around at the titans that served the city.

The pumps sighed and coughed; the heart of Low Chicago beat through the crimson gloom. Near him a mechanism of some sort rose and was lost in the shadow above. Out of blackness a piston, fifty feet in diameter, drove at him, hesitated, and shot back again. Forward it came, and back, forward and back, forward—

Lightning crawled across the vaulted ceiling that sheathed Low Chicago.

Br-r-rooom—thlock!

That was the piston.

Whssssss . . .

Compressed air.

Whroooom . . . whroooom.

Pump.

His feet scuffed through dusty slag. Something was moving down there. He crouched, staring at the things that slipped swiftly and noiselessly through the cinders, red and black—

Chessmen.

His hand went through them.

Subjective. The chessmen were walking about two by two. A projection of his thoughts, preoccupied with a land beyond the looking glass, where the expected did not always happen. They were not there . . .

He did not look down again to make sure. Cameron swung around and walked hurriedly toward the nearest Way, not hearing the low thunder of the Spaces re-echoing all around him.

A valve opened; he stepped through and found a seat on one of the belts. His hand lay open on the padded arm. Suddenly something was thrust against his palm; instinctively his fingers tightened.

A metal cylinder.

He looked back. Already his chair was ahead of the seat on the slower belt that had briefly adjoined his. Daniel Ridgeley, the courier, was sitting there, jet eyes burning with excitement.

Cameron raised his arm and threw the cylinder straight at Ridgeley.

The courier lunged aside and caught it. His mouth opened in a soundless laugh.

The director's finger touched a stud; the chair slid aside. Instantly Cameron was out of it, a reasonless cold panic filling him. Now he wanted familiar things, not the dim, strange vastness of the Spaces. And here was the infirmary annex, to his own department, a refuge against—

Against what?

He looked over his shoulder, but Ridgeley had vanished. The panic had not gone, though. Cameron stepped into a lift and got off without noticing the floor. He stood looking into a dim, quiet room where a dozen beds made pale oblongs.

He came forward a few steps and paused, absorbing the peace that brimmed the room.

A nurse's voice said, "All right?"

"All right," Cameron said. "It's the director."

"Yes, Mr. Cameron—"

The lift sighed. A low humming began; that meant unauthorized intrusion. The nurse's televised voice began to speak and broke off. Cameron swung around and began to back up.

He felt a door panel behind him. He groped for the knob, and it bent like putty beneath his fingers. Someone was coming along the hall outside, someone who was making staccato, harsh noises in his throat.

But at the other end of the room the lift's barrier slid aside, and the stocky, hunched form of the courier stood there, shapeless in silhouette.

Behind Cameron, in the hall, someone, was going. "Kuk-k-k-k-k-k—"

Ridgeley came on. Cameron could see the cylinder in his hand.

The director let go of the useless doorknob. "You're not allowed in here," he said thinly. "Get out."

"I've my orders. Priority."

"See Seth Pell."

"The Secretary of War told me to deliver this to you personally."

With part of his mind Cameron realized how irrational this nightmare was. All he had to do was take the message and give it, unopened, to Pell. As simple as that. But somehow it didn't seem quite so simple, with that

bulky, squat figure plodding relentlessly forward.

"K-k-k-k-k-kuk!"

Ridgeley put the cylinder into Cameron's hand.

The door behind the director opened, letting a shaft of pale light in. Cameron turned his head, blinking. Pell's white hair gleamed as he stood staring, his hand tight on the shoulder of a young man wearing an infirmary bedsuit. The boy was shaking from head to foot, his eyes were closed, and the rasping, harsh noise was coming from his throat.

DuBrose was there, too, his young face strained. He pushed past Cameron into the dormitory.

Pell said, "Easy, Ben. Chief—"

"You'd better take this," Cameron said, holding out the cylinder. "Kalender's courier—"

The patient stopped shaking. The rattling clatter died in his throat. Without inflection, in a rapid, staccato voice, he said.

"Everyone is too short, flat people, but this new one ... I saw him before ... he reaches in the right direction, long, long, longer by far than anyone else here . . . not as long as the shining things but he is more complete in his duration—"

The boy stopped. DuBrose, facing Ridgeley, caught a new expression on the man's face—something like wild, inexplicable delight.

"Sorry if I caused any disturbance," the courier said smoothly. "But my job's done. I'll go now."

Nobody stopped him.

An hour later Cameron was in Deep Sleep in his office, and Du Brose and Pell were working over Billy Van Ness. The boy was in third-stage hypnosis, and fragmentary words were beginning to emerge from the jumble of noises. But it took a long time before any coherent pattern became evident.

DuBrose spun the semantic integrator dial on the dictagraph and watched words form on a lighted screen. His lips moved as he read. He could hear Pell's soft, unhurried breathing behind him.

"It isn't ESP. then," Pall said. "It's ETP. Extra-temporal perception. That explains something that's puzzled me. The patterns cases like Van Ness follow when they walk. Certain symptoms of disorientation. They're just avoiding chairs that aren't there at the moment, but either were or will be. They reach for objects that were moved a week ago. They're disoriented in time— because they can sense duration."

"It's crazy," DuBrose said.

Pell watched the screen. "See how this sounds. Some race far away in time made an expedition. I don't know why. They must have been pretty

unthinkably inhuman. Fifty million years in the future—or a hundred million. Maybe they faced extinction and took refuge in time instead of in space. They came here, twenty-two years ago, in the Duds. They didn't survive. While they did, for an hour, they—talked?—in their particular way. Not with sound waves. Not with vibrations. With hard radiations. Or perhaps they always emitted those radiations."

DuBrose looked at the hypnotized boy and swallowed dryly. Pell's cold, steady voice went on.

"Hard radiations. Genes getting knocked around—mutation. But a very queer kind of mutation. The only kind possible. It was a sort of biological meeting of two utterly unlike species. Mental. Gemis homo and genus—X!"

They were perhaps the ultimate adaptation of life on earth. Their race had never been human; they had sprung from other seeds in their own unthinkably long ago.

And they could move through time, in their own way. Not easily, for only under certain specialized, nearly unique conditions, could they exist at all.

Seventy-four temporal protective domes sprang into existence in the world of genus homo. From within those shells, genus X looked at a planet fantastically alien to them, as a human might regard the boiling gneiss raging across the seething crust of a molten earth.

And the hard radiations came out from the domes for an hour, radiations that were an integral part of the basic matrix of genus X. Human gene plasm responded. And was altered.

Before genus X passed, it had bequeathed to a few unborn specimens of genus homo certain latent abilities, wild talents not to be perceptible until the delayed maturation. And even then the powers of genus X would be all but useless to a merely human race.

The legatees could sense duration. But, by the time they were able to do that, they were hopelessly insane.

Pell said, "Some sort of energy must maintain what's left of the Duds. These mutants sense that. Or else they see—"

"What about Ridgeley?"

"I've checked the records. This is actually the first time any of these cases has ever roused from his lethargy except when near a Dud. Remember what this boy said when he saw . . . sensed . . . Ridgeley?"

"It's integrated with the other stuff," DuBrose said. "There are several possible conclusions." He nodded toward the screen.

"Yeah. To somebody who can see duration, a baby must look plenty flat. No, I'm wrong. That would depend on the baby's longevity. If he grew up to be a hundred, he wouldn't seem so flat. But Billy said everyone was too short except Ridgeley. Ridgeley reaches in the right direction, longer than anyone else who was in the infirmary then—but not as long as the shining things.'

"The Duds. Wait a minute, Seth. If Billy here can sense duration, that might just mean that Ridgeley's going to live to a ripe old age."

Pell grunted. "Do you realize from how far in the future the Duds must have come? You can't compare the heights of ants when you use Everest as the measuring stick. If Ridgeley's duration is noticeably long to Billy's perception, he must reach plenty far along temporal lines."

"You're jumping at conclusions. There's not enough data—"

"You heard me question this boy. You heard the answers. Look how the integrator figures 'em!" Pell jerked his thumb toward the screen. "What about that list? I asked our patient what he—senses—in this room, and—"

The list was complete and inaccurate. It included present furnishings, equipment that hadn't been here for years, a diatherm that was scheduled to arrive next week, a centrifuge that had been on order for a month, and a great deal of material that wasn't expected at all, including some gadgets that probably weren't invented yet.

"Now doesn't mean much to Billy Van Ness," Pell said. "He's told us what he senses in this room in the past, present and future. Look at the word association conclusions. It all points to duration, and Ridgeley's tied up with it. I asked those questions with a purpose, Ben."

DuBrose moistened his lips. "Well, then—what?"

"My guess is that Ridgeley may have come from the future. Not from the incredibly distant future of the Duds, but from one closer to us."

"Seth, for Pete's sake! There's nothing to prove—"

"No proof at all. I know. And the only proof I may ever be able to get will probably be empirical. But it's the only answer that fits all the terms."

"You could pluck an answer out of the air for any problem," DuBrose complained, "if you ignore probabilities. You could say Ridgeley's a goblin who's found Aladdin's lamp!"

"I'm not saying anything definitely. This is a theoretical solution. Nothing more. Billy Van Ness has ETP. His duration comparisons indicate that Ridgeley doesn't compare with radium half-time but about equals iron. If the boy were a metallurgist I could learn more. I don't know what grade of iron he has in mind. But, roughly, the life expectancy of ordinary iron equals Ridgeley's duration, as Billy's ETP sees it."

"How long does iron last?"

"Find out. Come in my office, will you?"

There Pell put in a televisor call, a request for information on Daniel Ridgeley. "Now we'll wait and see. Sit down, Ben. What do you think?"

DuBrose dropped on cushions. "I still think you're jumping at conclusions. There might be other explanations. Why jump at the wildest possibility?"

"Yet you didn't cavil at the idea that the Duds might come from the future."

"That's different," DuBrose said illogically. "They don't do anything. What's Ridgeley trying to do? Upset the apple cart? Is he following Kalender's orders?"

"The Secretary of War is a brass hat, but he's no traitor. Ridgeley could be—probably is—acting on his own initiative. He may be in enemy pay. All along, Ben, I've been puzzled by one point: how the Falangists could have worked out this equation. They're not from the future. Their technology isn't much more advanced than ours, if at all. We live on this side of the world; the Falangists live on the other; but we're contemporaries. They're neither supermen nor are they from a super future. They're people like us. But Ridgeley—well, I think he's from the future, and he's butting into a fight that doesn't concern him. Or maybe it does, somehow. I don't know." Pell grimaced. "Well, I'm hungry. Let's order up some chow. We've been running around all night, and it's 3 a. m." He spoke into the mike, after switching off the force-field that guarded his desk.

"As for the report we're going to hand in to the chief," he said, fingering a fresh bundle of papers and spools before him, "it's integrated and ready, I think. We've taken out the dangerous stuff. Quite a job."

"About Ridgeley, Seth—"

"One thing at a time. I believe Ridgeley ties in with this equation business. He's been trying to give dangerous information directly to the chief. Well, we'll guard against that from now on. This latest message from the Secretary of War— seven more technicians have gone insane. Not Pastor; he's still working away up in his hideaway in the Rockies. But the danger is clearer now. The equation must be solved before the enemy solves it."

"Every technician in the country may go crazy," DuBrose said.

"Only top-flight men can work on a thing like this. The others aren't qualified. But those men are the ones who keep the war from being lost. They're the ones who think up offensives and defensives fast. If our best technicians are insane—and the list is growing— we're caught flat footed if the enemy launches an assault. There's one thing in our favor. Those insane technicians can be cured."

DuBrose thought it over. "Uh . . . yeah, I get that angle. They took refuge in insanity because they couldn't solve the equation, and the responsibility was too much for them. Show them the solution to the equation, and they'll snap out of it. Right?"

"Near enough. None of these case histories"—he tapped the pile on the desk—"indicate noncurable pathological states. Once we—" He stopped, looking past DuBrose.

''Hello, Ridgeley," he said.

DuBrose found himself on his feet, swinging to face the courier. Ridgeley- was standing against the closed door, his eyes blazing, his face impassive as ever. In a lifted hand he held something so bright and glittering that

DuBrose could not see it clearly.

"It's too easy," Ridgeley said.

"And you prefer it the hard way, is that it? I don't think you'll find it so easy."

"No?"

"How did you check up on us? Some sort of scanning ray?"

"Something of the sort," Ridgeley admitted. The thing in his hand trembled slightly; dazzling rays momentarily blinded DuBrose.

Pell said, "So we're right. You're from the future."

"Yes."

DuBrose snarled, "Why don't you go back there?"

For the first time he saw expression on those blunt features— something very much like fear. But Ridgeley only said, "No, I like it here, I'd rather no one knew as much about me as you two know. So—"

DuBrose glanced toward Pell, waiting for a signal. But the aide hadn't even risen from his seat.

He smiled at the courier and said, "You turned off your scanner too soon. I've put in a routine check query on the visor. Querying you, Ridgeley. If we're found dead, or disappear, somebody will start wondering why the last time I used the visor, I asked about you."

"You wouldn't be found," Ridgeley said, but his voice wasn't quite as certain. He hesitated.

Tension grew in the room. Suddenly that burning, joyous excitement leaped again behind the courier's eyes.

"All right," he said. "We'll do it the hard way." He fumbled behind him, opened the door, and slipped out. DuBrose sprang forward, but Pell's quiet voice halted him.

"Hold it, Ben. No heroics. You haven't even got a gun,"

DuBrose made an impatient noise. "Well, let's do something! Can't we have that . . . that guy picked up? Or—"

"I'll think about it," Pell chuckled. "Take it easy. You're flying off the handle. Here." He tossed a blue plastic key on the desk. "Why not knock off for a few hours?"

"I ... what is it?" DuBrose picked up the key and examined It.

Pell said, "Not many people have those, Ben. They open the door to supercharged hedonism. Show that key at Blue Heaven in Low Manhattan, and you'll get the most thorough dose of extroversion you can imagine. Useful when hypertension creeps up. Try their Creepies—it's a catharsis. Go

on, get out of here. That's an order. You need something like—a blue key."

DuBrose said, "What about you? If Ridgeley comes back—"

"He won't. Go away. I'll expect you back in the morning, bright-eyed and ready for anything. Outside!"

DuBrose went away.

VI.

Across the curve of the world dawn came, rose and gray, the laggard sun behind. The cool light brightened on a quiet land. Tiny hamlets speckled the continent, and only a few flaming streaks that might have been meteors gave any hint that the peace was deceptive. Even across the gray scars of the cities, New York and Detroit and San Francisco, the reclaiming green crept out from the wildernesses that had been the city parks.

Helicopters with their glider-trains troubled still air. The rising sun glittered here and there on a few silvery, tattered shells, the monuments of genus X. Warmen began to drift toward the pneumo-car terminals.

Before dawn—

Three more technicians had gone insane, two of them irreplaceable key men in electronics.

Mid-morning. Pell came into DuBrose's office, smiling and cheerful.

"Use that key?"

"Uh ... no," DuBrose said. "I was dead beat. I took Deep Sleep. Feel better now."

"Suit yourself," Pell said, shrugging. "I got that report on Ridgeley. He's a highly confidential and trustworthy Secret Service man. Not just a courier. He's been responsible for several fast deals but benefited our side. He's been on the job for seven years. Every once in a while he disappears. No reason given. Unorthodox, but —he's valuable."

"To whom?" DuBrose asked. "The enemy?"

Pell looked puzzled. "He's been valuable to us, Ben. That's what throws me. He dug up plans for some gadgets we found mighty useful. There's never been any question as to his loyalty."

"Do anything about it?"

"Not . . . yet," Pell said slowly. "Except to put a few papers in my safe, just in case. The chief has the combination. Remember that."

DuBrose turned the subject. "How is the chief?"

"Jumpy. Nervous. I don't know why. I handed him the stuff on the equation a couple of hours ago— along with allied problems I dug up, to keep him from smelling a rat. I've handled it as semitheoretical material. I couldn't tell him how urgent it was—if he knew that, he'd realize its significance.

But I loaded the other items with key words he'll subconsciously shy away from—the wrong emotional indexes for his personality. He'll study the equation dope first."

"Won't he wonder about Ridgeley?"

"I blamed that on the brass hats. I said Ridgeley was just trying to do his duty;—deliver his message to the Director of Psychometrics. Dunno if the chief swallowed it, but I gave him something else to think about—a few hints he'll chew on. Just in case he starts wondering too much why I wanted to isolate him and act as filter. I fixed it. Pretty soon he'll decide the enemy are trying to kill him. Simple assassination attempt. Toxin probably. Let him figure it out. A personal menace like that won't worry him in the least."

"Oh. Well— I've got nothing new. Billy Van Ness is completely passive now. Force-feeding, as usual. And I took a call from Dr. Pastor, up in the Rockies. He says he'll have the equation solved before the day's over."

"Good. How did he look?"

"Not too well. I notified Wyoming Emergency to stand ready. Though there wasn't any definite symptom. He talked a little too fast—but nothing psychopathic. The responsibility didn't seem to bother him."

"Fair enough," Pell said. "Now come along. The chief wants to see me about the equation—"

"Already?"

"He's a fast worker."

Cameron sat behind his desk and watched it rain. He thought that if he could get through the door, the rain might stop; but he wasn't having any. He'd tried it already. Wading through knee-deep invisible water wasn't a pleasant experience.

