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SEND HER VICTORIOUS

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MECHANICAL
HEART**

Also stories by P. F. COSTELLO
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APRIL, 1968 VOL. 42, NO. 1

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AMAZING STORIES, Vol. 42, No. 1, April, 1968, is published bi-monthly by Ultimate Publishing Co., Inc., 69-62 230 Street, Oakland Gardens, Flushing, N.Y. 11364. Editorial office: Box 7, Oakland Gardens, Flushing, N.Y. 11364. Business office: Purchase, N.Y. Box 175, Portchester, N.Y. at 50¢ a copy. Subscription rates: One year (6 issues) United States and possessions: \$2.50; Canada and Pan American Union countries: \$3.00; all other countries \$3.50. Change of address notices, undeliverable copies, orders for subscriptions, and other mail items are to be sent to Box 7, Oakland Gardens, Flushing, N.Y. 11364. Second Class Postage paid at Flushing, N.Y. and at additional mailing office. Copyright 1968 by Ultimate Publishing Co., Inc. All rights reserved. Editorial contributions must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for return or safety of art work, photographs, or manuscripts.

ACKNOWLEDGEMENTS

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SEND HER VICTORIOUS BRIAN W. ALDISS

Illustrated by JEFF JONES

Have you ever felt that there was something basically wrong with the world—that it was all some kind of cosmic joke? This would explain the wars, the evil, the diseases that curse mankind and would give some excuse for what appears to be the insensate madness of the universe. It passes reason that all of this should be done deliberately. . .

THE news hit New York in time to feature in the afternoon editions. No editor splashed it very large, but there it was, clear enough, alarming enough, on the front pages:

MANY DEATHS IN
CASTLE CATASTROPHE
and
QUEEN'S HOME
DISAPPEARS
and
BRITAIN'S ENEMIES
STRIKE?

Douglas Tredegar Utrecht bought two papers as he fought his way to the Lexington Advanced Alienation Hospital, where he was currently engaged as Chief Advisor. The news did not tell him as much as he wished to know, which he found was generally the way with news. In particular, it

did not mention his English friend, Bob Hoggart.

All the papers said was that, during the early afternoon, a tremendous explosion which might be the work of hostile foreign powers had obliterated the grounds of the royal park of Windsor, Berkshire, England, and carried away most of Windsor Castle at the same time. Happily, the Queen was not in residence. Fifty-seven people were missing, believed killed, and the death roll was mounting. The Army was mobilizing and the British Cabinet was meeting to discuss the situation. On Wall Street, the pound sterling had fallen by several points to a new low.

Utrecht had no time to worry over the matter, deeply though it concerned him. As soon as he entered his office in the Advanced Alienation Hospital, he was buttonholed by Dr. Froding.

"Ah, Utrecht, there you are! Your severe dissociation case, Burton. He at-



tacked the nurse! Quite inexplicable in such a quiet patient—rather, only explicable as anima-hostility, which hardly fits with his other behavior. Will you come to see him?"

Utrecht was always reluctant to see Burton. It alarmed him to discover how attracted he was by the patient's psychotic fantasy world. But Froding was not only a specialist on the anima; he was a forceful man. Nodding, Utrecht followed him along the corridor, thrusting his moody reindeer's face forward as if scenting guilt and danger.

Burton sat huddled in one corner of his room—a characteristic pose. He was a pale slight man with a beard. This appeared to be one of the days when his attention was directed to the real world; his gestures towards it were courtly, and included the weariness which is so often a part of courtliness, although here it seemed more, Utrecht thought, as if the man were beckoning distantly, and part of him issuing fading calls for help. Don't we all? he thought.

"We are pleased to receive your majesty," Burton said, indicating the chair, secured to the floor, on which Utrecht might sit. "And how is the Empress today?"

"She is away at present," Utrecht said. He nodded towards Froding, who nodded back and disappeared.

"Ah, absent, is she? Absent at present. Traveling again, I suppose. A beautiful woman, the Empress, your majesty, but we must recognize that all her traveling is in the nature of a compulsion."

"Surely, Herr Freud; but, if we may, I would much rather discuss your own case. In particular, I would like

to know why you attacked your nurse."

Burton looked conspiratorial. "This Vienna of ours, your majesty, is full of revolutionaries these days. You must know that. Croats, Magyars, Bohemians—there is no end to them. This nurse girl was hoping to get at your majesty through me. She was in the pay of Serbian assassins."

He was convinced that he was Sigmund Freud, although, with his small stature and little copper-colored beard, he looked more like Algernon Charles Swinburne, the Victorian poet. He was convinced that Utrecht was the Emperor Franz Josef of Austria. This confused mental state alternated with periods of almost complete catatonia. Year by year, the world's mental illnesses were growing more complex, spiralling towards ultimate uterine mindlessness, as the ever-expanding population radiated high dosages of psychic interference on all sides.

Although Burton's case was only one among many, its fascination-repulsion for Utrecht was unique, and connected, directly but at a sub-rational level, with the commission on which he had sent Bog Hoggart to London, England. Many were the nights he had sat with Burton, humoring the man in his role, listening to his account of life in Vienna in the nineteenth century.

As a result, Utrecht knew Vienna well. Without effort, he could hear the clatter of coaches in the streets, could visit the opera or the little coffee houses, could feel the cross-currents that drifted through the capital of the Hapsburgs from all corners of Europe. In particular, he could enter the houses, the homes. There was one home he loved, where he had seen a beautiful

girl with a peacock feather; there, the walls were clear-colored and plain, and the rooms light with dark-polished pieces of furniture. But he knew also the crowded homes of Freud's acquaintances, had made his way towards over-stuffed horse-hair sofas, knocking a Turkish rug from an occasional table, brushed past potted palms and ferns. He had sat and stared at dim volumes, too heavy to hold, which contained steel engravings of customs in the Bavarian Alps or scenes from the Khedive's Egypt. He had seen Johannes Brahms at a reception, listened to recitals of the Abbe Liszt and the waltzes of Johann Strauss. He knew—seemed to know—Elizabeth of Austria, Franz Josef's beautiful but unhappy wife, and occasionally found himself identifying her with his own doomed wife, Karen. He felt himself entirely at home in that distant Victorian world—far more at home than an alienist with an international reputation in the year 2000 should be.

This afternoon, as Burton rambled on about treason and conspiracies at court, Franz Josef's attention wandered. He had an illusion much greater than one man's madness to diagnose. He knew that he, his companions, his ailing wife, the great bustling world, faced imminent disaster. But he continued to dispense automatic reassurance, while sustaining the role of the Emperor.

As he left Burton at last, Froding happened to be passing along the corridor. "Does he seem disturbed?"

"I cannot make sense of the fellow," Utrecht said. Then he recalled himself. He was not the Emperor, and must not talk like him. "Er—he is quiet at present, probably moving towards withdrawal. Pulse rate normal. See that

he is monitored on 'A' Alert tonight."

Dismissing Froding rather curtly, he hurried to his office. He could catch a news bulletin in four minutes. He flicked on the desk 3V and opened up his wisputer, feeding it the nugatory data contained in the paper report on Windsor Castle. He added to the little computer, "More details when the newscast comes up. Meanwhile, Burton. He attacked his nurse, Phyllis. In his Freud persona, he claims that she was a revolutionary. Revolution seems to be dominating his thinking these days. He also claims an anti-semitic conspiracy against him at the university. Multi-psychotic complex of persecution-theme. Indications his mental condition is deteriorating."

Switching off for a moment, Utrecht swallowed a pacifier. Everyone's mental condition was deteriorating as the environment deteriorated. Burton had simply been cheated out of the presidency of a little tin-pot society he had founded; that had been enough to topple him over the brink. Utrecht dismissed the man from his mind.

He ignored the adverts scampering across the 3V screen and glanced over the routine daily bulletins of the hospital piled on his desk. Under the new Dimpsey Brain Pressure ratings, the figures in all wards were up at least .05 over the previous day. They had been increasing steadily, unnervingly, for a couple of years, but this was the biggest jump yet. The World Normality Norm had been exceeded once more; it would have to be bumped up officially again before alarm spread. By the standards of the early nineties, the whole world was crazy; by the standards of the seventies, it was one big madhouse. There were guys now running banking houses, armies,

even major industries, who were proven round the bend in one or more (generally many more) of three thousand two hundred two hundred and six Dimpsey ways. Society was doing its best to come to terms with its own madness: more than one type of paranoia was held to be an inescapable qualification for promotion in many business organizations.

The oily voice seeping from the 3V screen asked, "Ever feel this busy world is too much for you? Ever want to scream in the middle of a crowd? Ever want to murder everyone else in your apartment building? Just jab a Draculin . . . Suddenly, you're all alone! . . . Just jab a Draculin . . . Remember, when you're feeling overpopulated, just jab a Draculin . . . suddenly, you're all alone!" Drug-induced catatonia was worth its weight in gold these days.

Struggling under all his responsibilities, acknowledged or secret, Utrecht could admit to the fascination of that oily siren voice. He was burdened with too many roles. Part of his morbid attraction to the Burton case lay in the fact that he liked being Franz Josef, married to the beautiful Elizabeth. It was the most restful part of his existence!

The oily voice died, the news flared. Utrecht switched on his wrisputer to record. A picture of Windsor Castle, as it had been, intumesced from the 3V and confronted Utrecht. He stared tensely, omitting to blink, as shots of the disaster came up. There was very little left of the residence of the anachronistic British sovereigns, except for one round tower. The demolition was amazing and complete. No rubble was left, no dust: just level ground

where the building and part of the town had been.

The commentator said, "The historic castle was only on the fringe of a wide area of destruction. Never before has one blow destroyed so much of the precious British heritage. Historic Eton College, for centuries the breeding ground of future aristocrats, has been decimated. Shrine of world-famous historic nineteenth century Queen Victoria, at Frogmore, situated one mile south east of the castle, was wiped out completely."

Bob Hoggart! I sent you to your death! Utrecht told himself. He switched off, unwilling to listen to the fruitless discussion about which enemy nation might have knocked off the castle; *he* knew what had wrought the terrible destruction.

"Hoggart," he said to the wrisputer. "You have a record of his probable movements at the time when disaster struck Windsor. What do you find?"

The little machine said, "Hoggart was scheduled to spend day working at Royal Mausoleum and—to cover his main activity—investigating nearby cemetery adjoining mausoleum, in which lesser royalties are buried. At time destruction happened, Hoggart may have been actually at Royal Mausoleum. Prediction of probability of death, based on partial data: fifty-six point oh nine per cent."

Burying his face in his hands, Utrecht said, "Bob's dead, then . . . My fault . . . My guilt, my eternal damned guilt . . . A murderer—worse than a murderer! Hoggart was just a simple but courageous little shrine-restorer, no more. Yet subconsciously I maneuvered him into a position where he was certain to meet his death. Why? Why? Why do I actually hate a man

I thought I really liked? Some unconscious homosexual tendencies maybe, which had to be killed?" He sat up. Pull yourself together, Douglas! You are slumping into algolagnic depression, accentuated by that recurrent guilty syndrome of yours. Hoggart was a brave man, yes; you ordered him to go to 'Windsor, yes; but you in turn had your orders from the PINCS. There is no blame. These are desperate times. Hoggart died for the world—as the rest of us will probably do. Besides, he may not be dead after all. I must inform PINCS. Immediately."

One thing at least was clear, one thing at least stood out in fearful and uncompromising hues: the universe lay nearer to the brink of disaster than ever before. The dreaded Queen Victoria had struck, and might be about to strike again.

The United States, in the year 2000, was riddled with small and semi-secret societies. All of its four hundred million inhabitants belonged to at least one such society; big societies, like the Anti-Procreation League; small ones, like the Sons of Alfred Bester Incarnate; crazy ones, like the Ypsilanti Horse-Hooves-and-All-Eating Enclave; dedicated ones, like the Get Staft; religious ones, like the Man's Dignity and Mulattodom Shouting Church; sinister ones, like the Impossible Smile; semi-scholarly ones, like the Freud In His Madness Believers, which the insane Burton had founded; save-the-world ones like All's Done In Oh One Brotherhood.

It was in the last category that the Philadelphia Institute for Nineteenth Century Studies belonged. Behind the calm and donnish front of PINCS,

a secret committee worked, a committee comprising only a dozen men drawn from the highest and most influential ranks of cosmopolitan society. Douglas Tredeager Utrecht was the humblest member of this committee: the humblest, and yet his aim was theirs, his desire burned as fiercely as theirs: to unmask and if possible annihilate the real Queen Victoria.

Committee members had their own means of communication. Utrecht left the Advanced Alienation Hospital and headed for the nearest call booth, plunging through the crowded streets, blindly pushing forward. He was wearing his elbow guards but, even so, the sidewalk was almost unendurable. The numbers of unemployed in New York City were so great, and the space in their over-crowded apartments and rooms so pronounced, that half the family at any one time found life more tolerable just padding round the streets.

To Utrecht's disgust, a married couple, the woman with an eighteen-month old child still being breast-fed, had moved into the call booth; they were employees of the Phone Company and had evidence of legal residence. However, since Utrecht could show that this was an hour when he could legitimately make a call, they had to turn out while he dialed.

He got three wrong numbers before Disraeli spoke on the other end. The visiscreen remained blank; it was in any case obscured by a urine-soaked child's nightgown. Disraeli was a PINCS' code name; Utrecht did not know the man's real one. Sometimes, he suspected it was none other than the President of the United States himself.

"Florence Nightingale here," Utrecht

said, identifying himself, and said no more. He had already primed his wrisputer. It uttered a scream lasting point six of a second.

A moment's silence. A scream came back from Disraeli's end. Utrecht hung up and scampered, leaving the family to take possession again.

To get himself home fast, he called a rickshaw. Automobiles had been banned from the city centre for a decade now; rickshaws provided more work for more people. Of course, you had to be Caucasian Protestant to qualify for one of the coveted rickshaw-puller's licenses.

He was lucky to qualify for a luxury flat. He and his wife, Karen, had three rooms on the twenty-fifth floor of the Hiram Bucklefeather Building—high enough to evade some of the stink and noise of the streets. The elevator generally functioned, too. Only the central heating had failed; and that would have been no bother in mild fall weather had not Karen been cyanosis-prone.

She was sitting reading a book, huddled in an old fur coat, as Utrecht entered the flat.

"Darling, I love you!" she said dimly, glancing up, but marking her place on the page with a blueish fingertip. "I've missed you so."

"And me you." He went to wash his hands at the basin, but the water was off.

"Have a busy day, darling?" At least she pretended to be interested.