The slanting veils of rain made the walls gray and shadowy. He felt the drops tap softly on his bare head and against his face and on his hands. With tremendous effort he remained motionless. Within his skin he was twisting and writhing.

There was, he thought, a gauge in his head, and a needle that had risen dangerously close to the red mark. He couldn't stand much more of this. What was keeping Pell?

As the door opened the rain stopped. Cameron looked at the backs of his hands; they were quite dry. So was the surface of his desk, and the carpet.

His head pounded.

He was rather sorry Pell and DuBrose had come in. That meant he had to do something. As long as he remained perfectly motionless, trying not to think, he could not easily be betrayed. Rain might fall, but the objects he reached for wouldn't slide away or collapse into blobs as long as he refrained from reaching.

Cameron drew in a long breath.

His voice came out more steadily than he had expected.

"Ben?"

"I wanted him to hear this," Pell said. "Got an answer for me?"

Cameron said carefully, "I think so. You didn't give me all the necessary factors, but there may be a way. What's this for?"

"I'd rather not say just yet. It's semitheoretical anyhow." Pell sat down; DuBrose followed his example.

"I'd say it's completely theoretical. Look here. You've got an equation based on constants gone variable. You want to know its probable effect on various types of trained personalities—scientifically trained. And you stipulate that the solution of the equation is a high-powered survival factor—the individuals must solve it. Is that correct, Seth?"

Pell nodded and crossed his legs, his eyes half-closed. "Correct," he said casually. "What do you think?"

"You left out one point. If the technicians fail to solve the problem, they'll go insane, under the circumstances."

"Mm-m. That's obvious, chief."

Cameron looked at something on his desk, hesitated, and seemed to lose the thread. "So . . . uh, well, the sort of equation you presuppose implies the use of truth itself as a variable. Or rather several sets of truths—all logical and accurate. Under certain conditions, let's say, an apple falls to the ground; under other conditions, it flies upward. In the first case the familiar law of gravitation holds good. In the second, it doesn't; an arbitrary basic is substituted, but a true one."

"Can mutually contradictory truths coexist?" Pell asked.

"It isn't likely," Cameron said. "I'd say no. However, let's take it for granted that such an equation does exist—for the sake of the theory. The ordinary technician, trained to intricate work, has had a sound groundwork in basic physics; he takes some things for granted. Like the law of gravitation. Or—conduction of heat. If he dips both hands in boiling water and his right hand is burned while his left freezes, he won't be able to understand it. If enough things like that happen—" Cameron paused.

Pell said, "Yeah?"

"Oh . . . he'll find refuge in insanity. His imagination, his mind, won't be sufficiently elastic to embrace a whole new set of variable truths. It would be like going through the looking glass. Alice did it without trouble, but she was a child. An adult would have gone insane."

"Every type of adult mind?"

Cameron said thoughtfully, "Lewis Carroll could have solved this

hypothetical equation of yours, Seth. Yes, I'm sure of it."

Pell nodded. "A thoroughly elastic mind, one that isn't bound too much by familiar values, the sort of guy who invents woolly dog stories. Is that it?"

"A man who makes up rules of his own. That's it, all right."

"I want to find some men like that and chart their psychology," Pell said. "Got any suggestions?"

"Offhand, no. The average scientifically trained mind is inelastic by definition; it's fan-shaped. It's imaginative at the wide part of the fan, but it's rigidly censored by the narrow part—the accepted basics. I'll see if I can think of a screening process for you, Seth."

"All right," Pell said, rising.

Back in DuBrose's office, the two looked at each other blankly. Pell chuckled.

"So far, so good, at least. Find a man like Lewis Carroll. Can you think of a candidate?"

"Not without a screening process. Are there any mathematicians today who write fairy tales?"

"Not a one. And there aren't any fairy tale writers who make math their avocation. Not that Alice is a fairy tale, Ben."

"What is it? Allegory?"

"Symbolic logic, beautifully worked out from arbitrarily assigned basics. Pure fantasy—the purest kind. Well, we'll have to try screenings. Maybe the chief will think of something. Meanwhile, screen technicians by avocation; use the big files downstairs. I'll try for psychological patterns that might fit."

"O.K.," DuBrose said.

Twenty minutes later he was at the dictagraph when the visor hummed. The wrinkled, gnomish face of Dr. Emil Pastor checkered in.

DuBrose pushed a button that would summon Pell as he jumped up. "Dr. Pastor. Glad you called. Anything new?"

The tousled head nodded. Something flickered in the blue background; it looked like a bird. Blue background? What—

"I have finished with it," Pastor said. "Understanding it showed me the unreality of all things."

"You've solved it, then?"

"Solved the . . . equation? Not all of it, no. But enough. Enough to show me the way. I can solve the rest now, if I wish. Ah, Mr. Pell."

"Hello, doctor," Pell said, stepping into the scanner's range. "I asked Mr. DuBrose to call me when you vised. Thanks, Ben. Now have I missed

anything?"

"Dr. Pastor says he can solve the equation," DuBrose said.

"But I won't," Pastor said, blinking.

Pell didn't show surprise. "Mind telling us why not?"

"Because nothing matters any more," Pastor explained. "I've found that out. It settled my problem. Everything is hollow, like a soap bubble. Maintained in existence simply by a certain coherence of will, the acceptance of the expected."

Insane.

DuBrose saw Pell's shoulders slump a little.

"I'd like to discuss that with you personally," he said. "May I fly in to your hideout? If you'll shut off the force-field when I—"

"Oh, it's gone," Pastor said mildly. "I stopped believing in it and it disappeared. My house is gone, too —most of it. I let the televisor stand and part of the wall, because I'd promised to call you. But now . . . I don't know. What would we have to talk about?"

"The equation?" Pell suggested. A shadow crossed Pastor's face.

"No, I don't want to discuss that."

DuBrose saw Pell's hand move. He said, "Excuse me," and slipped quickly out of the office. It took him three minutes to vise Wyoming Emergency and have an ambulance copter dispatched to the peak where Pastor was now.

DuBrose went back into his office, and moved up behind Pell. Pastor was still talking.

"... couldn't explain the theory to you very well. It deals with certain variables I'm sure you wouldn't accept. But they're surprisingly effective in practice. I simply used will power on my house and it was gone."

"And that's an integral part of the equation?"

"Oh, yes."

"I don't see—"

"Like this," Pastor said. His wrinkled face twisted into an agony of concentration. He lifted his hand and pointed. DuBrose felt a sudden tension knot along his spine.

"You don't exist," Pastor said to Pell.

Seth Pell vanished.

In his office Cameron was about to eat lunch. The laden tray was on the desk before him. He dipped the soup spoon into onion broth and lifted it

toward his mouth.

The edges of the spoon thickened, curled, spread into cold metallic lips.

And kissed him.

The Fairy Chessmen

by LEWIS PADGETT

Concluding Padgett's novel of a strange but very terrible sort of weapon—the concept that truth, like all other things, might be a variable, and our most basic laws but one of many possible aspects.

illustrated by Orban

SYNOPSIS

The doorknob opened a blue eye and looked at him. That was the first of a series of manifestations aimed at driving Robert Cameron insane. His face made ripples in the mirror; an altitude gauge smiled at him; the stairway had a nonexistent top step—and Daniel Ridgeley, courier from GHQ, was apparently persecuting him.

The Falangists, a European nation, were at war with America. America had dug into the great, shielded cavern-cities like Low Chicago, where Cameron was Civilian Director of Psychometrics. For decades the war, planned by technicians and fought by robots, had been at a stalemate. But now the Falangists had a new weapon. They could do the impossible.

It was impossible for bombs to penetrate force-shields, but Falangist bombs penetrated American force-shields. Not many exploded. The ones that exploded were the Duds. The rest were analysed and studied by technicians whose minds had been trained along lines of orthodox science. And the design used in the Falangist bombs was unworkable.

But it worked. The technicians had to discover why. They had to find a shield. That was their responsibility.

They went insane.

The bombs were one application of a basic equation apparently understood by the Falangists, but not by America. American technicians had the equation available. If they could solve it, the Falangists' greatest weapon would be blunted. But no mind trained along orthodox lines could solve an equation based on variable truth.

Faced by enormous responsibility, unable to crack the equation, the technicians began to go insane—in unusual ways. They could understand a few factors of the equation. There was Case M-204, who thought he was Mohammed, and who remained in a cataleptic state, floating a few feet above his bed. Through variable logic, he had nullified gravity. Others committed suicide. A technician-shortage was beginning. And this was a war of technicians.

Problem: find a type of mind that could solve the equation. Cameron,

trained in applied psych, could locate such a mind. But if he knew the vital importance of his job, the responsibility might drive him insane too. If he himself tried to work out the equation, a psychosis would be inevitable.

So Seth Pell, Assistant Director, and Ben DuBrose, Cameron's secretary, combined to keep their chief in ignorance of the importance of the problem. It wasn't easy. Kalender, Secretary of War, was a brass hat and insisted on dealing with the director. Pell and DuBrose refused to permit communication. Daniel Ridgeley, Kalender's courier, tried to force his way into Cameron's office. And Ridgeley, Pell thought, was neither American nor Falangist. He had come from another time period.

There was no real evidence, except indirectly. Twenty-two years before, seventy-four huge, impenetrable domes of mirror-silver had appeared out of nowhere, all over America. They had held their secret perfectly. Now they were tattered and split, though still impenetrable; and it was possible to see that they held nothing at all. Only one investigator had contended that shortly after their appearance they had emitted hard radiations for an hour. Nothing else. But those radiations had caused mutations among the children born in the vicinity of the silvery Duds, and Billy Van Ness was one of the mutations. He was in Low Chicago, being examined by Seth Pell.

Van Ness had seemed normal until maturity. Then he had gone insane. Through hypnosis, Pell and DuBrose discovered the reason: The Duds had held beings from an unimaginably distant time-sector, creatures utterly remote to genus homo. They were genus X. The hard radiations might have been simply their means of communication. They had come back through time searching for something—impossible to guess what—and had failed to find it. So they had died. But Billy Van Ness was one of the mutants who had inherited a certain sense from genus X; the hard radiations had altered him before birth, and the latent alien talent had emerged when he matured. He had ETP—extra-temporal perception. He could see duration. And he had gone mad.

Under guided hypnosis he could talk rationally. He had given DuBrose and Pell one clue; he had said that Ridgeley's duration was immensly longer than that of any contemporary. Ridgeley, too, Pell thought, had come from the future. But his motives were obscure.

Dr. Emil Pastor, physicist, was beginning to solve the equation. In his eyrie lab in the Rocky Mountains, he told Pell and DuBrose that the effect of the equation was to suspend the laws of logic. A free-falling body might have a variable rate of speed. Scientific constants were used as variables. But if Pastor didn't go insane, he could crack the equation—he said.

DuBrose worried. Pell told him to go to Blue Heaven and get an emotional catharsis at that hedonistic pleasure-palace, but DuBrose preferred to worry. If he had known what was happening to his chief, he'd have worried harder. For the Falangists were still trying to incapacitate Robert Cameron.

His anxiety neurosis was building up to psychosis as he sat down to lunch, lifted a spoon to his mouth —and the spoon kissed him.

Seth Pell was in Ben DuBrose's office when Dr. Emil Pastor televised. Pastor

announced his discovery; everything was hollow, and he could make anything vanish by applying will power. He had already destroyed his laboratory, he said—

He was insane. The equation had smashed him. When Pell became curious, Pastor demonstrated his power. "Like this," he said, pointing to Pell and concentrating. "You don't exist—"

Seth Pell vanished.

VII.

The office had not changed. That seemed a minor miracle, somehow. The desk might have sprouted wings, the televisor could have scampered off on its bulky plastic base, and the White Queen should have jumped into the soup tureen. But the office was the same. The background to illogic remained cold, familiar logic. Emil Pastor's gnomish face blinked at DuBrose from the visor screen, and beyond it Pell's door stood half open.

"Like that," Pastor said quietly. 'That's how I do it, Mr. DuBrose."

Psychosis unclassified—but a tentative prognosis was possible. The impossible part of it was that Pastor's psychosis was founded on paradox. He was insane and believed he could make things stop existing by applying will power.

He could do it, too. Seth Pell had—blinked out.

DuBrose didn't want to move. The numbness of shock held him. But slowly his mind began to work again, and to see the danger. If someone came into the office now— the director, or anyone at all—Pastor's precarious balance might be upset. The man was responsible, and he held a bomb that could blow up—All creation?

Habit takes over when the planning faculty is paralyzed. Dimly DuBrose sensed that there were a dozen things to be done, but first of all it would be necessary to pacify Pastor. Though it had been years since his internship in Psychometric Base and the sanatoriums, old habits came to his aid. He knew he was facing a patient.

Deliberately DuBrose let his mind go blank. He studied Pastor's face. Visible symptoms? Case history? That eyrie lab in the Rockies, with its clutter of ill-assorted furniture, the nonconventional color "stories" on the Fairyland projector, the very fact that Pastor had settled on this particular wild talent of controlled obliteration out of the variety of powers the equation apparently could bestow—adding up to what? There was a key to the man's personality somewhere, a familiarity he had not sensed until now.

Sentiment. That picture of Pastor's wife and children—an emotional appeal?

Essential amorality, lack of empathy, tremendous egotism, that could enable Pastor to wipe a man out of existence with utter casualness. As a child destroys a toy.

A child is to a toy as Dr. Emil Pastor is to mankind—

That was it. The subconscious motive. The murderous quintessence of rationalization. A madman will believe himself to be Christ, wound himself with the stigmata, and thereafter sincerely believe that the scars have appeared spontaneously and miraculously. Corroborative evidence. But Pastor's mind had worked more clearly. First he had chosen and acquired the power that would prove the reality of his role; as yet he might not even have realized consciously that he was God.

The ultimate paranoid egotism. Perfectly rationalized insanity!

Pastor said, "Didn't you see what I did? You weren't watching—"

DuBrose was rather surprised that he spoke instead of screaming. "Oh, I saw it. It surprised me, that was all. My reaction was pretty complicated. There's an instinctive attempt at rationalization." He was choosing carefully the words with useful emotional indexes.

Pastor looked surprised. "But rationalization with what? You can't do it. Only I can. You can't possible perceive that everything's hollow as a soap-bubble. You instinctively accept the expected. I'm able to do this because I'm skeptical."

'That's true, I guess," DuBrose said. Too facile agreement would strike the wrong note; but provoking an argument would be dangerous, because the physicist could so convincingly demonstrate the truth of his argument. "Anyway," he went on, "I'm glad you remembered to vise me. You've an almost miraculous power. Or—is it miraculous?"

Pastor smiled. "I don't know. I'm still surprised. I don't really know the extent of my power."

"It's a responsibility, I can see."

The physicist didn't quite like that. He scowled a little. DuBrose went on quickly, "I'm not presuming to inquire about your plans—" He had almost used the word advise. But he had suddenly found a key to Pastor's personality; there was a parallel of sorts in history— an isolated mountain retreat, cluttered with disorganized and tasteless furniture—a magpie's nest— and a man who studied occultism instead of composing unorthodox color-treatments. Dr. Emil Pastor had much in common with the German Hitler.

Pastor said doubtfully, "My plans? I don't want—" He hesitated.

"I'm extremely interested," DuBrose said. "You can do miraculous things, Dr. Pastor. But you know much more about the possibilities than I do. You remember you showed me one of your Fairyland compositions?"

"Yes," Pastor said. "You didn't pay much attention, though."

"I wanted to see more, but I knew you were busy. I did see enough to realize what sort of creative mind you must have. And now you'll be able to compose on an indefinitely larger scale."

Pastor nodded. "I've just been destroying some things so far. Do you think that was wrong? I don't know if I can create—"

"Right and wrong are arbitrary values. They can be transcended." Dangerous words, but necessary. DuBrose was trying to work on Pastor's subconscious, which knew it was God, even though the conscious mind had not yet felt the impact of that delusion. "As I said, I'm very glad you vised me. I appreciate it. And, while I don't know what you intend, I'm sure it will be—remarkable. I'll be expecting an extraordinary composition."

Pastor said helplessly, "But I haven't made any plans yet."

"The power is still new to you. You'll need to learn how to handle it to the best effect, I suppose—is that right? Even if you make a few mistakes through being hasty, it won't matter—right and wrong are arbitrary. But I would like to see what you'll do. Would that be possible?"

The flood of words had disconcerted Pastor. "You're seeing me now."

"The visor screen's limited. Would you let me come to your lab by copter? Don't forget," DuBrose said, "you can do exactly as you want. Nobody can stop you now. Forget my ideas if you don't like any of them. I can't help being enthusiastic. Sometimes I talk before I think. I've often jumped the gun and regretted it. If I were smart, I'd plan my moves in advance. But—" He shrugged.

"Planning's wise," Pastor said.

"Yes, it is! I want to think." The screen suddenly went blank.

DuBrose took a few steps and caught the edge of his desk. His whole body began to shake uncontrollably.

He got that under control and vised Wyoming Emergency again. The same medic in charge came on.

"Has that ambulance copter gone out for Pastor yet?"

"Hello, Mr. DuBrose. Yes, we sent it out stat. You said emergency."

"Recall it. Double emergency. Don't let your men get near Pastor."

"But if he's psychotic—is he a violent case?"

"He's homicidal en masse." DuBrose said grimly, "But as long as he's sitting on top of the Rocky Mountains, it's O.K. I hope. I don't want him disturbed. He mustn't be disturbed. Recall that copter!"

"Right. I'll call you back."

DuBrose said, "Yeah," broke the connection, and put in a call to the Secretary of War. When Kalender's heavy, hard face appeared on the screen, DuBrose was ready.

"I need help," he said. "You're the only man who can authorize this, Mr. Secretary. It's extralegal. But it's absolutely vital."

"You're Ben DuBrose," Kalender said. "Well? What is it?"

"Dr. Pastor—"

"Has he solved the equation?"

"He's gone insane," DuBrose said, Kalender grimaced.

"Like the others. Well—"

"Worse than the others. You remember that sanatorium case— M-204? The one who could nullify gravity. Pastor's got hold of a power a lot more dangerous."

Kalender's harsh face changed. Brass hat though he was, he was competent in his job.

"How dangerous? Where is he?"

"His Rocky Mountain lab. I just talked to him on the visor. I think he'll stay put for a little while anyhow, making plans. And he's expecting me. A copter can rocket down and blast him before he has time to retaliate."

"Retaliate how?"

"By making the copter disappear.” DuBrose said carefully. "By making the Rocky Mountains disappear or by making the whole world disappear."

Kalender's lips parted. His eyes tightened.

DuBrose said, "I'm not insane. I haven't been working on the equation myself. Pastor showed me proof, that's all. Put a scanning ray on him, but be careful he doesn't detect it. He's destroyed most of his lab already."

"That's fantastic," the Secretary of War said.

The visor hummed. DuBrose twisted a dial, saw a cameo face blink into view at one corner of the screen, and instantly snapped it blank again. He nodded at Kalender.

"Pastor. Calling me back. Oversee this."

Kalender's face faded as Pastor's gnomish features checkered into a recognizable pattern. "Mr. DuBrose?"

"You just caught me. I was about to leave—"

"Don't come. I've changed my mind."

"What?"

"I thought it over," Pastor said slowly, "and I saw the possibilities. I hadn't quite realized before. I was intoxicated. At first. But when I sat down and tried to make plans, I realized what having this power means. I'm not going to use it. I'm not meant to use it."

DuBrose said, "You've decided that?"

"Don't you agree?"

"I can see you must have your reasons. May I hear them?"

"I think this may be—a test of humility. I know I have the power. That's enough. I know all things are hollow. That's enough too. On this mountain I have been shown the kingdoms and powers of the world. I have been tempted. But I'll never use the power again."

"What do you intend to do?"

"Think," Pastor said. "Thoughts are the only real things in a hollow world. Gautama knew that. I'm wiping out my past. I was too much concerned with the hollow things . . . technology—" He smiled slowly. "So I won't need to use my power. It was given to me as a test. And I survived that test. I know that meditation is more important than anything else."

DuBrose said, "You're wise, I think. I agree with you."

"You can see why I mustn't use the power again."

"Yes," DuBrose said, "you're right. And it's symbolic that you destroyed your laboratory. It was the symbol of your past, and I believe you were meant to destroy just that much."

"Do you think so? Yes, I suppose . . . yes. My past has vanished. I can go forth without chains to a new life of meditation."

"Did you destroy all the past?"

Pastor brought his eyes into focus. "All my—what?"

"The laboratory. If you leave one part of your past still alive, it'll be a bond, won't it? And the lab is the symbol."

Pastor said, "One wall still stands."

"Should it stand?"

"But I swore never to use the power again. It won't matter."

"The symbol represents the truth," DuBrose said. "It will matter. You must start fresh. A single bond now—"

"I won't use the power again!"

"You haven't completed your task. The power was given to you so you could destroy the symbol of your past. Until you fulfill that command you won't be free. You won't be able to enter into your new life."

Pastor's mouth twisted. "I . . . must I? Do you believe . . . that was what was meant?"

"You know it was. The last symbol. Destroy it. Destroy it!"

"All right," Pastor said. "But it's the last time I'll ever use the power."

DuBrose said, "Push the visor away so I can see the wall go, will you? I want to be sure of your complete success."

Pastor's face slid aside; there was a shifting panorama, and then the

half-ruined wall of the laboratory stood against a cold gray sky. DuBrose said, "Stand where I can see you. Now."

"Well . . . but . . . DuBrose, must I—"

"You must."

Pastor looked at the wall.

The wall vanished.

"Good.” DuBrose said. "The last symbol is gone."

Pastor's face was puzzled. "No. I forgot—"

"What?"

"The visor. That's the last—"

The screen went blank.

Kalender's face came back. The Secretary of War was sweating.

"You're right. DuBrose. That man can't stay alive.''

"Then have him killed. But be careful. You'll have to catch him by surprise."

"We'll manage." Kalender hesitated. "Why did you talk him into destroying that wall? Just to convince me?"

"Partly."

"But he was determined not to use the power again—"

DuBrose said angrily, "I had to be sure. He meant it then. But how long could he have held out. If I was able to talk him into using the power, the devils in his subconscious mind would eventually have done the same thing. If he had refused to destroy that wall, no matter how much I urged him, I might have figured it would be safe to let him live. Though even then—"

"He can destroy—anything?"

"Anything at all," DuBrose agreed. "Or everything. And since he's broken his word to himself once, he'll do it again. Kill him. Fast. Before he can get off that mountain."

"I'll send a warplane from Denver," Kalender said. "I'd like . . . there's no time now, though. Good-by."

As his face faded, the medic at Wyoming Emergency called.

"I recalled the hospital copter, Mr. DuBrose—"

"In time?"

"Yes. They'd gone only a few miles. But have you made other arrangements, or—"

DuBrose said, "Other arrangements have been made, yes. Forget the affair. Good-by."

He clicked the visor off.

The room was empty and silent. The window ports showed the blue sky and sunny meadows of a hillside landscape miles above Low Chicago. Time slowed down and stopped.

Then he knew that Seth Pell was gone.

VIII.

No one else must know. Seth's disappearance must be explained away, somehow, for a while. Because no hint of the real problem must reach Cameron; the director had to be shielded from realization of his responsibility, or he would go mad.

There was not even time for grief.

DuBrose went into Pell's office and stood silent, considering. The room's vacancy chilled him. An hour ago Seth had been sitting on that desk, swinging his heels and talking in his lazy, casual voice. Suppose DuBrose, not Pell, had been Pastor's victim? How would Seth have reacted?

With competence, anyhow.

DuBrose fumbled out a cigarette, stared at the desk, and tried to imagine Seth sitting there, white hair gleaming under the pale lights, youngish face faintly amused.

"How about it, Seth?"

"How about what?" Yes, that was it. Careless, casual, but—

"You know what. You're dead."

"O.K. So you're in charge. Take over, Ben."

"But how? One man can't—"

"Oh, stop worrying. You'll do all right. It's only that sense of responsibility that can break you. You had one idea already. The chief mustn't know I'm dead."

"He'll want to know—something!"

"Well, tell him something. Use your memory. Didn't I anticipate trouble?"

"Not this trouble. You did with Ridgeley."

"So?"

"Yeah. You said you'd put some papers in your safe, just in case. And the chief's got the combination."

"Smart boy. This is a good trick, you know. You're so used to kicking ideas

around with me that it's hard for you to think on your own. O.K. Imagine me any time you want. Put words in my mouth. It'll help a bit."

It had helped. Seth wasn't sitting on the desk. He hadn't been sitting there. But, briefly, DuBrose had recreated Seth Pell as surely as Pastor had destroyed him.

DuBrose headed for the director's office. Cameron was at the window; he had slid aside the pane and was watching the shadowy, red-lit darkness of the Spaces. Thunder of the great machines came through the port. DuBrose saw that Cameron's luncheon hadn't been touched.

"What is it, Ben?"

"I'd like you to open Seth's safe."

Cameron turned. His face was under iron control. "Why? Where's Seth?"

DuBrose said carefully, "I just got a message from him. He wants you to open his safe. That was all."

Cameron hesitated, smoothed back his gray hair, and grimaced. Without a word he went past DuBrose into Pell's office. The safe was a dual-control, attuned to open only to the radiation pattern of Pell's brain or Cameron's.

The panel slid aside. A bulky envelope was propped up against a shelf. It was addressed to Cameron, who slit it open and took out a paper and another thick, sealed envelope.

The director's eyes moved swiftly across the letter. He handed it to DuBrose.

DuBrose read:

Bob,

I've been called away. Can't tell you details yet. Till I get back, let Ben take over. He knows the set-up. Give him full charge. If he isn't available, open this envelope yourself. See you later.

Seth

Cameron held out the envelope. "Here it is. Now—what is all this funny business?"

DuBrose said, "First of all, are you going to do what Seth wants?"

"Yes. He knows what he's doing."

"He gave me my orders."

Cameron smiled. "I'm in danger of being assassinated? Is that the answer?" Pell had led the chief to think that, DuBrose knew, to keep him from guessing the truth. As a red herring, it might prove useful.

"It might be the answer. Or it might not."

"I'm not a child, Ben."

"Chief, I'm just following Seth's orders."

"All right," Cameron said abruptly. "Go ahead and follow them. Let me know any time you want my resignation." He took a folder out of the safe and said, "I'd meant to ask for this back. That new propaganda line ... it may need some work."

Harmless stuff. DuBrose knew what it was. He watched Cameron's broad back out of the room.

The director had forgotten to close Pell's safe. DuBrose shut the panel himself, frowning speculatively. The action wasn't at all like Cameron. He was meticulous about details. And he was a hearty eater.

Yet he hadn't touched the luncheon tray.

Had Cameron learned the truth, somehow, after all? Was an anxiety neurosis beginning to work?

Symptoms: absent-mindedness, loss of appetite—

Cameron glanced at the papers outlining the new indoctrination lines, but he couldn't focus on them. His mind wasn't under its usual tight control. He was conscious of the luncheon tray on the desk, and the soup spoon that had behaved so —abnormally.

Automatically he scrubbed the back of his hand across his mouth.

There was a pattern to all these things. All these hallucinations. They were aimed at making him feel insecure.

Aimed?

A directive purpose?

Persecution, then. Why dodge the word? A persecution mania. What would a psychiatrist say?

It was either hallucination or it wasn't. If it wasn't, it was persecution. Or—

It was difficult to think clearly when at any moment the floor might tilt unsteadily beneath your feet.

Impossible to work on the propaganda papers now. Cameron shuffled them back into their folder and went to his own wall safe. He opened it.

There was an egg in the safe.

Cameron knew he hadn't put it there.

It wasn't a real egg either, because as he reached for it, it went away—somewhere.

Seth had written:

Ben,

Anything can happen now. Ridgeley's found out we know he's from the future, and he's plenty dangerous. I'm allowing for the possibility that I'll be killed and you'll survive. If we're both killed—well, you won't be reading this.

But play it this way. The equation's got to be solved, and the chief's probably the only one who can find somebody to solve it. Maybe Pastor will do the trick. Maybe he won't. He's got further than anyone else so far. Keep screening, and do your best for the chief.

And don't let this throw you. In a few million years, what will it matter? Luck, though!

Seth

The other papers in the envelope were the equation itself and the research material Pell had gathered on it. None of it was new to DuBrose. He sat back and considered.

Seth was dead. (I'll mourn you later.)

Daniel Ridgeley was alive. DuBrose had almost forgotten the courier. At the moment, he could be discounted, though not permanently. The Secretary of War might help on that score. Ridgeley might be in the pay of the Falangists. Though why a man from the future would bother with temporal-local wars DuBrose could not imagine. Why did Ridgeley apparently feel pleasure when he faced enemies? It had been that, an odd, illogical delight that had flamed behind the courier's dark eyes when DuBrose had pulled a vibropistol on him, and when Pell had managed that business last night, when Ridgeley had been dissuaded from murder.

Billy Van Ness and his ETP— extra-temporal perception; could Billy, in his few lucid moments, help? How? By locating Ridgeley? Finding the courier wouldn't be enough; DuBrose thought the key would be motivation. And that motive might lie thousands of years in the future, in the world from which Ridgeley had presumably come.

Well, then—the Duds? The monuments of that lost race from the inconceivably far future, now tattered, dissolved domes of impermeable force? Nothing there.

The equation.

Pell had proposed it to the chief as a casual theoretical problem. Who could solve a formula based on variable logic? And Cameron had named Lewis Carroll—a thoroughly elastic mind, one not bound by conventional values.

But no mathematicians existed today who wrote fairy tales of symbolic logic. DuBrose had already used the big files for a screening on technicians by a vocation. He hadn't found much. One mathematician seemed a possibility; he was a sculptor of mobiles but he was also one of the men who had gone insane while studying the equation.

Pastor had gone further than most. DuBrose decided to attack the problem

from a new angle. If he could pick out the factors that had made Pastor nearly successful in his attempt, there might be an answer there.

He made a psycho-chart, omitting the name, and noted a few questions. Cameron could probable get something out of this pattern. But DuBrose dared not take the chart in now. The director would certainly smell the concealed rat.

He shoved the chart among some other routine folders waiting Cameron's decision and sent them into the director's office. Now he could only wait—on that point anyway.

"What next, Seth?"

"I can't tell you anything except the words you put in my mouth. You know that. Remember me. Visualize me. Think what I might say."

"I'm trying to."

"Get drunk. Eat some Kix. Take Deep Sleep for a year. Use that blue key I gave you. Try some high-powered hedonism; it opens the right doors for that."

"Escapism. I'd be trying to dodge responsibility."

"Semantic trouble. Your responsibility's limited to keeping the chief on the beam. He's the guy who can keep the works from blowing up. But don't let him know that."

"Maybe if I checked over those screenings again—"

"Maybe."

DuBrose did that. He drew up some charts, ran off several lists, and studied them. Avocations: badminton, baseball, bowling. Cards—a whole sub-group. Oil painting, surrealistic, classic, tri-dimensional. Writing Creepies, the sensory "movies" of the period. Chess, several varieties. Were there several varieties? What was fairy chess, anyhow? Rabbit raising. Hydrosphere exploration. Adagio dancing. Dipsomania.

DuBrose thought the dipsomaniac sounded like the best bet.

Then Kalender vised. He had bad news. The war plane sent to blast Dr. Pastor had failed; Pastor couldn't be located.

DuBrose began to feel like a target aimed at by a dozen expert archers. "I won't ask if you've done everything possible, Mr. Secretary. You know the importance of this as well as I do."

"We've put scanning rays on the whole area, and psych-radar detectors, tuned to the frequency of the adult mind. No response."

"Pastor's instruments didn't work on M-204. It's possible that Pastor's mind is running on a different frequency now."

"Well—we've done infrared aerial pix, and picture-series to check on ground

movement. Nothing but deer and a few pumas. There's a copter registered to Pastor. It can't be located. Did he have it on the mountain with him?"

"Maybe. He might have destroyed it. You've sent out an alarm?"

"A kill-on-sight priority alarm, Mr. DuBrose. It's a general alert."

"The first shot must be mortal, you know. If Pastor retaliates—"

"I've seen what he can do," Kalender said, moving his mouth stiffly. "What I want now is suggestions. Let me talk to the director."

DuBrose said, "I can't. I'm sorry. He gave orders, you know—"

"But this is emergency!"

"I know it. But it's equally vital that Mr. Cameron be kept isolated from such things for a while."

Kalender flushed darkly. After a moment he said, "Then put on Seth Pell."

"He's unavailable. I'm in charge in his absence." DuBrose went on without waiting for an explosion. "Pastor might head for his home, I think he's emotionally attached to his family. He may go there either to be with them, or to destroy them. They're symbols of his past, too. He promised not to use his power again, but ... I suggest spotting some logicians with your blasting crews, in case of trouble. Pastor's weakness seems to be metaphysics. A good logician might be able to argue him out of retaliating. Though the only safe way is to kill him on sight.""

"M-m-m— That makes sense, All right."

"One more thing." DuBrose had made his decision. "Record this, please. Daniel Ridgeley's a spy."

Kalender jerked back. "What? Im—"

DuBrose's back stopped crawling. "Wait," he said, letting out his breath. "I had to get that recorded fast. I didn't know if Ridgeley might kill me before I could get the words out. But it's on the record now. If he murders me, you'll get on his trail."

The Secretary of War said slowly, "Mr. DuBrose, what's the matter with your department? Are you having mass hallucinations in Psychometrics? Ridgeley has been invaluable to us—"

"Hallucinations ? Is Pastor's power imaginary? What's so fantastic about Ridgeley's being a Falangist spy?"

"I—know Ridgeley. I trust him completely. You don't know what services he's rendered—"

"Will those services save us from the Falangist equation? Sure you trust him. That's what he was after. Remember those occasional periods when he drops out of sight? Do you know what he does during those times?"

"Of course . . . eh?"

"Remember this," DuBrose said. "Ridgeley is a lot more dangerous than Pastor. I can't ask you to pick him up or have him killed. I don't think it would be possible. But I'd like you to stand ready. Locate Ridgeley; don't let him know he's spotted. Put a scanner on him and keep it there."

Kalender rubbed his jaw. "We can't take chances. So I'll do as you suggest. But—when can I talk to the director?"