"Sure." She was already deep back in—he saw the title because she, as undeviatingly intellectual now as the day he married her, held it so that he might see—"Symbolic Vectors in Neurasthenic Emotional Stimuli." He made a gesture towards kissing her.

"Good book?"

"Mm. Absorbing." Invalidism had sapped her ability to tell genuine from false. Maybe the only real thing about us is our pretences, Utrecht thought. He patted Karen's shoulder; she smiled without looking up.

Cathie was in the service-room-cum-bedroom, sluggishly preparing an anemic-looking piece of meat for their supper. She was no more substantial than Karen, but there was a toughness, a masculine core, about her, emphasized by her dark skin and slight, downy moustache. Occasionally, she showed a sense of humor. Utrecht patted her backside; it was routine.

She smiled. "Meat stinks of stilbestrol these days."

"I didn't think stilbestrol had any odor."

"Maybe it's the stilbestrol stinks of meat."

They'd done okay. With his two sons, Caspar and Nero, they were a household of five, minimum number in relation to floor space enforced by the housing regulations. Karen and Cathie had enjoyed a lesbian relationship since graduate days, so it was natural to have Cathie move in with them. Give her her due, she integrated well. She was an asset. Nor was she averse to letting Utrecht explore her hard little body now and then.

He dismissed such sympathetic thoughts and turned his attention to the wrisputer, which slowed Disraeli's phoned scream and retransmitted it as a comprehensible message:

"Whether or not Robert Hoggart managed to fulfill his mission at the

Windsor mausoleum is immaterial. Its sudden destruction is conclusive proof that he, and we, were on the right track with our Victoria hypothesis. We now operate under Highest Emergency conditions. Secret PINCS messengers are already informing Pentagon in Washington and our allies in the Kremlin in Moscow. Now that the entity known as Queen Victoria has revealed her hand like this, she will not hesitate to distort the natural order again. The fact that she has not struck until this minute seems to indicate that she is not omniscient, so we stand a chance. But clearly PINCS is doomed if she has discovered our secret. You will stand by for action, pending word from Washington and Moscow. Stay at home and await orders. Out."

As he switched off, Utrecht was trembling. He switched on again, getting the wrisputer to launch into a further episode of the interminable pornographic story it had been spinning Utrecht for years; it was a great balance-restorer; but at that moment there was a banging at the toilet door, and he was forced to retreat.

He was a man alone. The Draculin situation, he thought wryly. Alone, and hunted. He looked up at the seamed ceiling apprehensively. That terrible entity they called Queen Victoria could strike through there, at any time.

The sons came home from work, Caspar first, thin, strawy, colorless save for the acne rotting his cheeks. Even his teeth looked grey. He was silent and nervous. Nero came in, two years the younger, as pallid as his brother, blackheads and adolescent pimples rising like old burial

mounds from the landscape of his face. He was as talkative as Caspar was silent. Grimly, Utrecht ignored them. He had some thinking to do. Eventually, he retreated into the shower, sitting on the cold tiles. Queen Victoria might not see him there.

The evening dragged by. He was waiting for something and did not know what, although he fancied it was the end of the world.

The doomed life of the place dragged by. Utrecht wondered why most of the tenants of the Hiram Bucklefeather Building had harsh voices. He could hear them through the walls, calling, swearing, suffering. Cathie and Karen were playing cards. At least the Utrecht apartment preserved reasonable quiet.

Utrecht's sons, head together, indulged in their new hobby. They had joined the Shakespeare-Spelling Society. Their subscription entitled them to a kit. They had built the kit into an elaborate rat-educator. Two rats lived in the educator; they had been caught in the corridor. The rats had electrodes implanted in the pleasure centers of their brains. They were desperate for this pleasure and switched on the current themselves; when it was on, the happy creatures fed themselves up to seven shocks a second, their pink paws working the switches in a frenzy of delight.

But the current was available only when the rats spelled the name Shakespeare correctly. For each of the eleven letters, the rats had a choice of six letters on a faceted drum. The letters they chose were flashed onto a little screen outside the educator. The rats knew what they were doing, but, in their haste to get the coveted shock, they generally mis-

spelled, particularly towards the end of the word. Caspar and Nero tittered together as the mistakes flashed up.

THAMEZPEGPE
SHAKESPUNKY
SRAKISDOARI

The Utrecht tribe ate their stilbestrol steak. Since the water supply was on, Karen washed up, wearing her coat still. Utrecht had thought he might take a walk when the pedestrians thinned a little, despite PINCS' orders, but it was too late now. The hoods were out there, making the night unsafe even for each other. Every eight days, New York City needed one new hospital, just to cope with night-injuries, said the statistics.

MHAKERPEGRE
SHAKESPEAVL

Utrecht could have screamed. The rats played on his latent claustrophobia. Yet he was diverted despite himself, abandoning thought, watching the crazy words stumble across the screen. He thought as he had often thought: supposing man did not run the god-damned rats? Supposing the goddamned rats ran men? There were reckoned to be between three and four million people already in the Shakespeare-Spelling Society. Supposing the rats were secretly working away down there to make men mad, beaming these crazy messages at men which men were forced to read and try to make some sort of meaning of? When everyone was mad, the rats would take over. They were taking over already, enjoying their own population explosion, disease-transmitting but disease-resistant. As it was, the rats had fewer illusions than the boys. Caspar and Nero had a rat-educator; therefore they believed they were educating rats.

SIMKYSPMNE
SHAKESPEARE

The Bard's name stayed up in lights when the rodents hit the current jackpot and went on a pleasure binge, squealing with pleasure, rolling on their backs, showing little white thighs as the current struck home. Utrecht refused to deflect his thoughts as Cathie and the boys crowded round to watch. Even if these rats were under man's surveillance, they were not interfered with by man once the experiment was set up. The food that appeared in their hoppers appeared a natural law, just as the food thrusting out of the ground came by a natural law to mankind. Supposing man's relationship to Queen Victoria was analogous to the rats' relationship to man? Could they possibly devise some system to drive HER crazy, until she lost control of her experiment?

CLUKYZPEGPY

Pleasure was brief, sorrow long, in this vale of rodential tears. Now the creatures had to pick up the pieces and begin again. They had always forgotten after the pleasure-bout.

DRALBUCEEVE

The family all slept in the same room since Utrecht had caught the boys indulging in forbidden activity together. Their two hammocks now swung high over the bed in which the women slept. Utrecht had his folding bunk by the door, against the cooker. Often, he did not sleep well, and could escape into the living room. Tonight, he knew, he would not sleep.

He dreamed he was in the Advanced Alienation Hospital. He was going to see Burton, pushing through the potted palms to get to the patient. An elderly man was sitting

with Burton; Burton introduced him as his superior, Professor Krafft-Ebbing of Vienna University.

"Delighted," Utrecht murmured.

"Clukyzpeggy," said the professor. "And dralbucceve."

What a thing to say to an Emperor!

Groaning, Utrecht awoke. These crazy dreams! Maybe he was going mad; he knew his Dimpseys were already pushing the normality norm. Suddenly it occurred to him that the whole idea of Queen Victoria's being a hostile entity in a different dimension was possibly an extended delusion, in which the other members of PINCS conspired. A mother-fear orgy. A multiple mother-fear orgy—induced by the maternal guilt aspects of over-population. He lay there, trying to sort fantasy from reality, although convinced that no man had ever managed the last to date. Well, Jesus, maybe; but if the Queen Victoria hypothesis was correct, then Jesus never existed. All was uncertain. One thing was clear, the inevitable chain of events. If the hypothesis was correct, then it could never have been guessed earlier in the century, when normality norms were lower. Over-population had brought universal neurosis; only under such conditions could men work on so untenable a theory.

The Cheyne-Stokes breathing of his wife came to him, now laboring heavily and noisily, now dying away altogether. Poor dear woman, he thought; she had never been entirely well; even now, she was not entirely ill. In some-what the same way, he had never loved her wholeheartedly; but even now, he had not ceased to love her entirely.

Tired though he was, her frighten-

ing variations of breathing would not let him rest. He got up, wrapped a blanket round him, and padded into the next room. The rats were still at work. He looked down at them.

SLALEUPEAKE
SLAKBUDDVS

Sometimes, he tried to fathom how their sick little brains were working. The Shakespeare-Spelling Society issued a monthly journal, full of columns of misspellings of the Bard's name sent in by readers; Utrecht pored over them, looking for secret messages directed at him. Sometimes the rodents in their educator seemed to work relaxedly, as if they knew the desired word was bound to come up after a certain time. On other occasions, they threw up a bit of wild nonsense, as if they were not trying, or were trying to cure themselves of the pleasure habit.

DOAKERUGAPE
FISMERAMNIS

Yes, like that, you little wretches, he thought.

The success of the Shakespeare-Spelling Society had led to imitations, the All-American-Spelling, the Rat-Thesaurus-Race, the Anal-Oriented-Spelling, and even the Disestablishmentarianism-Spelling Society. Rats were at work everywhere, ineffectually trying to communicate with man. The deluxe kits had chimps instead of rats.

SHAPESCUNRI
SISEYSPEGRE

Tiredly, Utrecht wondered if Disraeli might signal to him through the tiny screen.

DISPRUPEARS

The exotic words flickered above his head. He slept, skull resting on

folded arms, folded arms resting on table.

Burton was back as Freud, no longer disconsolate as the sacked president of the Freud in His Madness Believers but arrogant as the arch-diagnoser of private weaknesses. Utrecht sat with him, smoking in a smoking jacket on a scarlet plush sofa. It was uncertain whether or not he was Franz Josef. There were velvet curtains everywhere, and the closed sweet atmosphere of a high-class brothel. A trio played sugary music; a woman with an immense bust came and sang a poem of Grillparzer's. It was Vienna again, in the fictitious nineteenth century.

Burton/Freud said, "You are sick, Doctor Utrecht, or else why should you visit this church?"

"It's not a church." He got up to prove his point, and commenced to peer behind the thick curtains. Behind each one, naked couples were copulating, though the act seemed curiously indistinct and not as Utrecht had visualized it. Each act diminished him; he grew smaller and smaller. "You're shrinking because you think they are your parents," Burton/Freud said superciliously.

"Nonsense," Utrecht said loudly, now only a foot high. "That could only be so if your famous theory of psycho-analysis were true."

"If it isn't true, then why are you secretly in love with Elizabeth of Austria?"

"She's dead, stabbed in Geneva by a mad assassin. You'll be saying next I wish I'd stabbed my mother or similar nonsense."

"You said it—I didn't!"

"Your theories only confuse matters. An argument developed. He was

no higher than Freud's toecap now. He wanted to pop behind a pillar and check to see if he was not also changing sex.

"There is no such thing as the subconscious," he declared. Freud was regarding him now through pink reflecting glasses, just like the ones Utrecht's father had worn. Indeed, it came as no surprise to see that Freud, now sitting astride a mammoth and smiling sow, was his father. Far from being nonplussed, the manikin pressed his argument even more vigorously.

"We have no subconscious. The Nineteenth Century is our subconscious, and you stand as our guardian to it. The Nineteenth Century ended in 1901 with the death of Queen Victoria. And of course it did not really exist, or all the past ages in which we have been made to believe. They are memories grafted on, supported by fake evidence. The world was invented by the Queen in 1901—as she had us call that moment of time."

Since he had managed to tell the truth in his dream, he began to grow again. But the hairy creature before him said, "If the Nineteenth Century is your subconscious, what acts as the subconscious of the Victorians?"

Utrecht looked about among the potted palms, and whispered. "As we had to invent mental science, you had to invent the prehistoric past—that's your subconscious, with its great bumping monsters!"

And Burton was nodding and saying, "He's quite right, you know. It's all a rather clumsy pack of lies."

But Utrecht had seen that the potted palms were in fact growing out of the thick carpets, and that behind the curtains stalked great unmentionable things. The velvet draps bulged

ominously. A great stegosaurus, lumbering, and rounder than he could have imagined, plodded out from behind the sofa. He ran for his life, hearing its breathing rasp behind him. Everything faded, leaving only the breathing, that painful symptom of anemia, the Cheyne-Stokes exhalations of his wife in the next room. Utrect sprawled in his chair, tranquil after the truth-bringing nightmare, thinking that they (Queen Victoria) had not worked skillfully enough. The mental theories of 2000 were organized around making sense of the mad straggle of contradiction in the human brain. In fact, only the Queen Victoria hypothesis accounted for the contradictions. They were the scars left when the entirely artificial set-up of the world was commenced at the moment they perforce called 1901. Mankind was not what it seemed; it was a brood of rats with faked memories, working is some gigantic educator experiment.

SHAKESPEGR L
SHAKERPEAVE

Like the rats, he felt himself near to the correct solution. Yes! Yes, by God! He stood up, almost guilty, smiling, clutching the blanket to his chest. Obviously, analytic theory, following the clues in the scarred mind, could lead to the correct solution, once one had detected the 1901 barrier. And he saw! He knew! They were all cavemen, stone age men, primitive creatures, trying to learn—*what?*—for the terrible woman in charge of this particular experiment. Didn't all mental theory stress the primitive side of the mind? Well, they *were* primitive! As primitive and out of place as a stegosaurus in a smoking room.

SHAKESPEAR L

SEND HER VICTORIOUS



Shakespearls before swine, he thought. He must cast his findings before PINCS before *She* erased him from the experiment. Now that he *knew*, the Queen would try to kill him as she had Hoggart.

There it was again . . . He went to the outer door. He had detected a slight sound. Someone was outside the flat, listening, waiting. Utrecht's mind pictured many horrible things. The stegosaurus was lying in wait, maybe.

"Douglas?" Dinosaurs didn't talk.

"Who is it?" They were whispering through the hinge.

"Mc. Bo, Bob Hoggart!"

Shaking, Utrecht opened up. Momentary glimpse of dim-lit corridor with homeless people snoozing in corners, then Hoggart was in. He looked tired and dirty. He staggered over to the table and sat down, his shoulders slumping. The polished restorations expert looked like a fugitive from justice.

SHAMIND

Utrecht cut off the rats' source of light.

"You shouldn't have come here!" he said. "She'll destroy this building—maybe the whole of New York!"

Hoggart read the hostility and fear in Utrecht's expression.

"I had to come, Florence Nightingale! I jumped a jumbojet from London. I had to bring the news home personally."

"We thought you were dead. PINCS thinks you're dead."

"I very nearly am dead. What I saw . . . Give me a drink, for God's sake! What's that noise?"