"You'll be the first one to talk to him, as soon as it's safe. Right now he must be kept isolated. It's a security precaution. You know the effect the equation has on people—"

The Secretary was finally beginning to understand. "There's been another suicide. An electronics man. And two more insanity cases. Not counting Dr. Pastor."

"The equation should be suppressed till we—"

"Impossible. It must be solved. You don't know your office will succeed. As long as there's a chance that someone may solve that— thing, we've got to take the chance."

"Even if it drives every technician in the country crazy," DuBrose said.

"I don't like it either. Keep in touch with me."

That was all. DuBrose eyed the window port. Claustrophobia touched him chokingly. At any second, all this might dissolve—

Pastor was loose—somewhere. And until his brain was blasted into nothingness, there would be no safety for anything or anyone, anywhere.

He sent another batch of material in to Cameron and tried to conjure up the image of Seth, without too much success.

"What now?"

"How should I know ?"

"I can't rush the chief—"

"Naturally. He mustn't suspect the importance of the equation."

"What about Pastor?"

"Done everything you can?"

"I'm not equipped to find him. I've condemned him to death already. Isn't that enough?"

"What about Ridgeley?"

"Oh. Well, the more information I can get about that guy—"

Billy Van Ness had a private room in the infirmary. DuBrose went there to study the boy's chart and examine the patient. The excitement caused by Ridgeley's arrival last night had worn off. Van Ness was in a passive state,

eyes closed, thin face relaxed.

ETP. Extra-temporal perception might prove valuable in dealing with a man from another time-sector. Pell has spoken of hypnosis, had tried it on the boy, with some success. DuBrose ordered gadgets brought in and used mechano-suggestion on Van Ness. When that failed, he had recourse to an injection.

K-k-k-k-kuk!

The harsh, unpleasant noise rasped out of the boy's throat. DuBrose remembered the palate deformation. Was this sound the equivalent of hard radiation emanations made audible—the probable method of communication used by that unknown race that had created the Duds?

He probed. This time it was easier to make Van Ness speak intelligibly. Pell had broken trail last night. But the temporal disorientation was still present. The mutant made no distinction between past, present and future. Some sort of temporal anchor was needed to pin down Van Ness' wildly oscillating perception. How strange the world must seem to this mutant who never used his eyes! He could see duration—

"—living and then backwards in long extension and stop . . . and again backwards, and again—"

Question.

"Shining. Bright domes. So long they reach to—"

Question.

"No word. There is none at the end. Or the bend, I mean. Where they doubled back. Came to look for—"

Question.

"There is no word. Back and back, searching.”

Question.

"Where are they now? . . . The end is now."

DuBrose thought. Genus X, the race that had built the domes, that strange unimaginable people that had traveled back through time and left the shining, tattered Duds as their eidolons. He wondered. Searching for what?

For something necessary to their existence. And failing to find it. Back through time, in age-long leaps, back to this world that must have seemed so primevally alien to genus X. But the end is now.

"The man you saw last night. Billy—"

"K-k-k-k-kuk!"

Saw? Last night? To the mutant, the words were variables. DuBrose tried to frame his question more narrowly.

"The man. He reached in the right direction, remember?" Would it be memory or prescience to Van Ness warped, expanded time-sense? "He was longer than anyone else. Except the shining things. He was more complete—"

"Running, running . . . I saw him run. There was a fight."

"A fight, Billy? What kind of a fight?"

"K-k-k-kuk! Too short to see— those big machines. Oh, big, big, but so short!" Immense machines of brief duration. What could they be?

"Noise. Sometimes. But sometimes silence, and a place where many lives were short—running, running, as they come . . . came . . . will come . . . k-k-k-k-uk! K-K-K-K-KUK!"

The first symptoms of convulsion began to appear. DuBrose hastily gave another injection and calmed the boy with deft hypnotic suggestion. The racking shudders died. Van Ness lay motionless, breathing shallowly, his eyes closed.

DuBrose went back to his office. He was in time to meet Cameron tossing some papers on the desk.

"I'm going home, Ben," the director said, "A bit of a headache. I couldn't do much with these problems. Managed a few. Where's Seth?" He watched DuBrose's face. ''Never mind. I—"

"Nothing's wrong, is there?"

"No," Cameron said flatly. "I'll see you later." He went out, leaving DuBrose to wonder. Had Ridgeley got to the chief again?

Symptoms: headaches, nervousness, inability to concentrate—

DuBrose hurriedly leafed through the folders, looking for one in particular. He found it. But the dossier on Dr. Emil Pastor had apparently not been touched. Maybe those other screening charts listing the avocations might—

Nothing there either. Or wait. Opposite one name there was a lightly penciled check mark.

Eli Wood, Low Orleans, mathematician; home, 108 Louisiana B-4088; avocation, fairy chess—

## IX.

None knew him. He was grateful; he felt deep humility because he could walk through the Ways of Low Denver and not be recognized for what he was. The Ways swept past, crowded with warmen, but no one watched the small, quiet figure strolling on the stationary central path. This was the second test, and probably a more difficult one than the first. Destroying the symbols of his past had been dangerously easy. The temptation had been there. Because he knew, now, that all things were hollow, he also knew how easy it would be to prick the world bubble.

For he could not die. His thought would live on. In the beginning was the Word, and in the end would be the Word, too.

He had wanted to go home, but this test must come first, and Low Denver had been the nearest cave city. His credentials had enabled him to enter. He had used those credentials just as though he were an ordinary man. And he would go on pretending that, in all humility. Only his thoughts, the thoughts of God, would blaze between the stars, the hollow stars, into the hollow universe that he could destroy—

That was the test. He must never use the power again. How often the other God must have been tempted to erase the universe He had made! But He had refrained, as Dr. Emil Pastor must refrain.

He would still call himself Dr. Emil Pastor. That was a part of the program of humility. And lie would never die. His body might, but his thought would not.

All these warmen on the Ways— how grateful they would be if they knew they continued to exist only by the loving-kindness of Dr. Emil Pastor, Well, they would never know. Pride was a snare. He didn't want altars.

The firmament was an altar revealing the glory of Dr. Emil Pastor.

An ant crawled out of a crevice and raced toward the Ways. Pastor chased it back to safety. Even an ant—

How long had he stayed here? Surely there had been time enough. He had passed this test of humility; nothing had tempted him to reveal himself to the war men of Low Denver; he wanted to go home. He hoped his wife would not realize the change. She must always continue to believe that he was Emil-dear, as the children must never guess he was anyone else but Dad. He could play the role. And he felt a surge of tenderness toward them because he knew that they were hollow.

They could vanish—if he willed it.

So he must never will it. He would be a kindly god. He believed in the principle of self-determination. It was not his task to interfere.

Time enough had passed. He stepped on a Way and was borne toward one of the pneumocar stations. In the car, he clutched a strap—the acceleration always did odd things to his stomach—and leaned back, waiting for the brief blackout to pass.

It passed. Fifteen minutes later he stepped out at a Gateway. A group of uniformed men were standing waiting. At sight of him an almost imperceptible tension touched them. But they were well trained. Not a hand moved toward a pistol.

God walked toward them.

Cameron was dining with Nela. He watched her calm, friendly face and knew that there was no sanctuary even there. As he watched, the flesh might melt from her skull and—

Music murmured from an audio. Fresh pine-scent filled the room. Cameron picked up a spoon, dropped it again, and reached for a water goblet.

The water was warm and brackish. The shock to his taste buds was violent. But he managed to set the glass down without spilling more than a few drops.

"Jitters?" Nela asked.

"Tired. That's all."

"You were like this last night. You need a furlough, Bob."

"Maybe I'll take one," Cameron said. "I don't know—"

He tried the water again. It was freezingly cold and very sour.

Abruptly he pushed back his chair. "I'm going to lie down for a bit. It's all right. Don't get up. A bad headache is all."

Nela knew how he hated fussing. She merely nodded and went on eating. "Call me if you want," she said, as Cameron went out. "I'll be around."

And then upstairs, in the bed that at first was pleasantly soft and relaxing, and then too soft, so that he kept sinking down and down into a feathery, pneumatic emptiness, with that nausea in his stomach that droppers always gave him—

He got up and walked around the room. He didn't look into the mirror. The last time he had done so, his image had made ripples in the glass.

He walked.

He was walking in circles. But presently he noticed that he was always facing the same spot, the same picture on the wall. He was on a turntable.

He stood motionless, and the room tilted. He found a chair, closed his eyes, and tried to shut out all sensory impressions.

Hallucination or reality.

If reality, then it was more dangerous. Were Seth and Ben DuBrose involved? Their hints about assassination were palpable red herrings. He might have believed them under other circumstances. But these hallucinations—It was difficult to think clearly.

Perhaps that was the intention. Perhaps he wasn't intended to think clearly.

Half-formulated thoughts swam into focus. He had to pretend to believe that these—attacks—were purely subjective. He had to pretend that they were succeeding in their purpose—

But he knew that the psychic invasion was objective.

He knew that he was being persecuted. Others might not notice the things that had been happening to him. The persecutors were clever. They were determined to drive him mad—well, why? Because he possessed

information of value? Because he was a valuable key man?

And that argument added up to one thing. Paranoia, with systematized delusions of persecution.

Cameron got up carefully. He winced. Once again it had happened. And, as usual, the unexpected.

He went downstairs, walking slowly and awkwardly, his face drawn and gray. Nela caught Vier breath at sight of him.

"Bob. What's wrong?"

"I'm flying to Low Manhattan," he said through stiff lips. "A doctor there I want to see—Fielding."

She came swiftly toward him. Her arms slipped around his neck.

"Darling, I won't ask any questions."

"Thanks, Nela," Cameron said. He kissed her.

Then he went out to the copter, walking unsteadily and remembering the fairy tale of the little mermaid who exchanged her fish-tail for human legs. There had been a price exacted. Ever after that, the little mermaid walked on sharp knives, no less painful because they were imaginary.

Wincing at every step, Cameron walked toward the copter's hangar.

"I don't drink," the mathematician said, "but I've some brandy I keep for guests. Or do you prefer Pix? I've got some somewhere. I don't use them either, but—"

"Never mind," DuBrose said. "I just want to talk, Mr. Wood." He laid the portfolio across his knees and stared. Wood sat rather uneasily in a plain relaxer chair, a tall, thin man with old-fashioned non-contact spectacles and a thatch of neatly-combed, mousy hair. The room was meticulously, fussily clean, an odd contrast to Pastor's cluttered, garish eyrie lab.

"Is it war work, Mr. DuBrose? Fm already working in Low Orleans—"

"Yes, I know. I've investigated. Your record shows you're extremely capable."

"Why—thanks.” Wood said. "I . . . thanks."

"This will be confidential. We're alone here?"

"I'm a bachelor. Yes, we're alone. I gather you're from Psychometrics, though. That's rather out of my line."

"We have our fingers in a lot of pies." Watching the man, DuBrose found it difficult to believe how many degrees Wood held and how many papers had been published under his name—some of them advancing remarkable theories of pure mathematics. "Here it is. You're interested in fairy chess, aren't your

Wood stared. "Yes. Yes, I am. But—"

"I've got a reason for asking you. I'm not a chess player. Can you give me some idea of what fairy chess is?"

"Why . . . certainly. You understand this is merely a hobby of mine." DuBrose thought Wood blushed slightly as he reached for a pile of chessboards and laid them out on a table. "I don't quite know what you want, Mr. DuBrose—"

"I want to know what fairy chess is. That about covers it."

Some of Wood's shyness was dissipated. "It's a variation of ordinary chess, that's all. About 1930 a number of players got interested in the possibilities offered. They felt there wasn't enough scope in orthodox chess, with its variation of problems—two-man moves and so on. So fairy chess was created."

"And—?"

''Here's a regulation board— eight squares by eight. Here are orthodox chessmen, king, queen, knight, bishop, castle, pawn. Knight moves two squares in one direction and one at right angles, or one and two. Castle in straight lines, bishop —diagonally in any direction on a single color. The idea, of course, is to checkmate. There’ve been a great many variations, but some themes are simply impossible, on the regulation board, especially certain geometrical themes."

"You use a different board?"

"In fairy chess, you may have men of different powers and boards of different types. Modified space compositions—here's one." He showed DuBrose an oblong board, eight squares by four. "Here's another, nine by five; here's a larger one, sixteen by sixteen. And here are fairy chessmen." DuBrose stared at unfamiliar pieces. "The grasshopper. The nightrider—though that's merely an extension of knight's move. Here's the blocker, which can block but never capture. Here's an imitator."

"What does that do?"

"When any man moves, the imitator must move for the same number of squares in a parallel direction. It's rather difficult to explain unless you're familiar with chess principles, I'm afraid."

"Well—I gather it's chess, with a new set of rules."

"Variable rules," Wood said, and DuBrose leaned forward sharply. "You may invent your own men and assign them arbitrary powers. You may design your own boards. And you can have rule games."

"Meaning?"

"Here's one." Wood set up a few pieces. "Let's say, on this, that black never plays a longer move than his previous move. A one-rule game."

DuBrose studied the board. "Wait a moment. Doesn't that presuppose a

certain arrangement of men?"

Wood smiled, pleased. “You might make a good player. Yes, you'd automatically have to assume that black's longest move is always available to begin with. Here's another. Black helps white mate in two moves. Oh, there are plenty of problems, the castling mutation, the camel-hopper, the actuated revolving center, checkless chess, the cylinder board—the variations are endless. You can have irreal men. The possibilities are endless."

"Assigning these arbitrary values —wouldn't that bother a man who'd been trained with orthodox chess?"

"There's been a minor war since 1930," Wood said. "The orthodox players, some of them, call fairy a bastard and unacceptable form. Still, we have enough fairy chess players to hold tournaments once in a while."

A thoroughly elastic mind . . . one that isn't bound too much by familiar values ... a man who makes up rules of his own.

Jackpot!

But DuBrose kept his fingers crossed as he opened the portfolio.

Three hours later Eli Wood pushed his spectacles up on his forehead and laid down a curve-stemmed pipe. "It's fascinating,” he said. "Most extraordinary thing I've ever encountered."

"But it's possible? You can accept—"

"I've been accepting ridiculous things all my life," Wood said. "I've seen some peculiar things." He didn't elucidate. "So your equation is founded on the variability of truths."

"It's far over my head. But— several sets of truth."

"Certainly. Several sets." Wood searched for his spectacles, found them, and pulled them down into place. He blinked at DuBrose through the lenses. "If mutually contradictory truths exist, that proves they're not contradictory— unless," he added mildly, "they are, of course. That's possible, too. It's simply fairy chess, applied to the macrocosm."

"If I remember right, part of the equation says that a free-falling body drops at the rate of five hundred feet a second. Later on the body is dropping at nine inches a second."

"Black never plays a longer move than his previous move. Remember? That's the rule in this part of the equation, I'd say."

"Presupposing a certain arrangement of men."

"Which would be the constant factor. I don't know what it is; this will take a great deal of study."

"You can nullify gravity, then—"

"Some themes are impossible on a regulation board. Set up the equivalent of a board in which the rule is—no gravity—and you've got it."

A macrocosmic board, one of the conditions of which is that the earth doesn't revolve. Within the limits of that board—it doesn't. Nevertheless it doesn't move. Galileo was wrong.

"Can you solve this equation?"

"I can try. It'll be a fascinating problem."

There was more to discuss, but finally DuBrose was satisfied. He left, having secured Wood's promise to consider the problem top priority. At the door DuBrose, troubled by doubt, turned.

"You're not—bothered—by the idea of variable truths?"

"My dear man," the mathematician said mildly. "In this world?" He chuckled, bowed, and let the door panel slide shut.

DuBrose went back to Low Chicago.

X.

Two visor calls were waiting. DuBrose turned on the playback attachment. The Secretary of War should have come first, but he listened to Nela Cameron instead.

"Ben. I tried to get Seth, but he's out. I'm worried about Bob. He's gone to New York to see a Dr. Fielding. He's ... I don't know. It's probably something at the office. Call me if there's anything I should know, will you? That's all."

Dr. Fielding. DuBrose knew him; a psychiatrist. Mm-m.

The Secretary of War said that there had been an inexcusable mistake. Dr. Emil Pastor had been located leaving Low Denver. He had been wounded—but not killed.

Result: that whole group of intercepter guards had disappeared. There was no trace of Pastor. He couldn't get far. Kalender had ordered double precautions. Pastor must be killed on sight without mercy.

Any suggestions?

DuBrose could think of none. Kalender had muffed the job. Anything could happen now.

He left messages and headed for Low Manhattan. No use calling Dr. Fielding. It might be better if Cameron had left before DuBrose arrived. That way, DuBrose might get some valuable information from the psychiatrist.

Very definitely, something was wrong with the chief.

Flying southeast, DuBrose thought of Eli Wood. Could the mathematician solve the equation? A man trained to the variables of fairy chess—well, the

very fact that Wood had taken up fairy chess showed the elasticity of his mind. DuBrose remembered that Pastor had composed unorthodox stories of his own on the Fairyland gadgets. Why hadn't the War Office given Wood the equation already?

The answer was obvious. Only the top-flight men had been selected to solve the equation. Wood was competent enough, but his record lacked the brilliance necessary to impress the brass hats. And he didn't, after all, have one of the Bib Jobs.

Would the mathematician go mad, like the others?

No use putting all the eggs in one basket. There might be other technicians who played fairy chess—or the equivalent.

The copter roared toward the nearest Gateway to Low Manhattan. DuBrose tried to visualize Seth.

"Something's wrong with the chief."

"Has he got wind of what's going on, Ben?"

"I don't know. I wish you weren't dead. If I could only be sure what's the best thing to do—"

"You've got Eli Wood on the job. That's something. As for the chief, he may be the Civilian Director of Psychonamics, but he's got a colloid in his head. You're a psychotechnician. Get busy."

"I'll try. But I'm walking six tightropes at once—"

Only one God has ever died . . .

Only one God has let his side . . .

Be wounded by a soldier's spear!

What was that? Some old poet; he couldn't remember the name.

Trying to kill me! Trying to kill their God!

He had acted instinctively. Self-preservation was almost a taxis. Co-incidentally with the burning agony in his shoulder, he had used the power. They had vanished.

Now his left arm hung withered and useless. The pain throbbed in dizzying rhythms through his head and body. He kept walking. The stars glared, coldly and unapproachably, but he could quench them if he wanted. He could turn that blazing vault black for ever and ever.

Dr. Emil Pastor. Dr. Emil Pastor. Emil-dear. A name, a word, a spot of cool, friendly light in the raging turmoil—

But what was Dr. Emil Pastor? What was Emil-dear?

If he could find his way to that spot of light—

Where was it? There was only the dark here, and night winds, and grass that rustled under his feet. A tree loomed up before him. He destroyed it without thinking. Realization came back then. There was some reason why he mustn't use the power.

Good intentions. The other God had had good intentions, too. But they had tortured him, hated him. . . . What about the Deluge?

Emil-dear. That meant something. It meant peace and safety, words he had almost forgotten. He didn't want to be God, really. He hated being God. If he could get to the place where he had left Dr. Emil Pastor, he could slip out of that incarnation and find rest once more. But he didn't know where it was.

Colorado. He was somewhere in Colorado. But that told him nothing. Without transportation or communication, he was lost, even He.

The woman—

He was going to her. To find the Dr. Emil Pastor he had left with her. She could help him. He was going to her.

Nothing was going to stop him!

DuBrose met the Director of Psychometrics outside Dr. Fielding's office. Cameron's face was haggard, his gray hair rumpled, and his eyes had lost their steadiness. A nerve jumped in his cheek.

He said, "What do you want?"

"We got trouble.” DuBrose said shortly.

"Nela told you I was here?"

"Right. She said you were going to see Fielding."

"Didn't you wonder why?"

"It's not unusual for our department to consult a psychiatrist sometimes," DuBrose said. "But you've been acting funny. So, since you ask—yeah, I wondered why."

Cameron's gaze flicked past Du-Brose's shoulder. He gave a low exclamation, turned, and nodded for DuBrose to follow. As they walked, he said, "Was that Ridgeley?"

"Yes."

To DuBrose's surprise, the director exhaled with relief. "Not a hallucination, anyhow. I've been seeing him everywhere tonight . . . I've been on the run through Low Manhattan, trying to dodge him. Haven't seen Fielding yet. I don't know—"

DuBrose guided Cameron on to a Way. The courier, he saw, was still following, though at a distance.

"What's up?"

“I’ve been out in the Spaces," Cameron said dully. "Trying to dodge him. It's getting so I can't—" He paused. His questioning gaze probed DuBrose's. "Where's Seth?"

"I can't tell you, chief. I only wish I could. Why not trust me?"

"It's—Ridgeley. Why should he be following me? I've spoken to guards twice. Each time, when they looked for Ridgeley, he was gone."

DuBrose said, "I asked the Secretary of War to check on him. We think he's in Falangist pay."

"A Falangist?"

"No-no. But in their pay."

"Assassination doesn't worry me too much,” Cameron said. "It's this other—" Again he stopped. DuBrose glanced at an overhead marker and urged the director to a crosstown Way. Low Manhattan was crowded, even at this late hour. On a full-time production schedule, even the graveyard shift roared.

"Ben. Are you trying to dodge Ridgeley?"

"I know a place where we can get away from him. I hope."

Blue Heaven was mildly notorious. At its garish portals DuBrose took out a blue key and used it as a passport, while Cameron frankly stared. "I didn't know you went in for these diversions,” he said.

"Seth gave me this key," DuBrose explained. "He thought I needed an emotional catharsis. Ever been here?"

"No. Seth's told me about it.

Rather—high powered, I gather. But—" He peered along the Way. There was no sign of the courier.

DuBrose said, "He can't walk through walls. It'd take him a while to get hold of one of these keys, and I don't know for sure that he can." They went along a mirrored hall through pale clouds that glowed faintly. Some energizing radiation pulsed through the dim air. An attendant appeared.

"Your pleasure? What type of enjoyment would you prefer? We have a new pattern for Creepies—"

"That'll do," DuBrose said. "Where is it?"

Clouds billowed up and surrounded them; they were conscious of smooth motion through that warm opacity. They were relaxed upon padded cushions before they quite realized that the movement had stopped. The soft voice of the attendant said, "The clouds will thicken a little. We don't bother with awkward neural attachments here. The water vapor is the conductor."

"Wait a minute," DuBrose said. "Suppose we want to take a break? How do

we turn off the program?”

"This lever, at your right hand. Now—"

The clouds thickened. DuBrose was not sure the attendant had gone. He waited. The first tingling vibrations of a Creepy neuropattem began to whisper through him. He felt drowsy, comfortable, infinitely relaxed. Images moved slowly through his mind.

Greek theaters had been one of the early forms of audience-projection. Later the cinema had expanded the scope, and television. All these art-forms had been aimed at making the receptor identify himself with the artist—and the Creepies, with their delicate patterns of pure sensory impressions, were the current development. DuBrose had felt Creepies before—you didn't see them—and knew they were excellent in entertainment-value. But this semibootlegged stuff was different.

It was rough!

Shock—shock—slam! Through the drowsy inertia the racing sensory currents plunged into Du-Brose's brain, with a violence that sent adrenalin pumping into his blood. Fear, hatred, passion—these emotions and others, stepped up abnormally, mingled in a cacaphonic symphony that jolted him horribly. His hand twisted the lever. Instantly the nerve-racking violence stopped, but he was sweating.

The fogs faded. Beside him, Cameron grinned faintly.

“Better than a Turkish bath," he said. "But leave it off. I want to be able to see if Ridgeley shows up."

DuBrose took a few deep breaths. "Any idea why he's chasing you?"

"I might have. But do you?"

"I told you. He's probably in Falangist pay. Why don't you tell me the real trouble, chief?"

"I can't. Not yet. Unless . . . answer a question for me. Has anything turned up that might make me . . . indispensable?"

DuBrose thought that over. He was a psychotechnician; he could see how close Cameron was to the verge. If he could take the risk now, it might solve a good many problems.

"Well—answer a question for me first." He'd chance it—with his fingers crossed. "Remember that hypothetical equation we were talking about yesterday?"

"The truth-variable? I remember."

"Could a guy who plays fairy chess solve that equation? Or would he go insane?"

Cameron sensed the signifiance of the query. His eyes narrowed, but he took a long time to answer.

"He could solve it. If anybody could, I imagine."

DuBrose swallowed. "And . . . if he couldn't . . . you'd still have enough dope to find somebody else who could, I suppose. I . . . I'll answer your question, chief. I don't want to. But I'm afraid. I'm afraid of what's happening to you. You're screwed up, and you won't tell me what it is, and I'm betting it's tied up with—this business."

"Ridgeley?"

"He's part of it. Seth and I couldn't tell you before because we were afraid the responsibility would —have bad results. But you know the answer now."

"What answer?"

"That equation isn't hypothetical." DuBrose said. "The Falangists have got it and have solved it. They're using it against us. We've got it, but we haven't been able to solve the thing. Our technicians have been going nuts. It's been your job to find a type of mind that could solve the equation."

Cameron hadn't moved. "Keep talking."

"Seth and I had to keep the knowledge of that responsibilty from you. You understand why now, don't you, chief?"

The director nodded slowly. But he didn't speak.

"We had to present the problem to you as theoretical. We were afraid you'd catch on. But I saw that fairy chess man tonight, and he's certain he can work out the equation. Even if he can't, we know, now, the type of man who can handle truth-variables. It's a matter of selection. If you fail, it's because the right man can't be found. But that won't be your fault. You know what sort of mind to look for."

"It's close to casuistry," Cameron said. "But it's sound logic. Only I don't know enough about the set-up. Tell me. Where's Seth?"

"Dead."

Silence. Then—

"Start at the beginning. Let's have it, Ben. And fast."

Nearly an hour later Cameron said, "If I'd known this from the beginning, I wouldn't have had my own trouble. But if you'd told me the set-up, the responsibility would probably have driven me insane. Listen." He told DuBrose about the rippling mirror, the soft doorknob, the mobile spoon, the shifting floor. "All aimed at my sense of security, you see. Trying to make me incapable of decisions. Building up an anxiety neurosis—to say the least. I knew it was impossible, except through science we haven't attained yet. But—"

DuBrose's throat was dry. "Lord! If you'd told us!"

"I didn't dare. I was mixed up at first. I thought it was all objective and tried to find explanations. There weren't any. There were two possible

answers. I was going insane. Or I was the victim of a planned campaign. In the latter case, there was some motive—I didn't know what. But I guessed that it was to drive me insane by artificial means. I decided to string along. I knew there might be scanning rays on me. Any word I said might be picked up by—the Falangists, or whoever was attacking me.” Cameron sighed. "It wasn't easy. I decided I could learn more by pretending to believe the manifestations were subjective. That way, the enemy might discount me, and I might find out what they were after. I knew you and Seth were up to something, and I guessed it was connected with this business—my hallucinations—but I trusted Seth. More than I trusted you, Ben. Till now."

DuBrose said, "You've been playing along, then—"

"It sounds easy, doesn't it? But a man can never be sure whether or not he's going insane. I haven't been sure. My mind . . . well, I've been in a genuine psychotic state, artificially induced. They succeeded in that. Tonight I had to have some help. I had sense enough not to tip my hand by seeing you or . . . Seth. I thought if I talked to a psychiatrist, I could get the value of catharsis, anyhow, without giving away what I suspected. But now it doesn't matter. Even if there's a scanner on me now—the Falangists can't make use of any information they gather. Because they can't stop us."

"Don't underestimate them," DuBrose said. "They've solved the equation. They can use it as a weapon. They know how to make bombs that can penetrate our force-shields, for one thing. And I'll bet that isn't all."

Cameron closed his eyes. "Let's see. First, the equation must be solved. That'll put us on even terms with the Falangists. Second, a counter-equation must be solved. But I don't know if even a fairy chess player could work that out."

DuBrose blinked. He hadn't foreseen this possibility. It was an entirely new and unexpected responsibility—the need for finding a man who could not only solve the equation, but nullify its effect.

"Eli Wood's a fine mathematician—"

"Of this era. He can break down the equation; I'm willing to accept that. It's easier to analyze than to create. Ben, don't you realize yet where that equation must have come from?"

"The Falangists—"

"Are contemporaries. Their science is no more advanced than ours. And the equation is the product of another type of technology entirely. Ridgeley's the answer.

"He's responsible."

"If he's from the future, it's probable that he brought that equation with him. And gave it, or sold it, to the Falangists. You were right in thinking one key to all this is Ridgeley. I want to try my hand at hypnotizing that mutant of yours . . . what's his name? Billy Van Ness? We may be able to learn something valuable."

"Ridgeley seems to me the most dangerous opponent we've got."

"He may be the most valuable," Cameron said thoughtfully. "I've an idea— Mmm. You asked Kalender to put a scanner on Ridgeley?"

"I don't know if he's managed it yet. You've got to locate the subject before you can adjust the scanning ray."

"All right.” Cameron said. He got up. "We've work to do. But I feel better. I . . . know now, that I'm not going insane, or going to be driven insane. For a while I was beginning to feel like a medieval peasant, attributing everything to my personal god—and devils. Now—"

He turned toward an arched opening visible through the thinning mists. "Now we'll find a visor— fast. Then we'll start integrating. Come on, Ben, You'll have to be ready to take over for me—in case."

"But you're all right now, chief. You know what the Falangists were trying to do to you."

"I know," Cameron said coldly. "But you've forgotten one thing. Even now, they could succeed. They could drive me insane through sheer pressure. They can use that equation on me till my mind cracks and retreats into insanity as an automatic defense measure."

"It's still happening?"

"Centipedes," Cameron said. "Little bugs. Spiders. If I took my tunic off and looked, I wouldn't see them, so there's no way of knowing what they are. But they're crawling all over me, and insanity would be a relief, Ben." He shivered.

XI.

At a public visor they called Kalender. The Secretary of War wasn't at GHQ, but it didn't take long to get the beam relayed. . The strong, harsh face showed strain and annoyance. "So you've finally decided to talk to me, eh? I appreciate it, Mr. Cameron."

"Mr. DuBrose was acting under my instructions," Cameron said briefly. He didn't want to quarrel now. "It was important that I be kept incommunicado while I worked on a certain matter. The slightest distraction might have been fatal."

"Fatal?"

"Yes. What's the latest on Dr. Pastor? DuBrose has kept me posted on current stuff."

"Have you solved the equation? Or found anyone who can?"

"Not yet," Cameron said. "I'm doing my best. But what about Pastor?"

"Oh . . . well, nothing. We've a dragnet out. Your man DuBrose thought he might head for his home. We've a cordon there. Enough camouflaged equipment to blast him into electrons. Or quanta. We haven't told his wife

anything. If he shows up—"

"He's left no trail?"

"Of . . . obliteration, you mean?”

“No, I doubt if he's using the power."

"You're doing all you can," Cameron said. "Now what about Daniel Ridgeley?"

Kalender said, "It's ridiculous. The man's invaluable to us. DuBrose must be wrong."

"Did you check his case history?"

"Naturally. And it checks."

"Could it have been faked?"

"Not easily."

"But it could have been, eh?"

"He can't be a Falangist," the Secretary of War snapped. "If you knew the valuable enemy information his espionage work has given—“

"A lot of good that will do you now," Cameron said. "The equation can simply wipe us out, and you know it. Have you put a scanner on Ridgeley?"

"Haven't been able to locate him. I called him on his private wave length, but he's turned off his receiver."

The director didn't comment on that. "He's in Low Manhattan. Put a scanner on me. Here's the visor number where I am now. I think Ridgeley may try to get in touch with me; if he does, scan him. And don't lose him! Better put three or four beams on the man."

DuBrose whispered something; Cameron nodded. "Ben DuBrose is with me. Scan him, too. We can't miss a bet on picking up Ridgeley."

Kalender said, "Do you want shadows?"

"No guards, no." Cameron thought for a moment. "All I want is to have Ridgeley under close supervision. But don't restrict his movement. That's important. I've got an idea."

"You're scanned," the Secretary said, after nodding to someone offscreen. "Both of you. Anything else?"

"Not now. Luck."

"Luck."

DuBrose said, "You told him we hadn't found anybody to solve the equation."

"Well, the beam might have been tapped. We don't want Wood murdered.

I'm probably scanned already by Falangists. Otherwise they wouldn't have been able to direct their mumbo-jumbo so accurately. It never happens when anyone else could notice."

"They're still . . . working on you?"

"Yeah," Cameron said. "Well, I'll call Nela. Then—"

He did.

"Then what, chief?"

"Seth had an apartment not far from Low Manhattan, I want to see if he left anything."

"What about Ridgeley?"

Cameron met DuBrose's eyes and grinned. What about Ridgeley? The courier was almost as much of an unknown quantity as the equation itself.

They found a pneumocar.

Seth Pell's "apartment" was really a cottage, a unit affair aimed at convenience amounting practically to hedonism. Cameron had the key-combination. The tinted fluorescents went on automatically as they entered, and the aerothermo-adjusters began to murmur softly. DuBrose looked around the big, pleasant living room. He had never, been here before.

"Seth used this as a hideout," Cameron said. "Here." He went to a night battle scene on the wall. As he approached, rhythmic motion rippled across the panel. The white streaks of rockets flared up, two by two; the pulsing of scarlet-tinged smoke clouds throbbed gently. Cameron watched the scene, waited briefly, and whistled a few bars. The wall opened.

Cameron took out two vibropistols, handed DuBrose one, and walked to the other end of the room. '''It's not a duel," he said. "Let's say it's a trap. Just in case. Ridgeley would catch up with us sometime, and this is the first time we've been away from crowds since I got to Low Manhattan. Stay the room's length away from me."

DuBrose nodded. He balanced the pistol. He had never fired one in his life, but that wouldn't matter. Aim and press. That was all. He glanced at the doors.

Cameron had opened another panel, and then a safe behind it. Finally he switched off a force-shield. "Nothing, I guess," he said, hunting through papers. "I didn't expect to find much here. Seth seldom brought work to this hideout."

DuBrose studied the room. It was a unit, well furnished, with none of the bad taste that had marked Pastor's magpie eyrie. Thousands of books filled the shelves, both ancient and modern; and there were cases of ribbon-volumes, recorded on wire tape. A pillow on a low relaxer still held the impress of Pell's head.

"Seth told me once that he was a misogynist," DuBrose said.