"Quiet! It's my wife breathing. Don't rouse her. She suffers from a hemoglobin-deficiency with some other

factors that haven't yet been diagnosed. One of these new diseases they can't pin down—"

"I didn't ask for a case history. Where's that drink?" Hoggart has lost his English calm. He looked every inch a man that death had marked.

"What have you found?"

"Never mind that now! Give me a drink."

As he drank the alcohol-and-water that Utrecht brought him, Hoggart said, "You heard she blasted the mausoleum and half Windsor out of existence? That was a panic move on her part—proves she's human, in her emotions at least. She was after me, of course."

"The tomb, man—what did you find?"

"By luck, one of the guards happened to recognize me from an occasion when I was restoring another bit of architecture where he had worked before. So he left me in peace, on my own. I managed to open Queen Victoria's tomb, as we planned."

"Yes! And?"

"As we thought!"

"Empty?"

"Empty! Nothing! So we have our proof that the Queen, as history knows her—our fake history—does not exist."

"Another of her botches, eh? Like the Piltdown Man and the Doppler Shift and the tangle of nonsense we call Relativity. Obvious frauds! So she's clever, but not all that clever. Look, Bob, I want to get you out of here. I'm afraid this place will be struck out like Windsor at any minute. I must think of my wife."

"Okay. You know where we must go, don't you?" He stood up, straightening his shoulders.

"I shall phone Disraeli and await

instructions. One thing—how come you escaped the Windsor blast?"

"That I can't really understand. Different time scales possibly, between her world and ours? Directly I saw the evidence of the tomb, I ran for it, got into my car, drove like hell. The blast struck almost exactly an hour after I opened the tomb. I was well clear of the area by then. Funny she was so unpunctual. I've been expecting another blast ever since."

Utrect was prey to terrible anxiety. His fingers trembled convulsively as he switched off his wisputer, in which this conversation was now recorded. Before this building was destroyed, with Karen and all the innocent people in it, he had to get Hoggart and himself away. Grabbing his clothes, he dressed silently, nodding a silent good-bye to his wife. She slept with her mouth open, respiration now very faint. Soon, he was propelling Hoggart into the stinking corridor and down into the night. It was two-thirty in the morning, the time when human resistance was lowest. He instinctively searched the sky for a monstrous regal figure.

Strange night cries and calls sounded in the canyons of the streets. Every shadow seemed to contain movement. Poverty and the moral illness of poverty settled over everything, could almost be felt; the city was an analogue of a sick subconscious. Whatever her big experiment was, Utrect thought, it sure as hell failed. The cavemen were trying to make this noble city as much like home territory as they could. Their sickness (could be it was just home-sickness?) hung in the soiled air.

By walking shoulder-to-shoulder, flick-knives at the alert, Utrect and Hoggart reached the nearby call booth.

"Night emergency!" Utrect said, flinging open the door. The little family were sleeping in papoose hammocks, hooked up behind their shoulderblades, arms to their sides, like three great chrysalids. They turned out, sleepy and protesting. The child began to howl as its parents dragged it on to the chilly sidewalk.

Hoggart prepared a wisputer report as Utrect dialed Disraeli. When his superior's throaty voice came up—again no vision—Hoggart let him have the scream. After a pause for encoding, another scream came from the other end. The wisputer decoded it. They had to state present situation. When they had done this, a further scream came back. The matter was highest priority. They would be picked up outside the booth in a couple of minutes.

"Can we come back in, mister? The kid's sick?"

Utrect knew how the man felt.

As they bundled in, Utrect asked, "When are you getting a real place?"

"Any year now, they say. But the company's agreed to heat the booth this winter, so it won't be so bad."

We all have blessings to count, Utrect thought. Until the experiment is called off . . .

He and Hoggart stood outside, back to back. A dark shape loomed overhead. A package was lowered. It contained two face masks. Quickly, they put them on. Gas flooded down, blanketing the street. A whirler lowered itself and they hurried aboard, immune from attacks by hoods, to whom a whirler would be a valuable prize. They lifted without delay.

Dr. Randolph Froding's lips were a

pale scarlet. As he laughed, little bubbles formed on them, and a thin spray settled on the glass of the television screen.

"This next part of my experiment will be very interesting, you'll see, Controller," he said, glancing up, twinkling, at Prestige Normandi, Controller of the Advanced Alienation Hospital, a bald, plump man currently trying to look rather gaunt. Normandi did not like Dr. Froding, who constantly schemed for the controllership. He watched with a jaundiced eye as, on Froding's spy screen, the whirler carried Hoggart and Chief Adviser Utrecht over the seamy artery of the Hudson.

"I can hardly watch any longer, Froding," he said, peering at his wristputer. "I have other appointments. Besides, I do not see you have proved your point."

Froding tugged his sleeve in an irritating way.

"Just wait and watch this next part, Controller. This is where you'll see how Dimpsey Utrecht really is." He mopped the screen with a Kleenex, gesturing lordly with it as if to say, "Be my guest, look your fill!"

Normandi fidgeted and looked; Froding was a forceful man.

They both stared as, in the 3V, the whirler could be seen to land on a bleak wharf, where guards met Utrecht and Hoggart and escorted them into a warehouse. The screen blanked for a moment and then Froding's spy flipped on again, showing Utrecht and Hoggart climbing out of an elevator and into a heavily-guarded room, where a bulky man sat at a desk.

"I'm Disraeli," the bulky man said.

Froding nudged the Controller. "This is the interesting part, Control-

ler! See this new character? Notice anything funny about him? Watch this next bit and you'll see what I'm getting at."

On the screen, Disraeli was shaking hands with Hoggart and Utrecht. He wore the uniform and insignia of a general. He led the two newcomers into an adjoining room, where nine men stood stiffly round a table.

Bowing, Disraeli said, "These are the other members of our secret committee, except for Palmerston in England. May I introduce Dickens, Thackeray, Gordon, Gladstone, Livingstone, Landseer, Ruskin, Raglan, and Prince Albert, from whom we all take our orders."

As Utrecht and Hoggart moved solidly round the group, shaking hands and making the secret sign, distant Machiavellian Dr. Froding chuckled and sprayed the screen again.

"At last I'm proving to you, Controller, what I've been saying around the Lexington for years—Utrecht is clean Dimpsey."

"He looks normal enough to me." Dirty little Froding; so clearly after Utrecht's job as well as Normandi's own.

"But observe the others, Prince Albert, Disraeli and the rest! They aren't real people, you know, controller. You didn't think they were real people, did you? Utrecht thinks they are real people, but in fact they are dummies, mechanical dummies, and Utrecht is talking to them as if they were real people. That proves his insanity, I think?"

Taken aback, Normandi said, ". . . Uh . . . I really have to go now, Froding." Horrified by this glimpse into Froding's mentality, Nor-

mandi excused himself and almost ran from the room.

Froding shook his head as the Controller hurried away. "He too, poor schmuck, he too is near his upper limit. He will not last long. It's all this overcrowding, of course, general deterioration of the environment. The mentality also deteriorates."

He had his own method of safeguarding his own sanity. That was why he had become a member of the Knights of the Magnificent Microcosm. Although, as a batchelor, he was allowed only this one small room with shared conveniences with the specialist next door, he had rigged up internal 3V circuits in it so as to enlarge his vistas enormously. Leaning back, Froding could look at a bank of three unblinking screens, each showing various parts of the room in which he sat. One showed a high view of the room from above the autogrill, looking down on Froding from the front and depicting also the worn carpet and part of the rear wall where there hung a grey picture executed by a victim of anima-hostility. One showed a view across the length of the room from behind the door, with the carpet, part of the table, part of the folding bed, and the corner in which Froding's small personal library, together with his voluminous intimate personal dream diary, was housed in stacked tangerine crates. One showed a view from a corner, with the carpet, the more comfortable armchair, and the back of Froding's head as he sat in the chair, plus the three screens on which he was watching this magnificent microcosm.

Meanwhile, at the subterranean PINCS HQ, Utrecht had recognized

Prince Albert; it was the Governor of New York City.

"We have a brief report of your activities in England, Hoggart," Albert said. "One question. How come you took so long to get here? You knew how vital it was to alert us."

Hoggart nodded. "I got away from Victoria's mausoleum before the destruction, as I told Nightingale and Disraeli. The information I thought I ought to reserve until I could talk to a top authority like yourself, sir, was this. Once Windsor and the Royal Mausoleum were destroyed, I believed I might be safe for an hour or two. So I went back."

"You went back to the devastated area?"

The Englishman inclined his head. "I went back to the devastated area. You see, I was curious to find out where the Queen—as I suppose we must continue to call her—had been trying to obliterate me or the evidence. It was easy to get through the police and military cordon; it was only just going up, and the devastation covers several square miles. Finally, I got to the spot where I judged the mausoleum had stood. Sure enough, the hole under the vault was still there."

"What is so odd about this hole?" Dickens asked, leaning forward.

"It's no ordinary hole. I didn't really have time to look into it properly, but it—well, it baffles the sight. It's as if one were looking into a space—well, a space with more dimensions than ours; and that's just what I suspect it is. It's the way—a way, into Queen Victoria's world."

There was a general nodding of heads. Raglan said in a crisp English voice, "We'll take your word for it. Each of us bears a navel to indicate

our insignificant origins. This hole you speak of may be Earth's navel. It is a not unreasonable place to expect to find it, in the circumstances, given the woman's mentality. We'd better inspect it as soon as possible. It will be guarded by now, of course."

"You can fix the guards?" Disraeli asked.

"Of course," Raglan said.

"How about shooting a bit of hardware through the hole?"

The all consulted. The general feeling was that since they and possibly the whole world were doomed anyway, they might as well try a few H-bombs.

"No!" Utrecht said. "Listen, think out the situation, gentlemen! We all have to accept the truth now. At last it is in the open. Our world, as we believed we knew it, is a fake, a fake almost from top to bottom. Everything we accept as a natural factor is a deception, mocked-up by someone—or some civilization—of almost unbelievable technological ability. Can you imagine the sheer complexity of a mind that invented human history alone? Pilgrim Fathers? Ice Age? Thirty Years War? Charlemagne? Ancient Greece? The Albigensians? Imperial Rome? Abe Lincoln? The Civil War? All a tissue of lies—woven, maybe, by poly-progged computers.

"Okay. Then we have to ask *why*? What did they go to all the trouble for? Not just for fun? For an experiment of some kind. In some way, we must be a benefit to them. If we could see what that benefit was, then we might be in a bargaining position with—Queen Victoria."

There was a moment of silence.

"He has a point," Dickens said.

"We've no time," Disraeli said.

"We want action. I'll settle for bombs."

"No, Disraeli," Albert said. "Florence Nightingale is right. We have everything to lose by hasty action. Victoria—or the Victorians—could wipe us out if they wanted. We must bargain if possible, as Nightingale says. The question is, what have we got that they need?"

Everyone started talking at once. Finally, Ruskin, who had the face of a well-known Russian statesman, said, "We know the answer to that. We have the anti-gravitational shield that is the latest Russo-American technological development. Next month, we activate it with full publicity, and shield the Earth from the moon's harmful tidal action. The shield is the greatest flowering of our terrestrial technology. It would be invaluable even to these Victorians."

This brought a general buzz of agreement.

Utrecht alone seemed unconvinced. Surely anyone who had set up a planet as an experimental environment would already have full command of gravitational effects. He said, doubtfully, "I think that psychoanalysts like myself can produce evidence to show that the Victorian's experiment is in any case nearly over. After all, experiments are generally run or financed only for a limited time. Our time's almost up."

"Very well, then," said Ruskin. "Then our anti-gravitational screen is the climax of the experiment. We hold on to it and we parley with the Victorians."

It seemed that the PINCS committee members would adopt this plan. Disraeli, Utrecht, and Hoggart were to fly to Britain, meet Palmerston there, and

put it into action. The three of them snatched a quick meal while the rest of the committee continued its discussion. Hoggart took a shower and a Draculin.

"Guess you were right to adopt a more gentle approach to Victoria," Disraeli told Utrecht. "I'm just a dog-rough army man myself, but I can take a hint. We can't expect to kill her. She's safe in her own dimension."

"I feel no animosity towards Victoria," Utrecht said. "We still survive, don't we? Perhaps it is not her intention to kill us."

"You're changing your mind, aren't you?" Hoggart said.

"Could be. You and I are still alive, Bob! Maybe the object of the experiment was to see if we could work out the truth for ourselves. If we are actually of a primitive cavedwelling race, maybe we've now proved ourselves worthy of Victoria's assistance. She just could be kind and gentle."

The other two laughed, but Utrecht said, "I'd like to meet her. And I have an idea how we can get in contact with her—an idea I got from some rats. Let me draw you a sketch, Disraeli, and then your engineers can rig it for us in a couple of hours."

Disraeli looked strangely at him. "Rats? You get ideas off rats?"

"Plenty." And then he started trembling again. Could Victoria really be kind when she had them all in a vast rat-educator, or did he just *hope* she was, for his own and Karen's sake?

When Disraeli was studying the sketch Utrecht made, Hoggart said confidentially in the latter's ear, "This Disraeli and all the other committee

members—you don't see anything funny about them?"

"Funny? In what way?"

"They are real people, aren't they, I suppose? I mean, they couldn't be dummies, animated dummies, could they?" He looked at Utrecht very chill and frightened.

Utrecht threw back his head and laughed. "Come on, Bob! You're suggesting that Queen Victoria could have some sort of power over our minds to deceive us utterly—so that, for instance, when we get to England we shall not really have left the States at all! So that these people are just dummies and this is all some sort of paranoid episode without objective reality! Absolute nonsense!"

"It didn't happen. It was a phantasm of my tired over-crowded brain, without objective reality. Senior members of my staff do not spy on each other."

Thus spake Prestige Normandi, Controller of the Advanced Alienation Hospital to himself, as he strode away from Froding's room down the crowded corridor towards his office. He was trying not to believe that Froding really had a bug ray on Utrecht; it was against all ethics.

Yet what were ethics? It was only by slowly jettisoning them and other principles that people could live in such densities as Central New York; something had to give; their rather stuffy fathers back in the sixties would have found this city uninhabitable. Under the sheer psychic pressure of population, what was an odd hallucination now and again?

A case in point. The woman coming towards him along the corridor. That regal air, those grand old-fash-

ioned clothes . . . Normandi had a distinct impression that this was some old-time sovereign, Queen Victoria or the Empress Elizabeth of Austria. He wasn't well up in history. She sailed by, seemed to shoot him a significant glance, and was gone.