Cameron nodded. "I suppose he was. He didn't make many friends. You had to earn his friendship. You'd think he'd have been an antisocial type. But he wasn't; he adjusted surprisingly."

"He liked his work."

"Seth would have adjusted to any kind of work. He was—" Cameron pulled out a book, examined it, and thrust it back. "He had a theory that wars were inevitable. He said they were extensions of the individual life pattern. Most people go through a series of personal wars, emotional, economic, and so on. A maturing influence, if they survive. Perhaps not strictly necessary, but Seth thought inevitable, according to the general pattern of existence. Survival of the species and self-preservation—the main factors. Reflected, in petto, by individual wars and by national ones."

"That sounds like a morbid philosophy."

"Not if you don't expect happy endings. Ben, when this war with the Falangists is over, that won't bring the millennium. Seth would have said that each war is a hammer blow forging a sword into shape. Tempering it. It works that way on the individual, when the sword isn't spoiled or broken. Perhaps it works that way with the race. A people who'd always lived in Utopia wouldn't have much survival value. Your gun, Ben."

DuBrose didn't have to elevate the muzzle more than an inch. He kept it aimed steadily at the sturdy, bronze-haired figure standing by the door. Ridgeley's brown-and-black uniform was spotless; the lapel insignia gleamed under the tinted fluorescents.

DuBrose studied the man. Neckless, compact, very strongly muscled, but built for speed as well as strength. There was nothing to mark the courier as an envoy from another time-period. Unless that glowing exultation deep in the black eyes meant anything.

Ridgeley held no weapon, but DuBrose remembered the cryptic, glittering gadget the courier had once aimed at him.

Cameron said quietly, "I don't know your potentialities Ridgeley. You might be able to kill both of us before we could kill you. But you're in danger of cross-fire. You're between DuBrose and me."

Ridgeley's face was impassive. ''Why, you might kill me," he said pleasantly. "I admit that possibility. But I like taking risks."

"You intend to murder us?"

"I'll try to, anyhow," the courier said. DuBrose moved his pistol a little. Ridgeley wasn't infallible. By this time the scanner was focused on him. Did he know that? In any case, he himself had admitted that these odds might be too heavy.

A man from the future wasn't necessarily a superman. He had his own limitations.

"I've an ace up my sleeve," Cameron said. "So don't begin till we've finished talking. I think I can make you change your mind."

"Do you think so?"

"First—what about trading information?"

'There's no necessity."

"Will you tell me what you want?"

Ridgeley didn't answer, but the quizzical mockery darkened behind his eyes.

DuBrose watched the courier with one eye and Cameron with the other, trying to anticipate a signal. None came. He could feel perspiration trickling along his ribs.

"DuBrose and I both want to stay alive," Cameron said. "So do you. This particular combat can come now or later. Is that right?"

"Why not now?"

"Because it may not solve anything. Do you know what happened to Dr. Pastor?"

"No," Ridgeley said. "I've been out of touch lately. I thought it wiser. Pastor—wasn't he working on the equation?"

Yes—the courier had his limitations. DuBrose watched, trying to find some clue behind those impassive features, while Cameron explained what had happened to Pastor.

"So that's the immediate danger," he finished. "We might kill you. You might kill one or both of us, or both. Pastor's still free, somewhere. Do you see the latent trouble?"

Ridgeley apparently had already made his decision. "Pastor must be killed. The Secretary of War might fail. In that case . . . yes, he's the immediate problem, Cameron.

There'd be little satisfaction in killing you if Pastor destroyed the world afterward."

"Hold on," DuBrose said. ''Don't you know whether or not Pastor used his power—is going to use it— that way? Unless time's a variable—"

"I don't know," Ridgeley said. "So I can't take chances. I'll see you later."

He backed out of the room. DuBrose moved forward and closed the door. The window ports were one-way, so privacy was insured.

''We're letting him go, chief?"

Cameron was rubbing his forehead. "We'd better. He might do the job for us—get rid of Pastor. And that must be done. A gun battle now wouldn't have meant a final decision. Ben—he said he didn't know."

"What? Oh. That was odd. If he's really from the future, if he's mastered temporal travel—he ought to know."

"Yes, he should. At least he should know whether or not time's inflexible or whether there are temporal probability lines. Mm-m. Let's try Kalender."

Kalender said there were now five scanning rays impinging on Daniel Ridgeley, and that the courier was heading by copter northwest. Also a technician, studying the equation, had suddenly giggled, shrunk to nothingness, and vanished. Microscopic examination revealed nothing but a pinpoint hole in the floor. Presumably the technician had dropped clear to the center of gravity.

There had been three more cases of straight insanity as well.

Cameron switched off the beam and nodded at DuBrose. "Try Eli Wood. See how he's getting on. Perhaps I'd better stay out of range." The director listened closely from his vantage point.

Wood's mild face was ink-stained, but his placidity seemed unruffled. "Oh, Mr. DuBrose. I'm glad to see you. I thought of trying to reach you at Psychometrics, and then—well, you said this was highly confidential."

"It is. How're you doing?"

"Nicely," Wood said. "It's fascinating work. But it's much more complicated than I expected. Sometimes it's necessary to work on two or three problems simultaneously, in view of the temporal variation. If I could have access to some integrators—"

"Head for Low Chicago," DuBrose said, in response to a nod from Cameron. "We'll authorize you to use the Integrators. You can have a staff—"

"Fine. I'll need men, too— trained men."

DuBrose hesitated. "Won't that be dangerous? For them, I mean?"

"I don't think so. I simply want certain problems solved fast. I'll give them the material to work on. And I'll want some mechanics. There are a few changes I'd like to make in an Integrator. I've worked out the method, but I don't know how to rig wires."

"O.K. Any idea when you'll be finished?"

"I can't tell yet."

"Well—go ahead."

"Oh—one more thing, Mr. DuBrose. I've never been to the Integrator rooms. Will it be all right if I smoke there? I can't work very well without my pipe."

"It'll be all right," DuBrose said, and watched Wood's calm face fade away. Cameron chuckled.

"He's the right type, I think."

"What about those helpers he wants?"

"They won't go insane. It isn't their responsibility. They delegate that to Wood. Well, let's head for Low Chicago ourselves. I want to see that mutant boy—Van Ness? If we can get some information about Ridgeley out of him, that'll help."

"It won't be easy. He's badly disoriented."

"I know," Cameron said. "But we've got to fight Ridgeley some time. I'd just like to know why— that's all!"

DuBrose nodded, thinking that if the courier's motivation could be discovered, a good many problems would be automatically solved. However, matters seemed to be approaching a climax. From now on, these final steps would, at least, be extraordinarily interesting. It would certainly be exciting—

But it wasn't. It was routine.

XII.

Wars are not won by battles. Before the battle must come gruelling, intensive preparation, in which every contingency must be planned and charted. In this particular case the unknown quantities had to be found, and there were many of them. Item: Who was Ridgeley?

What did he want? What powers did he possess?

"We can't find out through his War Department record," Cameron said, studying graphed psych-lines. "He'd built up an assumed personality for that role. We've got to study his environment, his actions and reactions—and Billy's very useful on that score."

DuBrose watched the mutant, sleeping quietly under hypnosis, an encephalogram charting his brainwaves. "We've found that temporal anchor, anyway."

It was merely a sea anchor so far, with guided hypnosis to aid. The radiation-pattern of Van Ness' brain had showed distinctive variations under certain stimuli. By leading the mutant to concentrate his EPT upon the time-sector they wanted, by checking, on the chart, the stimuli that distracted him or, conversely, helped him to focus, it had been possible to learn something of Ridgeley's past—in the future. But it was always necessary to allow for a margin of error, due to Van Ness' confusion over duration. Thus there were blanks and snarls in the story; some of these could be straightened out by applying the yardstick of familiar experience, but when that failed, the unknown x had to be supplied.

It took days.

Meanwhile nothing had been heard from Dr. Pastor. Cameron had finally decided to use guards. Low Chicago was on alert. Only the most necessary warmen were allowed into the cavern that teemed with guards and specialized technicians. In the Integrator rooms, Eli Wood and his staff of co-ordinators worked at top speed, though the mathematician did not seem to be affected by the tension. Puffing thoughtfully at his pipe, he wandered

through the forest of huge semicolloid mechanical brains, making notes on his cuff when he couldn't find a pad, and occasionally discussing his progress with Cameron and DuBrose.

"Won't we need machines?" DuBrose had asked once. "To utilize the equation once we crack it, I mean? Some sort of transmitter—"

"Probably," Wood said. "Though I'm not sure even of that. You see, this thing is working out as a group of variable truths, so very variable that we can't anticipate what we'll need to harness it. That mental case of yours—he used mental energy, and he neutralized gravitation. I might find one basic, arbitrary truth that would presuppose the transmission of controlled variable-truths through the medium of a lead pencil or a block of iron. Or a hair follicle," he added, blinking mildly.

"But you're getting it?"

"Why sure. However, the counterequation is 'way beyond me. I might crack that too, but it would take months."

"Can we wait months?" DuBrose said, and answered his own question. "No. We've a chance now to smash the Falangists. Their chief weapon is controlled use of the equation. More of those bombs of theirs have penetrated our shields. If they launched an all-out invasion now—"

"Their robots might win," Cameron broke in. He stared at the huge Integrator pulsing softly in the distance. "That was their plan. The bombs were nothing. They were aiming at the technicians."

Wood said, "There can't be more than a hundred top men in this country. Electrophysicists, electronic engineers—and so on. Men who are trained to think up fast countermoves—"

"It's a technological war," Cameron agreed. "Once they drove our best technicians insane, we'd be as helpless as the blood-stream without a liver. In a position where we needed new ideas fast—we'd go down. Because the men who could supply those ideas would be insane."

"Even when we crack the equation, though," DuBrose said, "it'll be deadlock."

"Yeah— We'll be on even terms with the Falangists again." Cameron moistened his lips; without a counterequation, there would be no help for him. The psychic assault had not halted. An hour ago, in his office, he had watched a lighted cigarette crawl out from between his fingers and loop up his forearm like an inchworm, burning his skin as it moved.

DuBrose was watching the director. "We'll manage it," he said. "Somehow. There's got to be a way. We've enough resources—"

Cameron nodded. "I finally got Kalender to stop all research on the equation. All but yours, Wood. So that'll save some technicians—but the top ones are either dead or insane already."

DuBrose said, "We can't get back the dead ones, but we can cure the others. Just show them the solution to the equation.”

"Not quite as easy as that, Ben— but that's the cure. They went insane because they couldn't shoulder their responsibility. If we can make 'em realize there is no more responsibility along that line, they should snap out of it fast."

"Well, I've got to get back to work," Wood said, rekindling his pipe. "All this, you know, is a form of fairy chess in which the rules aren't clearly stated." He blinked at the great Integrator. "Amazing things. I don't understand—" He went off, shaking his head thoughtfully.

"He'll crack it," DuBrose said confidently.

"Yeah. When? Let's look up Billy." Flanked by guards, they returned to the psychometrics sanatorium and another session with the mutant. Bit by bit, more notes were being added to the file on Daniel Ridgeley.

Van Ness could be no more than a spectator. He saw duration, but he was a psychotic case himself, and had the reactions, though not the vocabulary, of a child. He would answer questions and tell what he saw, but no more than that. And. while he had learned to identify Ridgeley easily because the courier's protracted duration-line was perceptible to him, a chronological charting was obviously impossible. He skipped; in one sentence, Ridgeley would be seen as an infant, in another an adolescent, in a third, a mature adult, and in a fourth, an invisible something suspended in what must have been a pre-birth incubator, though it seemed extraordinarily complicated.

And very slowly, very faintly, the picture of Ridgeley's own world began to swim out of the clouded vistas of time.

It took shape. Like a land seen from above, fog-shielded, peaks and rises gradually emerged from that misty dimness. It was possible to assign a tentative chronology, too, by making Van Ness describe Ridgeley's appearance thoroughly. Lines of experience appear and deepen on a man's face as he grows older.

Routine. Tedium. Anxiety, as the days dragged past and the status quo held. Dr. Emil Pastor stayed invisible. Cameron's hallucinations continued, till he allowed DuBrose to dope him whenever that drastic step was necessary. The insane technicians stayed insane. M-204, in his sanatorium, was still Mohammed and remained afloat a few feet above his bed, ignoring the undignified force-feedings as he passively ignored everything else.

Unofficially, GHQ moved to Low Chicago. A concentration of equipment and men began to flow into the cavern city. No one knew what might be necessary, but everything was made as available as was possible.

Ridgeley, they learned from the scanners focused on the courier, was moving through the country, sometimes by copter, sometimes afoot, using something resembling a directional compass. He was obviously trying to locate Dr. Pastor. When he did, GHQ would know it.

Cameron came in one day nervously excited. DuBrose looked up from the papers on his desk, automatically expecting trouble.

"Anything wrong?"

"Found Pastor yet? No? Well, listen in on this. I've got an idea.” He used DuBrose's visor to get Eli Wood. The mathematician, as quietly imperturbable as ever, nodded at them from the screen.

"Morning. We're coming along nicely. I just found out that people ain't. According to that particular truth, it's quite accurate. We're reaching the end, incidentally."

"And you're still O.K.? But I can see that you are. Listen, Wood —check with me. How does this sound? We're assuming that Ridgeley brought the equation with him when he hopped back through time. He gave it to the Falangists. Well, the mutant Van Ness is giving us some of Ridgeley's back-ground, and he comes from a remarkably advanced world—technologically speaking. The equation is used there. I can't pump out too much from Van Ness, but I gather it's a war weapon—not the one, just one of 'em. Wouldn't the counter-equation, the nullifying factor, have been known to Ridgeley's contemporaries?"

Wood pursed his lips. "Seems like it would. Can't you get that through your mutant?"

"He's a superficial observer. Even if he saw the counterequation used, he couldn't describe the set-up clearly enough. He'd miss too much. Besides, we can't guide him easily—and if we could, we wouldn't know what to look for. But assuming that Ridgeley knows the answer to the equation and how to handle it, can't we also assume he knows the counterequation?"

"Seems like. You've got scanners on him."

"That," Cameron said, "is what I mean. He's looking for Pastor. And Pastor's got that obliterative power that's part of the equation. Ridgeley must know how to protect himself against Pastor."

"The only protection would be the counterequation."

"If he uses it against Pastor—"

"The application," Wood said thoughtfully, staring at his pipe bowl. "I see. If he should do that, we could break down whatever he does into the counterequation. If a scientifically trained observer sees a gun go off for the first time, he should be able—theoretically, anyway—to work out a formula for gunpowder. Huh. I'd suggest cameras equipped for quantitative and qualitative analysis; keep them focused on Ridgeley through the scanners. Attach ultraviolet, infrared and any other stuff you can think of. That'll do to start. If Ridgeley does use some application of the counterequation against Dr. Pastor, we can crack that problem, too."

As Wood checkered out, Cameron turned to DuBrose. For the first time in weeks, the chief's eyes lost their tight fixity.

"You know what it would mean?" he asked softly.

"Yes," DuBrose said. "You wouldn't be . . . haunted . . . any more."

Cameron shrugged. "Natural for me to think of the personal application first. But it would also mean we could smash the Falangists. They don't

have the counterequation. Because Ridgeley wouldn't have given it to them. The counter-equation is his own life insurance. In his position, he's automatically a target for assassination—because the Falangists can't trust him."

"Wouldn't he be too valuable to them?"

"More dangerous than valuable. He gave them a weapon that could win the war, in exchange for . . . something. I don't know what. But if they should win, what use would they have for Ridgeley? And suppose Ridgeley sold out to us? A mercenary will change sides if it's profitable enough. The Falangists may be afraid of Ridgeley, they may find him tremendously useful, but they can't possibly trust him. He could win the war for either side, from the Falangist point of view. So Ridgeley would know enough not to trust his allies, and he wouldn't sell 'em his armor as well as his weapon."

"Sounds sensible," DuBrose admitted. "But suppose he doesn't find Pastor?"

"Mm-m. Cheerful, aren't you? Let's try Billy again."

The pattern emerged.

There had been war in Ridgeley's time, too. But an absolute war. One that was served by the mightiest technological system the planet had ever seen.

It had gone on for a long time. It had sealed its impress into every part of the socio-economic system. Before birth, the sensitive germ-plasm was impregnated with radiations that would permit the later development of certain necessary talents. Ridgeley’s people were warriors in bone, sinew, nerve, and brain. Psychologically they were beautifully equipped for their job.

And, in that time, there was but one job. War.

Exquisite muscular co-ordination blended with a super-fine neural structure. Ridgeley had whiplash responses. He could make split-second decisions. He was the embodiment of Mars.

He had been trained to fight and conquer, with all the tremendous facilities of his time-era. To fight and win.

But only that.

In Cameron's office—

"You started the wheels going around in my head," Wood said, "when you suggested that Ridgeley wouldn't trust his Falangist allies. He wouldn't give them the counter-equation. But the big point—the one that was holding me up—is something else. There's been a certain screwiness to the equation itself."

"The whole thing's screwy," DuBrose said. "That's the basic idea, isn't it?"

Wood blinked. "Nevertheless I was assuming the gambits were all there.

Until yesterday. Has it occurred to either of you that the Falangists aren't making full use of their weapon?"

Cameron said slowly. "Our technicians are going insane—-"

"A few factors of variable logic have been used. All that can be used by application of the incomplete equation."