Impressed, he thought, "She really might have been there. Maybe it was a nurse going off duty, member of some odd society or other"—Normandi disapproved of all these societies, believing they tended to encourage fantasies and neuroses, and was himself President of the Society for the Suppression of Societies. All the same, he was impressed enough by the regal apparition to pause at Burton's cell; Burton would know what to think; it was in his line.

But he was too tired for the Freud act. With his hand on the door knob, he paused, then he turned away and pushed through the mob which always jostled along the corridor, towards his own little haven.

Safely there, he sat at his desk and rested his eyes for a minute. Froding was scheming against Utrecht. Of course Utrecht was probably spying against someone else. It was really deplorable; the state they had come to. Sadly, he slid open a secret drawer in his desk, switched on the power, and clicked switches. Then he sat forward, shading his eyes, to watch the disgusting Froding spying on Utrecht.

Utrecht and Hoggart were half-comatose, eyes shaded against the bilious light inside the plane as it hurtled eastwards across the Atlantic, England-bound.

The communications equipment Utrecht had specified had been built and was stowed in the cargo hold.

Not until they were landing at Londonport in a rainy early afternoon did the news come through. Gripping Utrecht's shoulder, Disraeli handed him a message from the PINCS undersea headquarters.

It read: "Regret to report that the Hiram Bucklefeather Building on Three Hundredth at Fifteenth was obliterated at seven-thirty this morning. All the occupants, estimated as upwards of five thousand, were immediately annihilated. It is certain this was the work of the entity known as Queen Victoria."

"Your place?" Disraeli asked.

"Yes." He thought of Karen with her cyanosis and her tragic breathing. He thought of the two unhappy lads, dying a few feet apart. He thought of Cathie, a patient woman. He even recalled the two rats, slaving over their spelling. But above all, he thought of Karen, so keen to seem intellectual, so hopeless at being anything, her very psyche sapped by the pulsating life about her. He had always done too little for her. He closed his eyes, too late to trap a tear. His wife, his girl.

Lovely Elizabeth of Austria, murdered needlessly on a deserted quay beside her lady-in-waiting—an irrelevant tableau slipping in to perplex his grief. All sweet things dying.

As they hurried across the wet runway, Hoggart said shakily, "Victoria was after *me*, the bitch! She's a bitch! A bloody cow of a bitch, Douglas! Think of it—think of the way she built herself into the experiment as a sort of mother figure! Queen of England—sixty glorious years. Empress of India. She even named the age after herself. The Victorian age. God Almighty! Began the

experiment with her own supposed funeral, just for a laugh! What a cosmic bitch! By God . . ." He choked on his own anger.

Palmerston was there to meet them in a military car. He shook Utrecht's hand. He had heard the news. "You have my deepest sympathy."

"Why did she—what I can't understand—why did she destroy the building five hours after we had left?" Utrecht asked painfully, as they whizzed from the airport, their apparatus stowed in the back of the car.

"I've worked that out," Hoggart said. "She missed me by an hour at Windsor, didn't she? It's British Summer Time here—the clocks go forward an hour. In New York, she missed us by five hours. She can't be all-knowing! She's going by Greenwich Mean Time. If she'd gone by local time, she'd have nailed us dead on both occasions."

"Ingenious," Disraeli admitted. "But if she can see us, then how could she make such a mistake?"

"I told you I thought there might be different dimensions down this hole we are going to investigate. Obviously, *time* is a little scrambled as well as the space between her world and ours, and it doesn't help her to be as effective as otherwise she might be. That could work to our advantage again."

"God knows, we need every advantage we can get," Palmerston said.

Alone in his little office, Controller Prestige Normandi sat shading his eyes and suffering the crowded woes of the world, but always watching his tiny secret screen, on which Dr. Froding, in his room, sat scanning the exploits of Utrecht on his tiny screen.

Psychic overcrowding with a vengeance, the Controller thought; and all the events that Utrecht was now undergoing: were they real or, as Froding claimed, a paranoid episode without objective reality, enacted by dummies? Froding crouched motionless watching in his chair; Normandi did the same.

A knock at the door.

Quickly sliding the spy screen away in the secret door of his desk, Normandi rapped out an official order to enter.

Froding stepped in, closing the door behind him.

Suddenly atremble, Normandi clutched his throat. "Good Dimpsey! You're not really there, Froding, you're just a paranoic delusion! I must get away for a few days' rest! I know you're really down in your room, watching Utrecht, sitting comfortably in your chair."

Swelling two inches all round, Froding stamped his foot. "I will not be referred to as a paranoic delusion, Controller! That is a dummy sitting in my chair; it has taken over and will not leave when asked. So I have wrung from you a confession that you spy on your staff! You have not heard the end of this, by any means, nor even the beginning."

"Let's be reasonable, Froding. Have a calmer with me." Hurriedly, Normandi went to a secret cupboard and brought out pills and a jug of chlorinated water. "We are reasonable men; let us discuss the situation reasonably. It boils down to the old question of what is reality, does it not? As I see it, improved means of communication have paradoxically taken mankind further from reality. We are all so near to each other that we seek to keep

apart by interposing electronic circuits between us. Only psychic messages get through, but those we still prefer not to recognize officially. Can I believe anything I see Utrecht doing when he is removed from me by so many scientific-artistic systems? The trouble is, our minds identify television, even at its best, with the phantasms of inner vision—wait! I must write a paper on the subject!" He picked up a laserpen and scrawled a note on his writing screen. "So, contemporary history, which we experience through all these scientifico-artistic media, becomes as much a vehicle for fantasy as does past history, which comes filtered through the medium of past-time. What's real, Froding, tell me that, what is real?"

"Which reminds me," Froding said coldly. "I came in to tell you that Burton/Freud has escaped within the last few minutes."

"We can't let him get away! He's our star patient, nets us a fortune on the weekly 'Find the Mind' show!"

"I feel he is better free. We cannot help him at Lexington."

"He's *safer* confined in here."

Froding raised an eyebrow loaded with irony. "You think so?"

"How did he get away?"

"His nurse Phyllis again, poor Phyllis. He attacked her, tied her up, and left his cell disguised as a woman, some say as Queen Victoria."

Effortlessly, Normandi made anti-life noises with his throat. "I saw her—him. She—he—passed me in the corridor. He—she—shot me a significant glance, as the writers say . . . What are we to do?"

"You're the Controller . . ." But not for so much longer, Froding thought. Events were rolling trium-

phantly in his direction. Utrecht was as good as defeated; now Normandi also was on his way out. All he had to do now was get rid of that damned dummy sitting in his armchair.

Undisturbed by the gale of psychic distortion blowing about him, the dummy sat comfortably in Dr. Froding's chair and stared at the 3V screen.

In it, he could see Palmerston's large military car slowing as it reached the outskirts of Windsor. The pale face of Utrecht looked out at the military barriers and machine gun posts.

Inwardly, Utrecht fermented with anger at the thought of what had happened to his wife. All the hate in his unsettled nature seemed to boil to the surface. He had claimed that Victoria might be kind! He had spoken up against throwing bombs at her! Now he wished he could throw one himself.

Gradually, his emotionalism turned into something more chilly. He recalled what they had said earlier: the big experiment was coming to an end. The various illusions were breaking up, becoming thin, transparent. Hence the widespread madness—to which, he realized bitterly, he was far from immune. He had enjoyed too deeply pretending to be the Emperor Franz Josef; now his real life Elizabeth had also been randomly assassinated.

So what was the aim of it all? Timed to run just a hundred years, only a few more weeks to go, this ghastly experiment of Victoria's had been aimed to prove *what*?

He could not believe that all mankind was set down on this temporary Earth merely to develop the Russo-American anti-gravitational shield.

Victoria could have got away with a simpler, cheaper environmental cage than this, had she just required the development of the shield. No, the point of it all had to be something that would explain the great complexity of the teeming terrestrial races, with all their varying degrees of accomplishment and different psychologies.

They were slogging across the wet and blasted ground of Windsor now, with two assistants dragging the communications equipment. Utrecht stopped short. He had the answer!

It went through him like toothache. He pictured the rats again. Man had carried out simple population-density experiments with rats as long ago as the nineteen-fifties. Those rats had been given food, water, sunlight, building material, and an environment which, initially at least, had been ideal. Then they had been left without external interference to breed and suffer the maladies resulting from subsequent over-population.

Now the experiment was being repeated—on a human scale!

It was the human population explosion—the explosion that mankind, try as it might, had never been able to control—which was being studied. Now it was breaking up because Victoria had all the data she needed. He figured that lethal interstellar gas would enfold Earth on New Year's Day 2001, a few weeks from now. Project X terminated successfully.

Unless . . .

The assistants were fixing up the communicator so that it shone down the hole. Soldiers were running up with a generator. A respectful distance away, tanks formed a perimeter, their snouts pointing inwards. Each tank

had a military figure standing on it, binoculars focused on the central group. A whirler hovered just above them, 3V cameras going. The rain fell sharply, bubbling into the pulverized ground.

Utrecht knew what happened to rats at the end of an experiment. They never lived to a ripe old age. They were gassed or poisoned. He knew, too, where the rats came from. He had a vision of the true mankind—primitive people, on a primitive planet, scuttling like rats for shelter in their caves while the—the Victorians, the super-race, the giants, the merciless ones, the gods and goddesses, hunted them, picked them up squealing, conditioned them, dropped them into the big educator. To breed and suffer. As Karen had suffered:

Now, Disraeli and Palmerston gave the signal. Lights blazed along the facets of the communicator. Their message flashed down into the hole, one sentence changed into another and back, over and over as the letter drums rolled.

IRECOGNIZEYOU
QUEENVICTORIA
OFFERIDENTITY
CONSIDERPEACE

The rats were trying to parley!

For the first time, Utrecht stared down into the hole that had once been hidden by the mausoleum—Earth's navel, as Palmerston had put it. The light coming from it was confusing. Not exactly too bright. Not exactly too dim. Just—wrong. Nastily and disturbingly wrong. And—yes, he swore it, something was moving down there. Where there had been emptiness, a confused shadow moved. The bitch goddess was coming to investigate!

Utrect still had his flick-knife. He did not decide what to do; he simply started doing it. The others were too late to hold him back. He was deaf to Hoggart's shout of warning. Avoiding the signalling device, he ran forward and dived head first into the dimension hole.

It was a color he had not met before. A scent in his nostrils unknown. An air fresher, sharper, than any he had ever breathed. All reality had gone, except the precious reality of the blade in his hand. He seemed to be falling upwards.

His conditioning dropped away, was ripped from his brain. He recalled then the simple and frightened peoples of the caves, living in community with some other animals, dependent mainly on the reindeer for their simple needs. There had not been many of them, comparatively speaking.

And the terrible lords of the starry mountains! Yes, he recalled them too, recalled them as being enemies whispered of in childhood before they were even seen, striding, raying forth terrible beams of compulsion . . . lords of stars and mountains . . .

The vision cut off as he hit dirt. He was wearing a simple skin. Grit rasped between his toes as he stood upright. He still had his knife. Scrubby bushes round about, a freshness

like a chill. Strange cloud formations in a strange sky. *And a presence.*

She was so gigantic that momentarily he had not realized she was there. Of course I'm mad, he told himself. That guy in Vienna—he would say this was the ultimate in mother fixations! Sure enough, she was too big to fight, to horribly horribly big!

She grabbed him up between two immense pudgy fingers. She was imperious, regal, she was Queen Victoria. And she was not amused.

The dummy viewing the scene from Dr. Froding's armchair stirred uncomfortably. Some of the things one saw on 3V nowadays were really too alarming to bear.

Dr. Froding entered and pointed an accusing finger at the dummy.

"I accuse you of being the real Dr. Froding!"

"If I am the real Dr. Froding, who are you?"

"I am the real dummy."

"Let's not argue about such minor matters at a time like this! Something I have just witnessed on the box convinces me that the world, the galaxy, the whole universe as we know it—not to mention New York City—is about to be destroyed by lethal interstellar gas."

Froding jerked his head. "That's why I want to be the dummy!"

Now On Sale

GREAT SCIENCE FICTION

The ILLUSION SEEKERS

By P. F. Costello



The "seekers" walked straight and true—"men" in a world peopled by "variants." The only problem was that death followed wherever they roamed striking down all who were different!

"RUN on home and leave us alone — you freak!"

The speaker was a fourteen-year-old boy. He wore loose homespun clothing that was no more than a sack draped on his body. There was a woody growth covering one side of his face.

A ten-year-old girl with a diminutive third arm dangling from her right shoulder picked up a rock and threw it, barely missing the tall, well-proportioned, sixteen-year-old boy who stood apart, tense, ready to run.

"I'm not a freak," he said. "And anyway that's no way to talk. We're all human beings. That's what my mother says."

"Then run on home to your mother," a sixteen-year-old boy with the backs of his hands studded with finger-like growths taunted. "We don't like you."

"Oh, let him play with us," an eight-year-old said.

"No!" the girl who had thrown the rock said, turning angrily on the speaker, her diminutive third arm jerking limply.

"Throw rocks at him!" another shouted, suiting action to words.

Randy Peters retreated under the barrage of stones, then turned and ran. There were tears of anger in his eyes. Anger and resentment.

It had always been this way. He had no woody growths, no extra arms or legs, no extra fingers or toes. He had nothing except a normal body yet the others called him a freak.

He ran until his tormentors were out of sight, then slowed to a walk. There was little underbrush. His bare feet padded noiselessly on the carpet of pine needles under the trees.

He passed within sight of a structure of sod and logs where people

were moving about. Eventually he came to the road.

Randy Peters parted the sarvis berry bushes warily, watching the approach of the stranger along the *road from the east*. His eyes were very wide. No one had come from out of the east in his memory. And he had never seen a man such as the one who was coming in all his sixteen years of existence. Taller than his own father, beardless, his clothes shaped themselves to him rather than hanging like sackcloth. The man advanced, whistling a strange tune that was itself miraculous in its beauty.

He held his breath as the stranger came close, about to pass him unnoticed. But suddenly his heart stopped too. The man was not passing. Instead he was looking at him, a smile spreading over his face.

"Hello, there," he said cheerfully. "Why do you hide from me?"

"I wasn't hiding," Randy said, straightening up. "I was just watching you. I've never seen anyone from out of the east before."

"From out of the east?" the stranger echoed, his eyes going down the lane of half-over-grown concrete highway he had already traversed in his journey, then returning to study the boy with grave friendliness. "What's your name, boy?"

"Randy Peters," Randy answered, his eyes frankly surveying the stranger, and seeming to come to a surprising thought from his survey. "That's funny!" he added abruptly. "You are like me!"

"But that's as it should be," the stranger said. "Or are there so few like you in this country?"

"My mother and father aren't like

me," Randy said. "What's your name?"

"You may call me Raymond, the Illusion Seeker," the stranger said gravely. "I would like to meet your mother and father, Randy, if you will take me to them."

"They are afraid of strangers," Randy said, shaking his youthful head. "I'm not afraid, but my father would whip me. What is an illusion seeker?"

"Someday when you are full grown I'll tell you — if you find me," Raymond, the Illusion Seeker, said. "If you were to go home slowly so that I couldn't help seeing where you were going, your parents couldn't blame you for my coming."

Randy's smile was quick. "I'm not afraid of being whipped," he said. "And if they learned I had refused to bring you with me they would whip me anyway."

He stepped out of the sarvis berry bushes and stood beside Raymond, tall, rather thin, but straight and well formed, his thick blond hair a mane that dropped to his shoulders, having never been cut.

"In what way are your mother and father different from you and me?" Raymond, the Illusion Seeker, asked as they walked leisurely along.

"You will see," Randy said calmly. After a long silence he elaborated a little. "My father has many little thumbs growing out at the end of each big thumb. They are well formed and very beautiful. He had many little fingers growing from the backs of his hands. They are ugly and he pulls them off sometimes, but they grow back again. And the skin over one shoulder and part of his neck and face is thick and hard like wood. Brown wood."

"And your mother?" Raymond asked, smiling as if what he had heard was nothing out of the ordinary.

"Her head is soft," Randy said. "She must sleep sitting up, and sometimes she is crazy. Then my father squeezes her head a little with his fingers and she goes to sleep. When she wakes up she has a nosebleed." After a while he added, "Her bones are soft, too. But she can walk."

He turned off the road from the east and started through the woods, the tall pines sighing in the gentle wind. Neither he nor Raymond spoke again. Soon they came to the log and sod structure Randy had always known as his home.

Randy ran forward, knowing that his mother and father would be lurking in the gloom of the entrance behind the cloth curtain. They did that even when neighbors first approached.

Behind him Raymond, the Illusion Seeker, studied the construction of the hovel with keen interest. The walls had been formed by piling up rectangular hunks of weed sod a foot wide, until a height of nearly seven feet was attained. Then felled pine and tamarack logs of medium diameter had been placed close together for the roof, and wet clay had been packed over this, high in the center so that there would be natural drainage. It was a structure that could well last a lifetime without damage.

But now Randy's parents were coming hesitantly into the open, led by their son who dragged each by a hand. The elder Peters was broadshouldered with a thick straw colored head of hair that covered his shoulders, and a heavy beard that grew profusely except where the woody growth of skin covered part of the right half of the

face. This was partially concealed by what was obviously a clumsy attempt at deliberate coverage by pulling a few locks of hair over it. His left arm was behind his back. His right hand, held by Randy, was as the boy had described it.

The thumb with its many miniature pink, beautifully formed thumbs, did indeed have a strange beauty to it.

Randy's mother had a certain beauty of features enhanced by a soul deep expression of shyness that centered around her large, intensely blue eyes. Her head above the eyes was round in a queer way. Her legs were bowed outward and seemed to bow even more with each protesting step.

"Hello," Raymond said, not appearing to notice anything unusual.

"Hello," the man and woman answered, embarrassed.

"You're a stranger," Randy's mother said brightly.

"Hush, Mary," the elder Peters said softly. Then to Raymond, "Don't mind her, stranger. Sometimes she's not right in her mind."

"But, but —" Mary protested.

"You're quite right, Mary," Raymond said, ignoring the elder Peters' remark. "I'm a stranger from the east. My name is Raymond."

"Raymond, the Illusion Seeker," Randy spoke up. "And he told me he would let me know the meaning of his name when I grow up."

"That's very nice of him, Randy," Mrs. Peters said with a timid yet dignified defiance directed at her husband.

"You will not be wanting to stay here the night?" the elder Peters asked, his manner suddenly unfriendly.

Raymond hesitated, studying the grotesque, partially bearded face.

"No" he agreed softly. "I must go on. There are others living to the west?"

"There are others," the elder Peters said, his hands gripping Randy's shoulders firmly to keep him silent.

"Then I will go," Raymond said. He looked calmly into the eyes of the man and woman, then, smiling, reached into a pocket of his strange coat and drew out a pinch of fine golden dust.

"A charm to protect Randy from all harm," he said stepping forward.

Randy grinned in delight. The fingers holding the golden dust flicked without warning, the dust flying into his mouth, his eyes, and his nostrils. Randy's cry of instinctive alarm ceased with the surprised realization that the dust was not smarting as other dust.

"What is this?" he heard his father say threateningly as he was shoved backward against his mother.

"Witchcraft," Raymond, the Illusion Seeker, whispered dramatically. "It is a spell." Then in normal tones that somehow seemed to contain an infinite sadness. "In three days death will breathe through the trees, and though it shall touch him lightly, *he shall live.*"

But Randy, though able to recall the words later, did not consciously hear them. He was feeling the taste of the golden powder. It was a strange seasoning taste, slightly similar to that of moldy bread. In his nostrils it smelled dank.

Through a blurred film that covered his eyes he saw Raymond, the Illusion Seeker, take a strange-shaped object from another pocket and hold it extended. From it a white powder sprayed briefly. Then he was leaving, down the path by which he had come.

And Mary, his mother, was trembling against Randy, while low threatening sounds came from his father's throat.

The elder Peters had to squeeze his wife's head a little after Raymond, the Illusion Seeker, had gone. She slept, but her face was flushed, and Randy was forced to stay near her and keep her upright in the sleeping chair that had been hers ever since he could remember.

When she awoke she was troubled and full of worries. The elder Peters threatened to squeeze her head again unless she quieted down, but he did not carry out his threat.

Much of the time during the night she kept Randy with her, hugging him so that the bones in her arms curved, straightening slowly when they were released.

Randy remained passive, knowing that he was his mother's only comfort when she was upset. His thoughts were alive with excited speculation behind his calm exterior.

What was an illusion seeker? The stranger, Raymond, had made a great impression on him. There were many reasons for that. The road from the east had always symbolized Mystery. Within his memory no one had ever come from there.

But there were many stories that added to the mystery. Far to the east it was said there were gigantic mountains, each but a single stone, like the scab-rock fields in the south canyon magnified a million or more times. These giant rocks were without vegetation. Not a tree, nor even the sarvis berry bushes could grow there.

But the road to the east, the stories said, continued on through this strange

country of rock, even though no man could follow it and live.

Raymond, the Illusion Seeker, had come over it though. So the stories were wrong. A man could live on it, A man such as he would someday be, because he was like Raymond. His bones were straight and strong. His head was hard. He had only five well formed fingers on each hand and five toes on each foot, and nowhere on his body did extra arms or legs grow, Nor was there any of the woody growth on him that afflicted his father and most of the other people he knew.

The words of Raymond came into his thoughts. The stranger from the east had placed a charm over him with dust that did not smart. A charm that would protect him from all harm.

The charm dust had tasted of brown mold, though it had been bright yellow. It was powerful. It had made his vision swim, though it hadn't hurt his eyes. It had had a tangy smell that went clear in.

The test of the charm would come in three days, he had said. In three days death would breathe through the trees and touch him, but not harm him.

Morning came. Randy's mother and father were possessed of a new mood. Usually they were somewhat gay, but now they remained indoors, and when they had to go outside they glanced often and fearfully into the treetops. Sometimes they shivered in what Randy surmised to be fear.

But on the second day after the visit of Raymond, the Illusion Seeker, Randy himself shivered, and knew that it was not from dread, nor anything else within his mind, but from the touch of something unseen.

And the branches of the pines moved

strangely at the passage of some invisible thing. Or so it seemed as the chill invisible breath touched him.

On the third day the sun hid behind a dull gray sky. Randy's mother and father huddled together, shivering uncontrollably. They ate nothing. They drank often. As the shadows of the night began to creep from the west Randy rose from a game played with small stones, feeling the presence of something that filled him with a strange feeling. Stranger than anything he had ever experienced before.

He ran inside to be with his parents. They were huddled together in one corner, wrapped in each other's arms. But they were dark. The light of life did not shine from them.

Not until that moment did Randy know the full meaning of the words of Raymond. Death had breathed through the trees. It had touched him only lightly and he had felt its touch. But it had touched his mother and father, taking the light of life.

That night for the first time he was alone.

At sunup he stirred himself from the dirt floor at the feet of his mother where he had lain all night. It had rained during the night, and though it was not raining now, it was certain to begin again before long.

Quickly he dragged his few personal treasures out of the house and stacked them under the split shingle roof of the grain shelter. He forced himself to eat bread.

Then he set about walling up the entrance to what had always been his home. He used the ax. His father's ax. Once he had been permitted to hold it in his hands for a few brief, ecstatic seconds, running his adoring

fingers over its smooth, polished steel, while his father had stood ready to grab it away from him lest he maim himself.

Now there was no one to gainsay him. The ax was his! But it gave him no thrill. He used it to cut rectangular strips of sod for the wall, his thoughts full of memories.

It rained. He worked on, the rain soaking his head, making his homespun clothes cling to him, hindering the freedom of his movements.

By noon it was done. The entrance was sealed, and one with the rest of the walls.

Randy ate again, surveying his own treasures while he ate. Reluctantly he came to the decision that he must leave them behind. The rag doll that had been his only playmate, the pretty stones he had collected, and the dozen other things that had formed the foundation of his dream life.

His common sense was whispering that never again would he be able to look to anyone to take care of him. He knew that none of those neighbors he had seen occasionally would welcome him into their circles. In fact, he didn't want to remain here. Someday he would come back on a pilgrimage to the grave of his parents, his home.

But for now his only desire was to put as much distance as he could between him and all he had known. To travel into the west along the road from the east as Raymond, the Illusion Seeker, had done.

For the first time since the death of his parents he thought of Raymond. And suddenly he knew what he had to do. He had to hurry after him and find him, for he was the only

one in the world that was like him physically.

Now there was haste in his movements. He filled four small bags with corn and slung them over his shoulders so that they balanced. Then with the ax in his right hand he went down the path to the road from the east.

A mile along the road was a path leading up to the place where the nearest neighbors lived. He paused at the foot of that path in indecision. But even if the Illusion Seeker had stayed here he would be gone now.

So Randy hurried on toward the west. And because he turned neither right nor left he reached the western foothills without discovering that he alone of all those who had lived in this valley was still alive.

At sunup Randy continued his journey. The road from the east went straight for the most part, at times cutting through hills, at other times crossing depressions on a hill of its own, so that rather than rising and falling with the terrain it managed to maintain a uniform upward slope.

At one place a flood had washed it completely away years before, so that he had to climb down and up again. A gigantic slab of concrete rose at a steep angle out of the ground fifty yards off the line of what had been the road at this point. He went over and examined it, marveling at it.

But he wasted little time. Raymond, the Illusion Seeker, had four days' start on him, and it would take fast travel to catch up with him.

In the afternoon he sighted a pack of wild dogs. They appeared on a ridge a quarter of a mile away.

He became uneasy. His father had brought home the carcass of a wild

dog when he was ten so that he would know what they looked like. While Randy had studied the dead creature with wide eyes the elder Peters had told him that it was the most dreaded of all wild animals, traveling in packs. Treacherous and insanely vicious, it delighted in cutting its victims down with its sharp teeth and torturing them while being careful not to kill them.

Once long ago, he had said, man and the dog were friends, living together; but that suddenly the dogs had turned against their friends, hating them as much as they had loved them.

And though the dogs shunned the places where men lived, whenever they caught a man away from his refuge they showed him no mercy.

Randy hurried his steps, then slowed to his normal pace. Of what use would it be to hurry? And anyway, Raymond, the Illusion Seeker, had placed a charm on him so that no harm could befall him. The dogs couldn't hurt him because of the charm, and he could hurt them with the ax.

A few moments later the dogs appeared through the trees, approaching the road at an angle, single file, at a leisurely trot.

At this point the road from the east was on a ridge ten to fifteen feet above the woods on either side. The dogs came up on the road fifty yards ahead of Randy and sat down to wait for him. He counted them. There were between fifteen and twenty, of all colors and sizes.

Randy began to have misgivings. The way they waited was too quiet and ominous. But Raymond had said no harm could befall him. Raymond had also said the breath of death would touch him lightly. The one

thing had been true so the other must be equally true.

As he came up to the dogs they looked at him with slowly blinking orange eyes, their tongues hanging from the side of their mouths, their teeth long and strong.

He let the handle of the ax slip down in his loose fist as he passed the first two dogs. He sensed their sudden charge and sidestepped so that they leaped past him, silent except for the click of their teeth closing on empty air.

With a quick shrug of his shoulders Randy got rid of the sacks of corn. The ax came alive in his hands, flashing in arcs about him too fast for the eye to follow.

The dogs closed in and were thrown back, maimed and bleeding. The ax turned red. The smell of blood was sickening.

One of the brutes got through and sliced the calf of Randy's leg, then darted to safety. Now they stopped their attack, staying back, watching him.

Four of them were dead. A fifth, his entrails long, in the dust, was crawling toward the embankment.

Randy watched the ring of dogs, his breath coming fast. In his mind were two strong emotions: A fierce, wild delight, and amazement at that delight.

He had never fought anything. He had never killed anything. Yet he was happier in a new strange way than he had ever been in his life.

He wanted to shout but he preferred to match the dogs in their silence. With a tight grin on his lips he stopped darting glances at the dogs behind him and advanced toward those in front of him.

They remained where they were. He watched their eyes, and when those yellow eyes focused on something behind him he turned swiftly, his ax arcing to catch the three who had leaped at him.

He found his eyes and arms acting together, guiding the ax. A part of his mind seemed disengaged from the rest, directing what should be done, planning in advance.

When the dogs drew back again there were seven dead and dying. The others shifted their gaze from Randy to their dead companions, pulling in their tongues and closing their mouths thoughtfully.

Without warning Randy darted forward and killed two outright. They hadn't moved, expecting him to repeat his first maneuver.

With this the others, as at a signal, turned and left. Randy leaned on his ax, watching them go.

Suddenly the gash in his leg was smarting and burning. He grinned fiercely and loaded the bags back on his shoulders. Soon he would come to some stream where he could cool it in the running water and cover it with mud.

In his heart was a fierce exultation. Raymond, the Illusion Seeker, had spoken the truth. No harm could come to him.