"Incomplete!" DuBrose said.

Wood tapped ashes from his pipe. "It is. It's beautifully disguised, camouflaged so that it almost seems like a complete equation, but there's a factor missing. I didn't realize that till I realized the possibility of its absence. A jig-saw puzzle with a piece missing. If you know that, if you fit the rest together, you can see the shape of the missing piece. In its present incomplete form the equation's applications are limited."

"But why?" Cameron asked.

DuBrose said, "By God, I know the answer to that! The complete equation must be dangerous to Ridgeley! It could be used against him! Naturally he wouldn't trust that to the Falangists, or to anyone."

The Director studied his hands. "We've been assuming that the Falangists have the ... the complete weapon. Whereas you say they probably have the bomb but not the bomb-sight. Eh?"

Wood nodded. Cameron went on:

"Well ... the Falangists aren't fools. They have good technicians. They'd have discovered that the equation isn't complete.”

Wood nodded again, "They've had time enough."

"But they haven't found the missing factor, or they'd have used it against us in an all-out attack. I'm assuming that the completed equation, in practical application, would be rather invincible."

"Can't be sure. I'd say it might be. Except, of course, against the counterequation."

Cameron smiled. "Then the Falangist technicians would be working on the problem, too. They'd have an occupational illness too. They'd have to get the missing factor, for fear we might get it first, and for fear of Ridgeley. I wonder how many top Falangist technicians are insane by now?"

DuBrose said excitedly, "It's a two-edged sword. It must be. If Ridgeley—"

The Director grunted. "Can you find that missing factor?"

"I think so."

"Then why couldn't the Falangists?"

"A racial psychological handicap, perhaps," DuBrose suggested. "They've always been reactionaries. Their culture as a unit is fairly new, but it's based on very old, established lines. They—"

"They don't play fairy chess," Wood said. "Oh, it's possible they might get the answer, but they couldn't have done it yet, or we'd be smashed. That's how powerful the complete equation can be. Here's another point." He chuckled. "If I should fail, I know I won't be shot or have to commit honor-suicide. The Falangists have a strict, arbitrary code of ethics. They serve the State, but they worship it too. Failure to them is unthinkable."

Cameron seemed to agree. "The Danes conquered the Saxons plenty of times, but Alfred and his men kept coming back. When the Danes were defeated at Ethandune, they were psychologically broken as well. The Falangist culture is inflexible. It had to be, in the beginning, or it would have broken up. But now . . . yeah, our technicians worry if they can't solve the equation; and they go insane. But a Falangist technician would be conditioned to worry a lot more. Cultural handicap."

Wood said mildly, "I'm having fun. I just don't have time to worry. So I may crack the equation, missing factor and all, quite soon."

Cameron looked at him. "We can win the war. We've the chance to do so. But if we do, I'll always wonder why Ridgeley joined the losing side?"

"He wouldn't," DuBrose said, "if he knew. So he couldn't have known. Maybe no records survived to his time-period. There'd be only a vague legend that there was a war about now. But the legend might not say who won. Even if there were records, they might be so incomplete that—"

"Incomplete or incorrect," Cameron said. "Then there's another possibility. Alternative time-lines.

In Ridgeley's original past, the Falangists might have won. But by coming back in time, he changed the set-up and switched the historical line across to an alternative future."

The mathemetician got up. "I must get back to work. Now that the matter is clarified somewhat, perhaps—"

Cameron didn't hear from him, then, for three days.

In the cool of the evening God, nee Emil Pastor, walked through the wheat fields of Dakota. A small, slight figure, he trudged on, while the silvery ocean of wheat rippled softly around him in the moonlight. He was following his shadow.

The shadow is the reality; the reality, shadow. Under his feet the hollow earth boomed deeply, and the sound crashed again and again into his aching head. He hated to stop. There had been enough delay. The sooner he reached his goal, the sooner his questions would be answered.

God should be omnipotent. That was the trouble. He was a dual personality. He had a dim, uneasy feeling that he might be not only God, but Apollyon. He might not be God at all. He might be merely the demon of destruction.

Why hadn't he been able to heal his own arm?

The neural tissues had been burned out. The pain he felt in that arm was

imaginary, a familiar phenomenon in amputation cases. He had bound the withered member to his body; the loose swinging distracted him.

Physician, heal thyself. God, heal Thyself. Apollyon—

He was very, very puzzled as he slowed to a halt and stood silent in the great quiet wheat field, staring at his black, one-armed shadow. But far away and dimly he could still remember something called Emil-dear, and that meant safety, and his shadow would take him to that sanctuary.

There he could learn his name. God or Apollyon. That would tell him his destiny. God must rule with justice and forbearance. Apollyon must destroy.

Something was moving in the wheat.

No—it was the wind.

He willed the pain to stop, but it did not stop.

Slow, helpless, easy tears spilled down his cheeks, and he did not see the movement coming quietly through the wheat, under the white, relentless moonlight.

The iconoclast slipped noiselessly toward God.

"What about the application?"

"Simple enough. It's like this, Mr. Cameron. You can't play fairy chess unless you've got a board, the pieces, and unless you know the rules. Now we've cracked the equation, we know the rules."

"The board, though? And the pieces?"

"All around us. Matter, light, sound—things you wouldn't ordinarily think of as . . . uh . . . machinery. Ordinarily they're not. In orthodox chess you can't use a nightrider or a grasshopper. In orthodox logic you can't use a . . . a cigarette as a machine. But even a cigarette can be assigned arbitrary powers when you assume variable truths. This space-time continuum and its properties are the board and the men. By working on certain irreal space-time assumptions, you alter the shape of the board. And when I say irreal, I mean irreal by orthodox standards."

"But the practical application!"

"A gas engine could give us the initial power, or simple nervous energy would do as well. There are vast sources of energy all around us, Mr. Cameron. In a world of orthodox logic we can't tap that energy, or we can't do it without specialized machines, anyhow."

"You've got the complete equation? That missing factor—"

"I found it. It fits. We've got something even the Falangists don't have. But even so it isn't unlimited. The variable-truth microcontinuum can be maintained only as long as there's a sufficient energy output effectively tapped and directed. Which may be lucky, or the universe could go hog-wild. There are limitations. Even mental radiations can't be maintained

indefinitely. But a thought can start the ball rolling."

DuBrose came into Cameron's office.

"Pastor's dead," he said flatly. "Ridgeley killed him. But he didn't use the counterequation."

The director put his hands flat on the desk and studied them carefully. A muscle jumped in his cheek.

"That," he said, "is unfortunate."

"How. . . how is it?"

Cameron lifted a ravaged face. "What do you think? They've been hammering at me without a let-up for—a million years! I . . . I . . . give me a shot, Ben."

DuBrose carried a narcotic kit in his pocket these days. He put the sterilized needle deftly into Cameron's arm and let ultraviolet glow briefly on the skin. A moment later the director settled back, the tic in his cheek subsiding.

"Better. Can't stand much of this. Can't think too clearly in this dreamlike state."

"It keeps the bugs away, chief."

"Not bugs now. Something new—" Cameron didn't elucidate. "Tell me—what you want to."

"The scanner's been on Ridgeley, you know. He located Pastor in Dakota ten minutes ago. He sneaked up and killed him with that little crystal gadget of his. Indian stuff. Pastor never saw him coming. Ridgeley crawled to within range and let go. I don't think any civilized man of this time could have done it."

"Ridgeley—trained for war. All kinds."

"Yeah. Well, he didn't have to use the counterequation. The whole thing was recorded; Wood's looking at the play-back now. But I'm sure he won't find anything."

Cameron slowly indicated a paper on his desk. "Been psyching Ridgeley. Read it." He settled back, closing his eyes, the lines of strain still twisting his face. DuBrose studied the director anxiously, knowing that Cameron couldn't stand much more of this. From the moment the doorknob had opened a blue eye and stared at Cameron, the man had been under relentless attack for nearly two weeks. The anxiety neurosis was building up to a true psychosis. Yet if the pressure could be removed, the cure would be speedy.

By the time Eli Wood appeared, DuBrose had finished the paper. He handed it silently to the mathematician.

Wood read it. He nodded at Cameron.

"Doped up, eh? Well, I guess you need it. Ridgeley didn't use the counterequation; did DuBrose tell you?"

"Even if he had," Cameron said rather thickly, "we might not have been able to break it down."

Wood shook his head. "Fallacious logic. We've got the original solved equation as a model now. And it's possible to analyze anything. Just let Ridgeley try that counterequation where I can see him, and I'll guarantee to give you the answer within a few hours, probably. The Integrators are already readjusted for variable logic."

"He might . . . not know it, after all."

DuBrose picked up the paper again. "But he might, chief. If we could force him into a position where he had to use it . . . mm-m. What dope have we got on him, anyway?"

"He came from . . . a world geared to total warfare."

Wood said, "Did you get all that stuff from your mutant?"

DuBrose smiled faintly. "By major operations. This data has been boiled down from eighty thousand words of extraneous material. But as for Ridgeley—we've learned some of his limitations. He's the last of the warriors."

Not quite as simple as that. Picture a world geared to absolute warfare, a world so technologically advanced that interdoctrination could begin before birth. And visualize the planet shaking beneath the conflict of two nations, two races, that had been locked in a death-struggle for generation upon generation. By comparison the war with the Falangists seemed brief.

The matrix was war. That was the basic pattern, and all else had to integrate and co-ordinate. The psychology was more easily understandable than the science of that time.

Indoctrination, then, until the individual was a perfect machine for fighting and winning. But only that.

Necessarily the faculty for compromise, for flexibility, had been rigidly trained along certain military lines. Daniel Ridgeley, since his embryonic period, had been shaped to conquer and rule. Even before his conception, the basic genes and chromosomes had been carefully chosen for heredity value.

And Ridgeley's nation had lost the war.

Of the defeated, many died, and very many more submitted and were absorbed into the social scheme of the victors. But Ridgeley was a war criminal. Not a major one; when he disappeared, no one troubled to search through time for him. He was gone—and he could not come back—so he was forgotten.

Temporal travel was beginning to be understood in Ridgeley's period. So he had taken that way of escape. He could not have stayed in his own

time-world, because his psychological pattern could not conceivably have fitted into a scheme of failure. He was a machine built for one purpose.

Tigers by heredity and environment are carnivores. On a diet of grass they would die. If they possessed the delicate nervous organisms of men, they might go mad. Carnivores rule; herbivores submit. The meat of battle—successful war—was necessary to Ridgeley's existence. So, deprived of his natural diet, he had sought it elsewhere.

"Some of this is theoretical," Cameron said slowly.

DuBrose nodded at Wood. "We don't know from how far in the future Ridgeley comes. You'd think he could have referred to a history book and found out whether or not the Falangists will win this war. He'd never choose the losing side."

"Maybe he didn't," Cameron said.

"We worked out another answer, chief. Remember? Histories of this era may not have survived in Ridgeley's time. Perhaps all he had to work on was the knowledge that there was a war around this period. Then, again, time may be flexible after all, so the future can be changed by switching off into different probability lines. But I dunno. The big thing—" He watched Wood. "Listen to this. Time travel was understood by Ridgeley's nation, and a number of people had tried it then. But none of them ever came back, from either the future or the past."

The mathematician blinked. "Why not?"

"We don't know, yet. Don't forget, our mutant contact is technically insane. He's temporarily disoriented, which is enough to drive anybody batty, I'd say. Those creatures that lived in the Duds might have been able to use ETP and stay sane—but they weren't even remotely human, so normal standards of sanity can't be applied to them. When Billy matured and acquired ETP, he went crazy."

Cameron said, "Can anybody use the equation?"

"Under guidance, yes.” Wood told him, "And it'll be easier as soon as my gadgets are finished."

Cameron closed his eyes. "Deadlock now. We've solved the equation but so have the Falangists. If we get the counterequation, Ridgeley might give it to the Falangists —and it'd be deadlock again. Ben, we'd better mobilize. Get ready for an all-out attack on the Falangists. See Kalender. Is Ridgeley still scanned?"

"Yes.”

On the desk Cameron's hands tightened into fists. "Use the equation on him. Hammer him. Give him the same treatment the Falangists are giving me. But worse. An assault that will tie his nerves into bowknots. Don't let up for a second."

Something crawled down DuBrose's spine and exploded into elation. "Force him to use the counter equation?”

"In self-protection. It won't be easy. He's resourceful. But there's only one shield against the equation, and if we can drive Ridgeley into using it—"

"O.K., chief. Can do, Wood?"

"Can do," the mathematician said laconically. "But—"

"But what?"

"God help Ridgeley.”

XIII.

"Ready?"

"Ready."

The copter was over a mile away. But he could reach it. That was the first step. The second would be to reach the Falangists. With the equation, it should be simple to pass the coastal force-shields. Gray mists of dawn hung over the wheat fields. A few stars faded before the encroaching, pearly light. Under his feet the ground winced and screamed like living flesh.

He blocked his mind.

Concentrate on the single purpose; that was it. Ten minutes to the copter, moving fast. That wouldn't end it. Under his hands the controls might squirm and twist; the variable truths, controlled now by his enemies, could hammer relentlessly at him.

But not effectively.

In his own time-era he had been trained to meet such assaults. Usually they were easy to neutralize with the counterequation—which was so simple. He couldn't use it now. There were scanners on him, and avid eyes watching, ready to study and analyze.

Reach the Falangists and give them the counterequation. They wouldn't be too grateful, probably, but he could protect himself. And he would be one of the conquerors.

Drops of oily, thick liquid crept clown his face and crawled toward his mouth and nostrils. He exhaled more strongly. He kept his mind blocked. Expecting the unexpected was the way to fight such an assault as this. And years of indoctrination and training had showed him the way.

He adjusted his pace as the ground changed its texture, now rough as broken rock, now slick as smooth ice.

The wheat fields sank. He stood on a pinnacle at the edge of an abyss.

He began to descend, iron face impassive, the exultant glow of excitement burning behind the black eyes. He was trained for battle. This was war. Only in the face of dangerous odds could he feel this blazing delight.

His mind had been trained to react unusually to adrenalin. He could feel

caution, but fear was usually alien to him.

The ground billowed like an ocean.

It slid away from under him. He had been walking for more than ten minutes. The copter was nowhere in sight, nor the grove of trees that sheltered it.

He paused to consider, still keeping that tight rein on his mind. The block held. The invasion glanced off harmlessly.

The landscape had shifted. The copter was over toward the left. He walked in that direction, a sturdy, neckless man trudging through wheat fields—

His eyes shot out on stalks.

"No luck yet?”

"Let me try!"

The eyes retracted. Before him stretched a Gargantuan chessboard. He felt a compulsion to move toward one square, but he did not turn from his course. The copter—

Here came the chessmen, bizarre, fantastic shapes, leaping in crazy patterns skyward and down again. But he had seen stranger creatures in the bio-labs of his own time-era. He walked on.

"Three hours, Wood! But at least we've kept him away from his copter"

"He can cope with the imaginations of normal minds, apparently. He's been conditioned—"

"How about psychotic patients? Could you guide their thoughts— project them?"

"It might work. You'll have to help me. Hypnosis, and suggestion. You handle the patients, I’ll handle the equation. We'll try it, DuBrose. Can't we get Cameron to help?"

"He's asleep. Drugged. I had to.”

Hiding around nonexistent corners the shapes of terror gibbered at him. The slow nightmare flight of white birds painfully labored past. A melting face repeated meaningless rhymed phrases. Red and yellow and spotted imps told him he was guilty and had sinned.

Hallucinations of insane minds, given objective reality by the variability of truth. The properties of energy and matter were altered, on the fairy chessboard, so that these arbitrary chessmen assumed form and substance.

The fairy chessmen screamed at him, laughed at him, sobbed and whistled and clicked and gasped—

Lurking, hating shadows. The phantoms of irrational fear and hatred and elation. The world of the insane.

He went on toward the copter. His eyes flamed with their terrible, burning delight.

Seven hours.

"I've got one answer," Wood said.

DuBrose turned a white, strained face and mopped sweat from his forehead. "To what?"

"Time travel, I think. Had you realized that Ridgeley could have escaped very easily simply by moving a few days away in time? But he hasn't done that. I've been tying it in with other factors; the fact that in Ridgeley's period nobody ever returned from a temporal trip. And the Duds, too. Our tentative theory about them is that they came back through time searching for something—we'll probably never know what. And they gave up and died right here."

DuBrose kindled a cigarette, noticing that his hand shook uncontrollably. "What does that add up to?"

"One-way time travel," Wood said. He screwed up his face and studied the air. "I've only worked it out in my head, but it adds up. You can move in only one direction temporally. Into the future or the past. But you can't come back."

"Why not?"

Wood gestured. "Why wasn't Ridgeley pursued by his enemies? He's a war criminal in his own period. But he was allowed to escape through time, and he's extremely dangerous. Suppose he'd gone onto the future, far in advance of his own time, picked up some super-weapons, and returned to his period with them? You don't let a criminal run loose if he has access to a vibropistol."

"Unless he can't get back," DuBrose said, frowning. "You mean Ridgeley's exiled?"

"Voluntarily. The creatures in the Duds couldn't retrace their steps either. You can move—and continue to move—in only one temporal direction, either future or past. But you can't return. You'd meet yourself coming back."