It was late afternoon before he came to a stream within sight of the road from the east. In the morning, in spite of the bathing and cooling mud, his leg was too stiff and sore for travel. It was a week before he could do more than hobble. When he did take up his march it was slow and tedious, so that altogether it was ten

days before he crossed the mountain into the valley of the lake.

He had known there would be the lake. His father had told him that beyond the western mountains was a valley with a lake.

By now his leg was stiff only in the morning, the stiffness wearing off quickly with exercise.

Loneliness made him hurry. He no longer had hopes of catching up with Raymond, the Illusion Seeker, but the sight of any living person was something to look forward to. And as he studied the beauty of the long rambling lake from the heights of the mountainside he was descending he felt that people would be surely living here.

The road from the east went down and down until the lake was lost to view behind the tall trees. Soon every mile or so there was a worn path leading off from the road.

Finally Randy decided to follow one of these paths and greet whoever lived at its end.

The path wound through the trees following the curve of the hill. After a mile it opened abruptly on a clearing where there were three sod houses within sight of one another.

No one was in sight. Randy approached slowly into the clearing, his eyes searching for signs of movement in the dark doorways.

"Hallo!" he called cheerfully. But there was no answer.

Hesitantly he went up to the doorway of the nearest house and peered inside. As his eyes adjusted to the gloom he saw why no one had come to greet him. There was a man and a woman. They were huddled on the dirt floor in a far corner. And there were two boys and a girl.

All were dead.

Randy advanced into the long narrow room, his eyes large and round with wonder.

The dead man had a large purple growth covering the left side of his head — a common enough thing, since several of the neighbors in Randy's own community had borne similar growths.

The woman's entire face and forehead was covered with fine hair which she had kept combed away from her eyes. There was a large growth pushing out her right hip under her dress.

The girl's hands ended in many long, reedlike fingers with small delicately wrought nails. Her lips drew back in death, revealing double rows of thin round teeth. Her age had been around ten years.

The two boys seemed to have none of the common varieties of differences. Until Randy noticed the flattening of their heads where they lay against the floor, and knew that they were soft-boned.

Slowly Randy backed out of the hovel. Outside he turned toward the other sod houses. And minutes later he stood in the center of the clearing with full realization of the horror that had preceded him across the mountain. In each of those sod houses was nothing but death.

Numbed in mind and body, he began the task of walling up the doorways.

"If you try to wall up the houses of all the dead you'll be dead yourself before you get done."

The quiet, kindly voice burst into Randy's conscious thought with startling abruptness. In a swift movement he dropped the heavy chunk of sod he was carrying and turned, half crouching.

Five men were standing where they had stepped out of the forest behind him. They wore friendly smiles. Randy relaxed slowly, sensing no danger.

Then the implication of the words sunk in.

"What do you mean?" he asked, frowning. "You sound like there are more dead than these here."

A heavy-bearded man with fingers growing from the backs of his hands like small sausages answered.

"There are two or three thousand dead here in the Cour d'Alene shore country," he said. "We five are all that are left alive."

"And if we had been here when it happened," another with an enormous head and very narrow shoulders, spoke up, "maybe we'd be dead too."

"Where you from, son?" the first one asked.

"Across the mountain," Randy said nodding toward the east. "My mother and father died—like this. I left in search of Raymond, the Illusion Seeker."

"Him!" A very short very broad man had spoken, spitting against the trunk of a tree. "Old man Smith was still alive when we got to him. He said that guy did the killing. With a curse or something."

"Oh, but he didn't!" Randy said quickly. "He said that the breath of death would come in three days, but he gave me a charm to protect me from all harm."

"A charm?" the short man echoed skeptically. "Then why didn't he give your Ma and Pa a charm?"

"I — I don't know," Randy said. "But how could he kill them when he didn't touch them, and they didn't die

until three days later?" He stared defiantly.

"A curse," the man said matter-of-factly. "We know such a thing is possible. Where's this charm he gave you?"

"It was some yellow dust," Randy said. "He threw it in my mouth and nose and eyes."

"I've been over east of the mountain," another of the five said. "Your Ma and Pa the only ones that died?"

"Yes," Randy said. "That is, I don't know. I didn't go around and find out. When my mother and father were dead there was nothing to make me stay. I lit out and came here after Raymond."

"The other kids never liked you, huh," the bearded man said sympathetically. "They resented your not having something wrong with your make-up."

Randy flushed and didn't answer. "How long ago was this that Raymond, the Illusion Seeker, visited you?" he continued.

"Ten days ago," Randy said.

The five looked at one another and nodded grimly.

"You'd better stick with us—what's your name, son?" the short broad man said.

"Randy," Randy replied. "Randy Peters."

"Stick with us, Randy," the short man went on. "There's no one else alive for miles around. We've been looking."

"But I want to find Raymond," Randy said frankly.

"So do we," the short man said grimly. "Forget that walling up the doorways. There's too many of them even to start. We're leaving this valley of the dead anyway. Come on."

He gave Randy a gentle, friendly shove with a broad short-fingered hand. They all went toward the path to the road from the east that Randy had left when he entered the woods.

As they walked along they introduced themselves. The heavily bearded man was the leader. His name was Dave. The very short, very wide man was Fred. The other two, so much alike they were probably twins, were Frank and Jack.

They walked with the swift easy gait of experienced walkers, following the road from the east as it went north along the lake, which Randy now learned was called the Cour d'Alene.

These men, Randy soon discovered, knew far more than his father had ever taught him. They called the country where he had been born the Panhandle, and said that the Panhandle and the Cour d'Alene were all a part of the Idaho country.

They were heading toward the Spokane country, and beyond the Spokane country was nothing but desert.

They said that Raymond, the Illusion Seeker, had no more than two days' start on them, and would probably still be in the Spokane country when they reached it.

They all swung their axes suggestively when they talked of Raymond, but they said nothing more against him.

With the northern tip of Lake Cour d'Alene in sight the road from the east dipped down abruptly and emerged onto a vista that brought a gasp of amazement to Randy's lips.

As far as he could see were ruins of strange houses of rotting wood and stone of various kinds, some of them

like the stone of the road from the east.

Dave and Mitch were in the lead ahead of Randy. They had taken no more than half a dozen steps away from the edge of the woods when they stopped abruptly and turned.

"Back and find a tree," they said urgently. "Dogs!"

Randy stared around him, still bewildered by the sight of the ruins of Cour d'Alene City. The five men were already climbing the nearest trees, leaving their axes on the ground.

Now Randy caught sight of the dogs. They were coming toward him in an easy lope, their long red tongues hanging out. In the lead was a large, huge shouldered brute. Randy estimated their number at ten or eleven.

A thrill of anticipation shot through him. Here was a chance to prove to these men that Raymond had really given him a charm against all harm.

As silent as the approaching dogs, he went forward to meet them, his ax ready.

"Hey, you crazy kid!" Mitch's voice sounded behind him. Randy flicked his tongue along his grinning lips, not bothering to reply.

The lead dog hastened his pace. The others dropped behind, puzzled by this foolhardy human.

Utterly sure of himself, the lead dog suddenly spurted, leaping with open jaws toward Randy's throat. Randy sidestepped swiftly, turning with the passing of the brute and neatly severing the spine in the neck with his ax. In a continuation of the movement he pivoted clear around to meet the other dogs.

They stopped abruptly, then slowly formed a circle around him, ten feet away from him. Two of the dogs went

up and sniffed of their dead leader, licking their chops nervously.

Now there was not a sound. The men in the trees, realizing their cries were of no use, and seeing what Randy had already done to the largest of the dogs, were remaining quiet, watching.

Randy repeated his first maneuver used on the other dog pack, darting toward one point on the circle and turning at the right instant to catch those that had charged from behind. But now he had no time to plan. The dogs were charging in.

With all his senses keyed at high pitch he was dodging and swinging his ax, making every blow count.

In the last tenth of a second of the battle the sole surviving dog made a desperate attempt to escape. Randy ran after him, bringing him down on the run.

Panting from the exertion he stooped down and cleaned his ax in the dirt. From the corner of his eye he watched the five men descend slowly from their perches in the branches of the pine trees.

They came toward him, finally stopping near him, their eyes on him.

"I told you Raymond, the Illusion Seeker, had given me a charm to protect me from all harm," Randy said with quiet gravity.

"Would you kill a *man* with that ax?" Fred, the one with the bulbous head, asked, his voice tight.

"Shut up, Fred," Dave said harshly.

"Well he did that like he took pleasure in it!" Fred shouted thinly.

"I wish *I* could do it," Mitch said admiringly. "Many's the time I've spent a day or two up a tree because of the dogs."

"And we would've this time except

for Randy," Dave said. "Of course he wouldn't kill a man."

"Of course not," Randy said. He stood up, swinging his ax as though it were part of his arm. "Dogs are enemies. They never make peace. My father taught me that."

Fred watched the blade of Randy's ax as it flashed in the sunlight. He started to shiver.

"I'm cold," he said, his teeth chattering.

"Let's move on," Dave said gruffly.

In an hour they left the crumbling monuments to the unknown past that was the city of Cour d'Alene behind. Fred, his bulbous head often wobbling precariously above his narrow shoulders, his teeth chattering, cast a depressing spell over everything.

"It's the curse," he kept mumbling.

"The breath of death," Randy said.

"Not a curse. Raymond is good. Why should he put a curse on anyone?"

"Why should he give you a charm against all harm?" Fred chattered angrily. "Is it a coincidence that you are the only one this side of the mountains or the other that's not adorned with some deformity?"

There was a long silence, interrupted only by the sounds of their bare feet padding on the pavement of the road from the east, and Fred's chattering teeth.

"They aren't deformities," Randy said quietly ten minutes later. "My father said that whatever God gives is not a deformity, but is given us to carry out His plans."

Frank and Jack, the brothers, gave a derisive, "Oh yeah?" But Dave shook his head at them warningly.

"Your father was probably right, Randy," he said. "We are too stupid to understand. We don't know why

we're here, nor where we're going when we leave here. It may be that what we think of as deformities are really very important things in *His* plans. But that's all the more reason why Raymond, the Illusion Seeker, should not place a curse on us all."

"But he didn't —" Randy bit his lip and gave up. In his own mind doubt was beginning to grow. He refused to recognize it. But that doubt increased his desire to find Raymond. Raymond would tell him the truth. Raymond would tell these men how wrong they were. If they *were* wrong. But they *must* be wrong! It would be too monstrous a thing: Raymond, the Illusion Seeker, placing a curse on all these hundreds of people so they would die. It would be murder!

The others, watching him as they walked along, saw the reflection of his thoughts on his face. Then they would look at one another knowingly, glance at Randy's swinging ax, and nod in silent hope.

If they could convince Randy of the truth of what they believed, they could get him to kill Raymond.

They made camp at sundown. During the night Fred died, his teeth chattering to the end, his eyes sinking deeply under his bulging brow.

In the morning Frank and Jack were shivering, their faces ashen from the realization that they were about to die.

Dave and Mitch walked away from camp and talked together in low voices, their eyes turning to Frank and Jack while they talked. Then they came back into camp.

"We're leaving you here," Dave said abruptly to them. "Mitch, Randy and I are pushing on." When Frank and Jack started to object he cut them short.

"We should have left Fred," he said curtly. "If we had, maybe the curse wouldn't have spread to you two. Anyway, it's better for you to wait here for death. One place is as good to die as another." He looked significantly at Mitch and Randy and said, "Let's go."

"You two can go," Randy said. "I'm staying. One place may be as good as another to die, but if some dogs came this way Frank and Jack couldn't get away from them."

"Thanks, Randy," Frank chattered, overcome by a chill.

Dave rubbed the mass of fingers on the back of his right hand against his clothes in a gesture of irritation and anger.

"You aren't being sensible, Randy," he said. "They'll be dead by tomorrow." His eyes avoided Frank and Jack as he said this.

"That's all right," Randy said. "I'm staying. You can do what you want to."

He swung his ax casually, sensing that all four of them were afraid of him — afraid to push their will on him too strongly. Although he didn't realize it the death of his parents and his success in two fights against packs of wild dogs had transformed his entire character. More than that, was his conviction that Raymond, the Illusion Seeker, had made him safe from all harm.

Dave and Mitch studied each other uncomfortably.

"We'll stay," Dave said abruptly.

The day wore along slowly. Randy sought the shade of the trees and lay down. His thoughts drifted. He thought longingly of his mother, fiercely protective, always bearing her

suffering cheerfully. In his heart he felt that her too-round cranium and her grotesquely bowed legs were the most beautiful in all creation. Certainly her mother love for him had been the most beautiful thing in his life, just as his father's firm hand and solid body had been a bulwark of strength to him.

Dave, in many ways, was like his father had been. His hands were the same except that he didn't have the beautiful fanned out miniature thumbs that had been his father's pride. Basically Dave was like his father in temperament, though. And Randy did not find his new strength within himself sufficient.

He opened his eyes and raised his head, looking around for Dave. He found him sitting with his back to a tree not far away. Randy rose and walked casually over to where Dave sat, and squatted down. Dave opened his eyes and looked at him without expression.

"You're a lot like my father was," Randy said, pulling loose a grass stem and chewing on it.

Dave blinked thoughtfully over this from underneath his shaggy eyebrows. A heavy hand, its back studded with many small fingers that seemed somehow not out of place, came up and stroked his beard that lay like a mat on his chest.

"I may have known your father, Randy," he said after a while. "That would have been before you were born. At least I knew a fellow the other side of the mountain then. Can't remember his name. Had fan thumbs and a broad band of brown thick skin from his face down over his neck onto his shoulder."

Randy nodded solemnly. "You knew him."

"Mighty nice girl he married," Dave said. "Soft boned and a little crazy at times, but any man would have been lucky to get her."

"That was my mother," Randy said, his voice strong with pride.

Dave nodded gravely.

"I know now where you get your fine qualities," he said. "Should have guessed." He was silent a long time. "My own woman and two girls were dead when I found them," he said abruptly. His eyes hardened. "The curse Raymond called the breath of death." He nodded toward Frank and Jack. "What ails them."

He got to his feet and strode away. Randy watched him walk away, a soft light in his eyes. For the first time since the coming of Raymond, the Illusion Seeker, he was happy.

At sundown Frank died. Jack went to pieces after that, screaming against the Illusion Seeker, cursing him, crying at the injustice of things that he should have to die like this.

Randy, standing apart, his eyes on the red skyline to the west, trying to blot out the sound of Jack's suffering, felt a heavy hand laid gently on his shoulder. He looked around quickly and saw Dave's bearded face.

"He shouldn't last much longer," Dave said. "Mitch and I think we ought to push on tonight. We've been resting all day."

"Yes," Randy said, his voice tight. "We've got to push on and find Raymond so you can find out it isn't his fault."

"And if he admits it is?" Dave asked.

Randy shook his head slowly and firmly. Dave opened his mouth, then closed it and turned away.

The sky was clear and blue except for an occasional misty cloud. The moon was a bloated crescent with three scintillating points of light in the darkened area, poised like stars between the horns of the crescent. In the bright crescent itself were a half dozen points of sunlike brilliance. But these had always been a part of the moon so far as Randy, Dave, and Mitch knew, and they paid no special attention to them.

The road from the east went north a few miles, then turned and went straight west in a direct line. Trees were scattered sparsely. Now and then the silence was broken by the distant howl of a wild dog. More often twin dots of light flashed briefly ahead or to one side, indicating the presence of a cat.

Once a throaty roar sounded from overhead, seeming to originate from the south, and sweeping across the sky to the north in the space of three deep breaths. The three travelers discussed this mysterious sound. They had never heard anything like it before.

"There must be lots of things we don't know about in the world," Mitch said philosophically.

"It sounded something like a voice," Randy said. "It makes me think of the breath of death when it visited me and touched me lightly. I saw the branches of the trees move like some spirit was passing through the trees. Then I felt a chill touch that seemed to go right through me and out again. If it had happened before Raymond gave me the charm against all harm I would have been afraid."

"Did it make a sound?" Dave asked, interested.

"I don't think so," Randy said. "I don't remember hearing one. In

fact, there may have been no connection. I just thought I saw the branches move. It could have been just the wind."

The road from the east began to have other roads leading off from it. At one place there were five branch roads, some of them in better condition. In every case where there was a choice Dave insisted they take the branch going west.

The sky at their backs was beginning to assume the gray light of dawn when they came to a large field smelling of recent grassfire, and charred so that it appeared black over a considerable distance.

Across this blackened field could be seen the vague outlines of something that gleamed metallically in the morning light. Voices drifted to them.

"Come on," Randy said eagerly. "Raymond, the Illusion Seeker, may be here."

He started into the field toward the strange object, Dave and Mitch following more slowly.

Suddenly there was a coughing roar that settled into a deep, throaty blast of deafening proportions. The shape of metal seemed to grow larger.

Dave and Mitch turned and ran. Randy stood his ground, erect, defiant, his ax held ready. The thing rushed toward him, details of shape emerging as it neared.

It rose upward as if to leap on him at the last moment. He had a brief impression of something long and tapering, with a needle-like nose and four streams of white interlaced with fire rushing out behind it. Then it had passed overhead and was gone.

As he turned to watch its departure he heard the same throaty, muted roar he and his companions had

heard earlier, fading to nothing in a brief minute.

Now Dave and Mitch came back, shamefaced but full of excitement.

"What was it?" Mitch asked.

"It was man-made," Randy said, positively. "Maybe there were men in it. I seemed to sense eyes on me as it passed over."

"Maybe Raymond, the Illusion Seeker, was in it," Dave said, adding a curse under his breath.

"Let's go look where it was," Mitch suggested more practically. "There may be signs we can read to find out what it was."

They went across the field toward the moon, which was low on the horizon, its light changed to a pale white by the rising sun in the east, its several pinpoints of brightness standing out so that they seemed like separate stars superimposed on the moon.

There were broad shallow ruts in the soft earth. Three of them, spaced about six feet apart. They began abruptly where the strange thing had taken into the air, and led to where it had been standing when they first had seen it.

Randy, Dave, and Mitch carefully studied the ground, finding the indentations of feet, the tracks strangely shaped as though whoever had made them had had on some sort of foot covering with stiff, trim-edged soles.

"That's the Illusion Seeker!" Randy exclaimed. "He wore things that made tracks like this and made sharp sounds on the road from the east when he walked."

"Here's some that lead away," Mitch said. "Maybe he didn't leave in that thing. Let's follow these tracks and see."

The three of them walked swiftly, their eyes following the tracks.

"He was running along here," Dave mumbled.

They hastened their steps. Dave and Mitch took firmer grips on their axes, their lips compressing. Occasionally their eyes lifted to look ahead, in the hopes they would see Raymond.

Suddenly Mitch touched Dave's and Randy's arms and came to a stop, pointing ahead. A quarter of a mile away was a lone figure, walking swiftly.

"We can cut over to the left in those trees and get ahead of him," he said. "Randy, you wait until we have time to get ahead, then call to him and walk up to him openly. That way he'll think you're alone. If he starts anything we can rush him from behind."

He winked at Dave so that Randy couldn't see it. Randy smiled to himself, coming to the silent conclusion that Mitch and Dave were afraid, and wanted to use him to see if there was danger, while they remained hidden and ready to run.

"All right," he said. "The trees come close to where he's heading. I'll stop him there. You get close enough so you can hear and I'll ask him if he killed everybody. Then you'll see that he didn't."

He watched Dave and Mitch disappear into the trees at a swift trot, shifted the sacks of corn on his shoulders, and started up again, his eyes on the lone figure ahead.

He had cut the distance separating him from that figure to a hundred yards when the man ahead turned to look back and saw him.

"Hallo!" Randy called cheerfully. "Are you Raymond?"

"Yes," the man called, stopping. Randy hurried up.

"Do you remember me?" he asked.

There was a doubtful scowl on Raymond's face. Then his eyes lit in recognition.

"Of course!" he said. "You're Randy."

"When my mother and father died I followed you," Randy said. "I thought I'd never find you."

Raymond, the doubtful scowl returning, walked along beside Randy. Randy managed to direct their steps toward the edge of the woods without seeming to do so, keeping up the conversation by telling Raymond of his encounter with the dogs.

At the edge of the woods he managed to get Raymond's back to a clump of bushes. He slid his bags of corn off his shoulders and sat down on the damp grass with a tired sigh.

"I've been traveling all night," he said.

Raymond squatted on his heels. When he wasn't looking, Randy peered through the underbrush, still keeping up his talking while Raymond listened to him sympathetically.

Finally Randy saw furtive movement through the brush. It came closer until Dave and Mitch were just a few feet behind Raymond.

"Tell me Raymond, the Illusion Seeker," Randy asked slowly, "I know you gave me a charm against the breath of death and all harm. Did you bring the breath of death that killed my mother and father — and all the others?"

He studied Raymond's hiking boots, waiting for the answer he was confident he would hear. It didn't come.

Instead, there was a rustle of movement from the underbrush, a flash of

metal. Randy looked up to see Mitch standing over Raymond, his ax buried deeply in Raymond's shoulder, having narrowly missed his head.

Raymond's hand was hovering over the spot where the ax was buried. There was an unbelieving, horrified expression on his clean-shaven face. His mouth was open in a soundless cry.

In a swift movement Randy was on his feet, his own ax raised. As Mitch pulled his ax loose and raised it to strike a second blow he stepped protectively over Raymond.

"Stop, Mitch," he said softly. "I'll kill you if you don't."

Mitch dropped his blood-smeared ax to the ground and retreated slowly.

"No. No, Randy," he said. "He did it. You heard. He didn't answer. He couldn't, because he killed them all, just like Dave and I said."

There was a deep groan from Raymond. Randy dropped his ax and bent down.

"What should we do?" he asked anxiously.

"Nothing," Raymond gasped. His lips drew back in a grin. "Your friend Mitch — got me. Good. But he's wrong. I didn't kill those people. It was virus plague."

The blood was seeping out of the deep gash in his shoulder rapidly, soaking his coat and his arm.

Dave stepped boldly out of the woods and faced Raymond.

"If you didn't kill them," he said accusingly, "how were you able to save Randy with your charm, and not use it on the others?"

"There's not enough of it," Raymond said. "I was saving it for any others I could find like Randy, that didn't have any deformities."

"You're dying," Mitch said. "Use some of it on me so I won't die."

Raymond lifted his head and looked at Mitch. Mitch's eyes turned away.

"Look, Randy," Raymond said. "I haven't much time left. I'm already faint from loss of blood. In one of my pockets you'll find the yellow powder that I used on you. It's yours. In exchange you must promise me that you'll go back on the road to the east and keep going until you reach my people. It will be a long march. Winter will come. Then you must wait until spring, wherever you are, and go on again. There are papers inside my coat. Take them with you and give them to whoever you meet. When you give them to someone who knows what they are, do whatever he tells you. Do you understand?"

"I understand," Randy said. "Should I kill Mitch?"

Raymond was beyond answering. His head dropped, his chin resting on his chest. His hand fell away from the half severed shoulder.

Randy looked at the brightly glistening blood and rose to his feet.

"Dead," he whispered.

"The yellow powder," Mitch said. "Get it and use it like he did on you."

Randy stared into Raymond's dead face, seeming not to hear Mitch. Mitch impatiently tried to push him out of the way and get to the yellow powder himself. Dave seized him roughly by the mat of hair on his head and pulled him back.

"Use some sense," he said warningly, "or you'll wind up with an ax buried in your shoulder."

"What do you mean?" Mitch said

angrily. "It was as much your idea as mine!"

"Shut up!" Dave warned.

The glaze in Randy's eyes vanished suddenly. Sentient intelligence flowed into his right arm, and down into the ax it held. He rose to a half crouch and turned. Mitch's bloodstained ax was still on the ground. Dave's was in his hand.

"Drop your ax, Dave," Randy said, his voice low and toneless. When Dave hesitated, "Drop it — or start using it to defend yourself."

Dave licked his lips nervously, then let his ax slip from his fingers to the ground.

"Step back," Randy said.

Dave and Mitch backed up. Randy scooped up both axes.

"What are you going to do?" Mitch asked, hysteria in his voice.

"I don't know yet," Randy said. He looked at the blood on Mitch's ax and repeated it thoughtfully. "I don't know yet."

And Dave and Mitch stared at him anxiously, knowing from the swiftness and sureness Randy had exhibited in his fight with the dog pack that they were completely at his mercy.

Randy ordered them back further, and made them lie down. Then he laid the three axes where he could get them at an instant's notice, and with one eye on Dave and Mitch began searching Raymond's coat pockets. There were four pockets outside and one on either side inside the coat. Each contained something.

He looked at his own pocketless, shapeless covering. Compressing his lips he lifted Raymond up and took the coat off. He put it on swiftly before Dave and Mitch could have a

chance to attack, if they had had any desire to do so.

It was a loose fit, but the sleeves were not too long. The blood on the left shoulder was still sticky. It could be washed out at the next stream.

In one of the inside pockets Randy found the papers. He nodded in satisfaction. They were written so that he could make out the words by long and tedious study in his leisure time during the long trip over the road to the east. Writing and reading were things his father had taught him. It was tradition. His father's father had taught him, and made him promise to teach his son, and his own father had made him solemnly swear that if and when he had a son he would teach him and make him also swear to carry it on. But this was the first time Randy had seen real paper. The writing itself was very small, the characters no more than a fraction of an inch high, and very neat. His own writing had been on the surface of flattened out sand gathered from sand pockets in the bed of the creek, and had been necessarily very large.

Randy risked no more attention on the contents of the pockets, except to reach into the pocket where he remembered the yellow dust was and make sure there was still some there. Two of the pockets contained heavy objects, wide, thick, and long, like small boxes. They could be examined later.

He returned his attention to Raymond, looking enviously at the shirt and trousers he wore. The trousers also had pockets. He dropped to his knees and searched, finding a long narrow object of metal.

He studied it intently and quickly discovered small slots in the metal

strips. He caught one with his fingernails and pulled, bringing out a sharp blade. He had never heard of a pocket knife. He was delighted with it, sensing its possibilities immediately.

There was nothing else.

He stood up, finished with Raymond. His eyes turned to Dave and Mitch where they lay obediently on the ground. In the back of his mind he had been studying what to do about them. Now he voiced his decision.

"Stand up," he ordered. They obeyed. He looked at their mute faces, his eyes softening. "I've been thinking what to do," he said. "Maybe I should kill both of you, or at least you, Mitch. But I can see no object in it. There's been too many deaths already as it is, and we three are all that are left alive. But I'm not giving you the charm to protect you from all harm."

Dave and Mitch nodded with eager gratefulness. They would take their chances with virus plague. They had escaped certain death from an ax by Randy's decision, and they were well aware of it.

"You can go your way," Randy added, "or come with me on the road to the east as Raymond commanded."

"We'll go with you," they both said quickly.

"I'll carry the axes," Randy said, assuming his new role of leader unconsciously. "Mitch, you will carry the sacks of corn."

He picked up the three axes and started back toward the road from the east. Two of the axes he carried balanced in his left hand. His own he carried easily in his right, ready for use as a weapon.

He did not look back, knowing

that Dave and Mitch would certainly follow. so closely did Randy keep to them.

Days stretched into weeks, and weeks into months. Randy, Dave, and Mitch became three automatons that lay down at night, only to rise at sun-up and continue along on the road to the east as it crossed the northern panhandle of Idaho into Montana where it became chunks of concrete widely distributed — mere landmarks rather than a road.

There was no vegetation. There were towering mountains of bare stone. There were great fields of huge boulders. There were stretches of sand. There were even rivers winding among the boulders, often disappearing below ground. But there was never a single green thing to indicate life.

This didn't bother them. They had no information from the past. They had no way of knowing that Montana had once been a rolling country rich in vegetation.

One day the first snow fell. It was on that same day that Randy became seventeen years of age.

He held his face up, letting the cool flakes caress his beardless cheeks. He thought of other birthdays. Days when his mother had excitedly shook him awake and informed him that another year had been added to his age.

On the long, monotonous trek memory of his parents had receded, but now it returned with new life. In order to hide it from Dave and Mitch he kept well ahead of them.

They, bowed under their heavy loads of corn and other foodstuffs which he had made them bring for the journey through the rock mountains, welcomed this chance to talk—the first they had had in a long time,

“Wonder what's got into Randy today,” Mitch mumbled furtively. “Ever since the snow started to fall he's had a dreamy look on his face. Now he walks ahead just like we weren't along.”

“What difference does it make?” Dave grumbled. “It gives us a chance to talk. It's about time we did something about this situation.”

“I know,” Mitch said, “but what? Both of us together are no match for him. He sleeps so lightly that if we even thought of him while he's asleep it would wake him up with his hand on his ax — and ours at his side.”

“We could turn back,” Dave said. “I don't think he'd stop us.”

“And lose out on the charm?” Mitch asked.

“He's in a good mood,” Dave said. “Let's catch up with him and ask him to give it to us now. Maybe he will.”