"What?"

"It's a one-way track," Wood said. "Two objects can't exist in the same space-time."

"You mean two objects can't occupy the same space at the same time."

"Well? An extension of Ridgeley exists from now to his own period, along the time-line. He can't go home. He'd bump into himself. He'd explode or something."

DuBrose scowled. "Uh. It's a bit hard to swallow. The Duds—"

"They gave up, I suppose. They knew it was no use searching further. So they—died."

"Wait a minute. Why hasn't Ridgeley tried to escape our attack by going into the past? He could do that, couldn't he?"

"He could, but would he? You're the psychologist."

"Yeah ... he wouldn't. He can't give up a fight until he knows he's licked. Suppose he decides he is licked and escapes into the past again? Without using the counter-equation?"

"Would he? Even if he has to let that information fall into our hands, he's not lost his private war. He may have other aces up his sleeve."

"We've got to break him down. He's resisted all our assaults so far. He's conditioned to the unexpected or something. Even those projections of objective insanity haven't cracked him. What would?"

The mathematician grimaced. "I don't know. If we keep pounding at him—"

A vagrant thought moved through DuBrose's mind. He caught at it.

"The mutant . . . yeah! Billy Van Ness! Wood, could we use him against Ridgeley?"

"Why—how? We're using psychotic projections now."

"Ordinary insanity," DuBrose said quickly, stubbing out his cigarette. "Van Ness has got something special. ETP. He's a mutation of a nonhuman race, a totally alien one. They gave him a legacy that drove him insane as soon as he could use it. The extratemporal perception was latent in him till he matured. Then—retreat to insanity. I don't think even Ridgeley's mind could stand ETP.

"We don't want to drive him insane."

"Don't forget his trigger responses. He'll know what we're trying to do. He'll use the counter-equation—he'll have to. There won't be time for him to work out other possible solutions. If the ETP is as dangerous as I think it is, Ridgeley will get one whiff of it, panic, and give us the information we want. But—can we transmit Van Ness' ETP?"

"Not according to orthodox logic," Wood said. "Only we'll use a truth-variant in which psychic transmission of the faculty is possible. We can try it."

"If it works, we'll have to be ready." DuBrose spoke into a visor. "Instant mobilization. At the word, smash down on the Falangists with the equation applications we've already charted. Get me Kalender . . . Mr. Secretary? Hold ready. The word may come at any time now. An all-out robot assault on the Falangists."

"We're mobilized for that," Kalender said tautly. "What about defense?"

"When we get the counterequation, we can handle it from here. Wood and his staff will tackle it instantly. O.K.?" DuBrose turned from the visor, a

tight, cold feeling in his stomach.

He was afraid of what he was going to do.

They kept up the unrelenting attack on Ridgeley as they prepared. But the courier, by sheer, dogged nerve—or lack of it—had nearly reached his copter. As Wood re-checked and diagramed the factors of the equation that they would have to use, DuBrose put the mutant under hypnosis and made sure that the warped, half-alien mind. was sufficiently under his control.

The scanner showed Ridgeley trudging on, his eyes blazing with the joy of conflict that was his reason for being, while around him the materialized madness of variable truths raged unceasingly.

To render Ridgeley en rapport with Billy Van Ness—that was the plan. If it could be done—

Finally:

"Ready, DuBrose?"

"Ready."

This was the lance that could pierce his armor. He saw it coming. In that single moment while Ridgeley saw and understood what weapon they were using against him, he analyzed the chances, made his decision, and acted.

He used the counterequation.

Around him the turmoil died. The wheat fields lay placid under the afternoon sun. A hundred feet away was the grove of trees that shielded the copter.

He was armored now. The equation could not harm him. But his enemies had forced him to reveal the nature of the counterequation. Very well. He could still fly to the Falangists—

Luckily he had protected himself before there had been full rapport with that mutant. Even the brief glimpse he had had was disturbing, a small, latent seed buried deep in his brain.

A seed?

Latent?

But what was this thing that grew, that uncoiled, that spiraled out and out through his consciousness as though a spark had ignited the whole heap of gunpowder ? One cell in his brain, one thought—but from that thought the contagion leaped faster than light, giving Ridgeley the extra-temporal preception that had come from an alien race of the ultimate future.

Delayed reaction, Time-bomb. The brain-colloid had to adjust itself to ETP—

The grove of trees was in violent movement. No, that was illusionary. There were hundreds, thousands of trees, superimposed in space but conjoining in time, and the line of their duration stretched like a network, with offshoots

of germination that ended in other trees—

Masonry loomed before Ridgeley.

Tepees stood there.

Future and past—

Limited spatially to this area, but without temporal limits. Everything that had been or was to be, Ridgeley perceived in a shifting, monstrous kaleidoscope that became clearer as his perception sharpened. It was not merely sight. ETP is something else, a consciousness of the objective that goes beyond vision and sound and hearing.

Spatially the manifestation was limited to a small area immediately surrounding Ridgeley, but he was oddly certain that he could expand the range at will. He made no effort to do that. He stood motionless, his head sunk between his heavy shoulders, veins throbbing on his forehead.

Suddenly he closed his eyes.

The disorientation grew worse. A dozen, a hundred, a thousand material objects occupied the same space in which he existed. An illusion. But he knew that two objects cannot concomitantly occupy the same space-time.

In the past and future, at this spot, there had been catastrophes. The land-surface of the earth is not large. And, in all time, there had been opportunity for lightning to strike near here, for quakes to rock the ground and for trees to crash down on the spot where Ridgeley stood.

The veins throbbed faster on his forehead. Teeth clenched, he bowed his head as though fighting a storm of sleet, while the ETP natural to a nonhuman race channeled through his brain, opening unimaginable doors.

Van Ness and the other mutants had learned to perceive duration— and they had gone mad. Disorientation was terribly inevitable. Only by retreating into insanity had they been able to survive at all, in a world of complete flux, of utter incoherence to any mind that instinctively expected a logical pattern. This was not even variable truth. It was fairy chess with a board extended to the end and the beginning of time, and on that incalculably vast chessboard the innumerable pieces were moving. . . .

A player can see the board and the pieces and comprehend the pattern. But if a pawn—or, in fairy chess, a nightrider—could see the board from the viewpoint of a player—what would be his reaction?

Ridgeley drew in upon himself, tighter and tighter. The impingement was becoming unendurable.

His legs bent. He sank down.

Keeping his eyes squeezed shut, he drew up his knees, crossed his clenched fists, and bent his head forward. He remained motionless in the foetal position.

He was not dead. He breathed.

But that was all.

A month later Cameron sat at his desk and stared defeat in the face. Not national defeat. Victory was three weeks old already, but how ephemeral a victory only Cameron knew.

The long, routine years had been merely preparation; the attack, invasion and conquest of the Falangists had been blitz. The counterequation was a sword that nothing could turn. Or rather, a shield the enemy did not possess. Under Eli Wood's direction the disorganization of the Falangists had progressed with unbelievable speed.

And here was peace.

Everywhere but in this room, this head, this foreboding mind. The counterequation was simple to apply, and Cameron still kept its effect in use around him. He had a reason. He was still shaky from his long ordeal, but no variable-truths could penetrate the armor of the counterequation even if any fugitive Falangists were still able to operate from hiding. Cameron was safe from that.

From himself he was not safe. He sat quite still, his back to the door, and a conversation from a few days past drifted through his mind. He did not want to remember it, but the sentences beat inexorably in his ears.

DuBrose: "Here's some indoctrination stuff for the Falangists. Needs your O.K., chief."

Cameron: "I'll tend to it. How do you feel, Ben? Want a furlough?"

DuBrose: "Lord, no. The work's too fascinating. Even Ridgeley—though, of course, he's incurable. And a good thing."

Cameron: ''Good? Well, necessary. But not just, Ben."

DuBrose: "Not just? For my money, it was a beautiful case of applied justice. He started this mess through time-traveling, and ETP smashed him."

Cameron: "You think Ridgeley started it? He didn't. His psychological pattern was set long before his birth, before his conception. He acted in the only way he possibly could have acted. You can't hold a man responsible for the things that happened before he was born. The real culprits were the ones who made Ridgeley's indoctrination along those lines necessary—and possible. Do you know who those culprits were, Ben?"

DuBrose had looked bewildered. "Who?"

Cameron tapped the papers on his desk. "What's this stuff? Indoctrination plans. We've got to use them. We've got to train our own men along supervised military lines or the Falangists may start another war. Preparedness is necessary. A vital survival-factor. But in the end —Ben, the end of it will be Ridgeley. Ridgeley's civilization. The seeds of that culture are right here, in these papers, in us, and what led to us out of our own past. We're the culprits, Ben."

"Casuistry," DuBrose had said.

"Yes, maybe. Anyhow, it's got to be done."

"Don't think about it," DuBrose advised. "That's one responsibility you can't change. You aren't responsible for what happened in your past any more than Ridgeley was for his. Forget it."

"Yes, but you see, I know. The men who evolved our work for us and taught us didn't know. They hadn't seen what I've seen—the ultimate end. But when you know, and can't do anything but go right on with a thing whose end you've seen already—when you see a war fought and men going mad and men dying and Ridgeley punished as he was punished for a thing that can be traced straight back to me—that responsibility's hard to take, Ben."

He had struck his desk a hard blow, and had time for a brief flash of irrelevant pleasure in the knowledge that it must remain a solid desk now the counterequation was on. Not a surface that would ripple under the blow, or open a wet mouth to engulf his fist.

DuBrose had said, "You need a furlough worse than I do. I'm going to see you get one."

Cameron went to a window port, opened it and watched the red gloom of the thundering Spaces outside. There was no escape. Every other nation was a potential enemy. From California to the Eastern Seaboard the nation had to remain a perfect war machine, ready to move into action at a second's notice. In such a machine, men are important cogs. And they must be cast of the right alloy, shaped to the right measure with precision skill, polished and tooled until they were—

Till they were men like Ridgeley.

And Cameron dared not change that process. He dared not even try, for fear of succeeding. What could he say? "Disarm, Seek peace. Hammer your swords into ploughshares."

And suppose they did? The enemy would strike again—and succeed, against an unprepared nation.

The thundering Spaces were before him, but all he saw was a race of circling thoughts made all but visible in the limbo of his mind.

"Forget it," he said aloud.

But there must be an answer.

"Forget it."

No problem is insoluble. There must be an answer.

"I've tried to find it for weeks. There is no answer. Forget it."

There must be an answer. You're responsible. You created Ridgeley.

"Not I alone."

But you have the knowledge the others don't have. You're responsible.

"Forget it."

Tell them? Don't tell them? There must be an answer.

"This has been going on for weeks. The war's over—"

This war. You're responsible.

"Forget it. I'm going home. I'm going to take a furlough. I'm going to take Nela. We'll go up into the woods and relax."

There must be an answer.

"So there'll be future wars. I . . . I'm no idealist. What can I do? Ridgeley's civilization—it's not pleasant. It may end in extinction, or a race of semirobots. Or the race may achieve peace finally."

But you're responsible. You can't dodge that. You made Ridgeley. What can you do?

"I . . . there must be an answer."

There must be an answer.

"There must be an answer."

There must be an answer!

THERE MUST BE AN ANSWER!

THERE MUST BE AN ANSWER THERE MUST BE AN ANSWER THERE MUST BE—

DuBrose got into the pneumocar, adjusted the straps, and waited for the blankout. After it had passed, he settled back to fifteen minutes of idleness as the vehicle rushed toward Low Chicago. But his mind was active.

The past month had changed Ben DuBrose. He looked older than his thirty years now, perhaps because his blue eyes had acquired a new look of competence and his mouth was firmer. Seth Pell's death had left him as potential successor to the job of Director of Psychometrics, and a crown prince is usually conscious of his responsibilities. Always before, DuBrose had known that Cameron and Pell were, in effect, buffers. He was Number Three—not quite a third leg, but certainly a spare tire. Now, however, Pell was dead, and Cameron had shown that he was not infallible. Some day the big job would devolve upon DuBrose, and he would be ready for it. Far more ready than he had been a month ago.

He had changed. His horizons had expanded. Eli Wood's conversation had done a good deal in that direction, and so had the very concept of variable logic. He was older, abler, and even wiser. He could see, for example, why the war-time precautions had not been relaxed. The Falangists were defeated, but thev location of Low Chicago and the other war-cities was still in the realm of military secrecy.

Preparedness was necessary, of course. Yet DuBrose thought that there would not be another war. He thought of the stars. And he thought of the mutant Van Ness, and of Ridgeley.

In Daniel Ridgeley's time there had been no interplanetary travel. There had been only global conflict that stretched back for unknown years, back along a time-track of conquest and defeat and deadlock, wars of attrition and red triumph and ash-tray failure, back to the war between America and the Falangists, and even before that. It was one road, the road that led to Ridgeley and his tremendous, futile culture.

One road out of many. No wonder, DuBrose pondered, that Ridgeley had chosen the wrong side when he came back through time. Had he thought that the Falangists were the ultimate victors? Or had he—not known?

Say he had not known. Or, if he had, he might have felt that his technological gifts could swing the balance in the direction he chose.

But there was another answer. Ridgeley's movement through time and his subsequent actions had affected time itself. Had switched the pattern of the future into a new path. Variable futures—

Again DuBrose remembered the mutant, and what Van Ness had revealed about that tremendous world that was now never to exist. For it was a world founded upon war, upon centuries and ages of continual battle, while the seesaw of victory swayed back and forth between the nations. War brings about technological progress, but only in certain specialized directions. Rocket-fuel, solar mirrors in super-atmospheric orbits, antigravity may be perfected for use, somehow, against the enemy, but not for use against the stars.

In Eden, DuBrose thought, leaning back against the softly padded cushions—in Eden the trouble began. And even after that, Cain slew Abel. In every Paradise, there have been wars. But in the Polar cold, in the Sahara, in all inhospitable lands where men wrench a dangerous living from the hostile elements, there is comradeship and unity against the Enemy older than man, the universe in which he dwells.

And now? The earth was at peace, for a little while. The weapons, the fuels, the technological miracles the world had perfected for destruction lay idle—and such things could not remain unused. Not while the stars hung in the skies, and the planets held their secrets—no longer unreachably far away. During the war no interplanetary travel had been attempted. The all-out effort had prevented such frivolous experiments.

But now the tools lay ready. Nations geared to the highest pitch of efficiency could not remain idle, could not rust in a lethargy that would be psychologically unendurable. There would always be an Enemy.

Not the Falangists. The Enemy stood at the gates of the sky, with the silent challenge it had given since man first raised his eyes from the ground. There would be new ships, DuBrose thought, a singing, joyous excitement in his blood—new ships like this pneumocar, but not burrowing through the dirt like moles. Ships to reach the planets.

There was the Enemy. The hostile universe that had always made man band together in a common unity. There lay the future that would wipe out Ridgeley's futile, tragic culture—because the future would slip into a new track now, one that led to solar—galactic!—expansion rather than fatal interglobal conflict.

A thousand years might pass. Ten thousand. But even then, Ridgeley would never be born. The arid soil from which his culture sprang had been fertilized, enriched by a nutrient that would bring forth greater glories than Ridgeley had ever imagined.

For years man had had the bridge.

But now he could use it. Now he could reach the stars.

They were the Enemy. The hostile, distant, alluring, secret stars. And this, too, would be conquered. But that would be no sterile victory.

DuBrose thought: The old order changeth, giving place to new.

The pneumocar stopped. DuBrose stepped out into Low Chicago. "I must tell the chief," he thought, as he moved toward a Way, and then— "Oh, well. He's probably figured it out for himself already."

But the chief had not figured it out. He could not, now. For Robert Cameron had been fighting too long, and his battle had been waged with the resources of pure nerve. When tremendous tension is relaxed suddenly, the result is sometimes dangerous.

The chief was very vulnerable now.

Vulnerable to phantoms.

—THERE MUST BE AN ANSWER THERE MUST BE AN ANSWER THERE MUST—

Stop it.

He didn't want to stop. Even in that circling confusion was refuge of a sort, from this unbearable responsibility which was in itself a grim kind of justice. The guilty must be punished. He himself must be punished. He, Cameron, a war criminal beside whom Ridgeley was as innocent as a tank or a plane. He must go on. Answer or no, he must go on. His duty was to the living, not the unborn future.

Was it? Was it? He had not asked for this responsibility. But ignorance of the law excuses no man. Justice . . . Justice ... If thine eye offend thee—

If thine eye offend thee—

Yes, there was one answer. Not a good one, but an answer. He had only to turn around to accept it.

He decided to turn around.

Automatically his hand reached out to close the window port. It' did not shrink away from his touch. The metal remained firm and cool, as metal

should. The counterequation still held him cradled in an unbroken shell of protection from all enemies. He knew that. No variable-truths could reach him here even if any enemies survived to hurl them at him.

He was shut in here with the one inescapable enemy.

He knew what was behind him. He had felt it a little while ago when he reached unsuspectingly for the door. There had been a strange, soft fluttering against his palm as he touched the knob. He had not looked down then. He had jerked his hand away and gone back to the desk. Now he would face it. Now he would look, and know, and accept the answer that would mean his own personal release, a laying down of the burden he had not asked for and could no longer carry. Now he would face the door.

The doorknob opened a blue eye and looked at him.

THE END.