“First, let's talk a little,” Mitch said. “We may not get the chance again for a while. I'm in favor of asking him for the charm, and if he doesn't give it to us, waiting our chance to kill him. If we agree on that there won't be any need of talking when the chance comes.”

“How would we do it?” Dave asked, looking nervously ahead at Randy's back, a hundred yards ahead.

“Lots of ways,” Mitch said. “I had a chance to trip him day before yesterday. If I could have been sure you were with me I'd have done it. The best way would be to wait until he's asleep. He'd wake up, but not before we landed on him and took his axes away. Without the axes we could get the better of him. We're stronger.”

“Hitting him on the head with a

good-sized rock while he's asleep would be better," Dave said. "Unless his charm is really against all harm. Then nothing we could do would be any good."

"That's what I'm afraid of," Mitch confessed. "But we've got to do something. I can't see being stuck here in the middle of nothing all winter."

"We're agreed then," Dave said. "Now let's catch up and ask him. If he gives us the charm we stand an even chance. If the charm works we can't harm him and he can't harm us. Then we can do what we like."

They hastened their pace and soon caught up with Randy. Dave called to him to wait. When he stopped they went up to him and dropped their heavy sacks and sat on them to rest.

"Randy," Dave said after a moment. "How about giving us the charm now. We're the only three people alive, and if the virus plague caught up with us and killed us, you'd be all alone. Not only that, we don't know what we're going to meet when we get to the end of the road from the east. If there's danger, we should have the protection against all harm, too."

"Yes," Randy said. "There's truth in what you say. It would be terrible to be alone in the world. I think everyone but us must be dead." He reached into the pocket containing the yellow powder and brought out a pinch of it. "Open your mouth and don't duck," he commanded Dave.

When Dave complied, Randy flicked the yellow powder into his face as Raymond had done it to him. He drew out another pinch of the powder and flicked it into Mitch's face.

"There," he said. "I don't know

how long it takes, but in three days it will certainly reach its full potency. Three days after it was given to me I felt the breath of death without it harming me."

Dave and Mitch blinked their eyes and shot each other a secret, triumphant glance.

"Three days," Mitch said, his tone carrying a secret decision to Dave.

The snow increased. At dusk they found an overhang where they could sleep in comfort. Randy, having now given Dave and Mitch the charm, seemed no longer cautious. While he slept Mitch cautiously picked up one of the axes and felt its sharp edge. But Dave shook his head and formed a silent "No" with his lips, and Mitch put it back.

They slept, and during the night the wind increased. All the next day they forged on through the driving snowstorm. That evening they found a large cave.

"We'll wait out the winter here," Randy decided. "The snow will provide plenty of water. We can keep the entrance to the cave covered with a sack, and our body heat will keep it warm inside."

"Perfect," Mitch agreed, giving Dave a significant glance.

As Randy emptied one of the sacks of corn against the wall of the cave and studied ways to make it serve as a cover over the entrance Dave and Mitch grinned at each other silently, their manner calm and patiently efficient as that of the wild dogs.

Randy leaned all three axes against the wall of the cave before lying down to sleep. Again Mitch looked at Dave questioningly and received

a silent shake of the head. He frowned, hunched his broad shoulders, and settled his short stocky body on the hard floor.

Dave sat down against the wall near the entrance. He didn't close his eyes, but remained restless, shifting often, sighing in exasperation at his sleeplessness.

The cave was in total darkness. Except for their breathing there was no sound.

Suddenly Dave jerked his eyes toward the rear of the cave. There had been no sound. What had startled him?

He frowned, trying to analyze what was in his mind to discover what had attracted his attention in that direction. It came to him what it was.

It was a strange odor. It was very faint, but now that he knew what had attracted him he brought full concentration to bear on it.

It definitely came from the rear of the cave — yet there had been nothing there — could be nothing in this sterile, lifeless land they had penetrated.

There was nothing. Only the deep, regular breathing of his two companions. Or was there other breathing? Dave held his own breath, straining to listen for the faintest sound that was foreign. He swallowed. The noise in his dry throat was loud.

Then suddenly he saw two eyes far back in the darkness. Panic striking to the core of his being, he leaped up, giving a hoarse shout of fear. His head struck the stone roof of the cave. He reeled, bright lights exploding before him, and stumbled over feet.

"What is it?" Randy said.

"In the back of the cave," Dave

said, his voice filled with terror. "Eyes. A strange smell." He lifted himself, resting his weight on the palms of his hands and shaking his head to clear it.

"I don't see any eyes," Randy said. "You must have been dreaming. A nightmare."

"I wasn't asleep," Dave said more calmly. "I smelled something. Maybe an animal, although it seemed a little like a human smell. Then I saw those eyes at the back of the cave. They scared me."

Randy had moved to the cave entrance and jerked away the sack covering. The snowstorm had ended. The sky was clear and the moon, reflected by the new snow, cast enough light into the cave to see things vaguely.

He took one of the axes, glanced doubtfully at the ceiling, laid the ax down and took out the pocket knife, pulling open its longest blade.

He crept toward the back of the cave while Dave and Mitch watched, their eyes round with fear.

"Hah!" Randy exclaimed suddenly. "You may have seen something at that. There's an opening back here leading into another cavern. Just big enough to crawl through. Let's explore."

"Not me!" Mitch said.

"Uh-uh!" Dave said. "Let's get out of here!"

"Why are you afraid?" Randy asked. "You're now protected against all harm just as I am. Come on!"

"You go," Mitch said.

"Well," Randy said, grinning in the dark. "O.K. It's a good idea. Then if whatever is back in there slips past me and tries to escape, you two can capture it."

"I'll go with you," Mitch said quickly.

"Me too," Dave said.

"Bring the axes with you," Randy said.

They wriggled through the small opening, Randy going first. Once they were in they crouched, waiting for their eyes to adjust to the deeper gloom. Ahead was deep black mystery of a vague form. They held their breath, staring, listening, and testing the atmosphere with sensitive nostrils.

"I think I get the smell," Randy said in a hoarse whisper. "It smells familiar, too. I don't know what it is, but I've smelled it before."

"—smelled it before," his hoarse whisper echoed hollowly.

"Shhh!" Mitch hissed.

"Shhhh!" the echo came back.

But Dave and Randy had heard what Mitch had. The faint sound of a pebble falling in the distance. They listened for several minutes, but the sound wasn't repeated.

"Probably a chip from the roof of the cave," Dave muttered.

"And what you probably saw was some cave creature as afraid of you as you were of it," Randy said in a normal tone. "Let's go back and get some sleep. You can stay awake and watch if you want. We aren't going anyplace tomorrow and you can sleep then."

Dave and Mitch grunted their approval. Randy let them precede him through the small opening back to the front cave. There Randy settled himself to go back to sleep.

"I know what I'll do," Dave said. "I'll pile the sacks of corn in the opening. That'll keep the thing from coming out."

Mitch helped him, wedging the sacks

into the opening so that they wouldn't dislodge easily.

They left the sack off the cave entrance so that the light of the moon shone in, giving them comfort.

Two hours later when the moon had dropped so that it was visible from inside the cave, its several pinpoints of white brilliance glowing like flashing diamonds against a softly luminous disc, Dave had also fallen asleep, his snores blending in with those of Mitch and the deep, regular breathing of Randy.

But suddenly Randy's deep breathing stopped. He opened his eyes, blinking at the moon through the jagged opening to the outside.

In his sleep it had come to him where he had encountered the strange odor before. There had been a faint trace of it about Raymond, the Illusion Seeker.

He turned his head and stared speculatively at the sacks of corn wedged into the opening at the back of the cave. A conviction grew in him that whatever lurked beyond that opening was human, and perhaps very similar to Raymond. And himself.

His hand crept slowly to the gash in the shoulder of the coat he was wearing, the one that had belonged to Raymond. Whoever it was that had looked out at them lying there had probably seen that coat with its gash, being worn by one it obviously did not belong to.

Randy sat up and slid until his back was against the wall. He stared at the sacks of corn. After a while he crept over and placed an ear against them. No faintest sound came to him.

He stretched out with the side of his face against the sacks. If they were

moved the least bit the sound would awaken him. And shortly he was asleep.

"Mitch and I are going out for a walk to see what things are like around here," Dave said. "Maybe you'd better stay here so that animal back in the cave won't carry off our food."

"O.K.," Randy said, masking the delight in his eyes at this chance to carry out what he had in mind.

Dave and Mitch each picked up an ax and went out of the cave quickly before Randy could say anything about the axes. Outside they hurried to the right away from the road from the east until they were out of earshot of the cave.

"Well?" Dave muttered, stopping and fixing his eyes on Mitch. "Are we going through with it?"

"I'm for it," Mitch growled. "In some ways I like that kid. But the more I'm with him the more I hate him."

"Me too," Dave growled. "I look at the mass of freak fingers on the back of my hands and then look at his smooth hands. I think of how he waded into those wild dogs while we climbed a tree."

"That's the way I feel too," Mitch said. "He's ordered us around, made us do all the carrying. He's getting worse. He has a knack for making me feel the worst about myself. Like last night when he laughed at us about that thing back in the cave."

"We *could* just walk off and leave him," Dave suggested.

"Yes, we could," Mitch admitted. "But he'd follow us and make us come back. And we would. I don't relish facing his ax."

"We'd better not try anything un-

til tomorrow," Dave said. "The three days are up then, and we'll be under the full protection of the charm. Then I'm for killing him."

"How'll we do it?" Mitch asked.

"Whatever way looks best," Dave said. "He isn't suspicious any more. It should be easy enough. We could catch him without his ax and jump on him together, knocking his head against the rock floor of the cave."

"Yeah," Mitch said, "and shove his body back in the other cave and plug up the hole. Then that thing back there could have a feast — if it likes meat."

"Let's stay out a while and look around," Dave said.

In the cave Randy waited until he felt sure Dave and Mitch were not coming back for anything they might have forgotten, then he went to the hole in the back of the cave and hurriedly pulled out the sacks of corn.

Without hesitation he crawled through the small opening and stood up. The daylight threw a beam of white brilliance across the cavern to light up the far wall, a hundred yards away. From there the light rebounded to light up the whole cavern enough to make out its details.

The walls and roof were very irregular. There were many areas of dark shadow where a creature could hide and watch him. Randy's eyes explored each dark shadow, hoping for a glimpse of whatever had alarmed Dave the night before. There was nothing.

There was nothing he could see. And yet he felt eyes upon him. Eyes that studied him. The feeling made him uncomfortable.

"I know you're watching me," he said, his voice calm and loud. He waited until the echoes died down,

then continued. "I'm not going to try to find you. I just want to talk to you. From your smell you are an Illusion Seeker, if there is another one besides Raymond. Do you know Raymond, the Illusion Seeker? I knew him. This is his coat I have on. He gave it to me. He died — in an accident. I didn't kill him. His last words were that I should take his coat and the papers in it and follow the road from the east until I found someone who knew what it was all about.

"I'm not going to try to find you. If you don't want to come out, I'll respect your wish. If you come out I give you my protection. Raymond gave me a charm against all harm. You can't harm me, but by the same token I can protect you from all harm, if you are afraid on that score.

"My name is Randy. Randy Peters. My mother and father were killed by the breath of death, as were all where I came from except these two others with me, who are out taking a walk right now. I've said my piece. You can think it over. If you don't come out I will come back again tomorrow and wait here a while to give you a chance to come out."

He stopped talking and waited, his eyes searching for a first glimpse of something moving. When nothing appeared he turned and crawled back to the outer cave, stuffing the sacks of corn back into the hole the way they were before.

When Dave and Mitch returned he was sprawled with his back against the cave wall, seemingly half asleep.

"It's the third day," Randy said seriously during a pause in his noisy crunching of corn. It was still dark in the cave, though bright outside.

The sun was above the horizon in the east and the cave faced west. "From now on you don't need to be afraid of anything. Nothing can hurt you—seriously." The memory of the gash in his leg from the teeth of one of the dogs made him add that qualification.

Dave and Mitch nodded without pausing in their eating. A moment later Mitch's eyes gleamed toward Dave in secret amusement.

Without warning a tremendous roaring sound came from outside the cave. It began full blast and died with incredible rapidity toward the west.

Randy jumped up and dashed out of the cave.

"Come look at this!" he shouted excitedly.

Dave and Mitch jumped up, paused, nodded grimly at each other and took an ax as they stepped out of the cave.

Randy's back was to them, his arm upraised, pointing to something in the sky.

With quick savagery Mitch stepped forward and brought his ax down on Randy's head. At the last instant Randy seemed to sense what was happening. He jerked his head around and started to shift sideways as the ax connected with his head.

He stumbled backward, taking several off-balance, backward steps before falling, to lie inert, blood rapidly matting his thick blond hair.

"Got him!" Mitch whispered in fierce delight.

"Are you sure?" Dave asked.

For answer Mitch held up his ax. The blade was streaked with bright red three inches up. There it ended in a sharp delineation.

"Went that deep," Mitch said, laying a deformed fingernail against

the line. "So he's dead all right."

"I get to wear Raymond's coat now," Dave said, pulling it off Randy's unresisting shoulders. "It won't go on you, Mitch."

They each took an arm and dragged Randy's lax body back into the cave. They let it drop and took the sacks of corn away from the opening in back with feverish haste.

Then they tried to shove him through the opening. Finally Dave had to crawl inside and reach through. Mitch handed Randy's wrists to him, and by combined pulling and shoving they got him through.

Dave emerged from the hole. Together he and Mitch piled the sacks of corn up, wedging them in.

"Next thing is to collect some rocks and really plug this opening," Mitch said. "By the way, let's see what Randy was yelling about outside."

They went out and looked up at the sky. There was nothing except for three peculiar cloud formations. They were narrow, running parallel clear to the western horizon, white streaks that seemed only a few hundred feet in the air and a hundred or so feet apart.

As they watched, the cloud formations began to disintegrate and drift under the disrupting effect of the mild wind.

Mitch glanced at Dave with lifted eyebrows, shrugged his shoulders, and grinned.

"Just some funny clouds," he said.

"But that roaring," Dave frowned. "It was like the sound of that thing we saw before we caught up with Raymond, the Illusion Seeker."

"Maybe," Mitch said carelessly. "But it was louder. That can't have any connection with those queer clouds

though. What could make clouds like that?"

"Guess you're right," Dave said. "Well," he went on, his tone light, "we're rid of Randy now. I never realized how much of a relief it would be."

"Now we can go back home," Mitch said. "And we don't need to fear anything."

"Not even dogs," Dave said with quiet satisfaction. "I hope we meet some. It'll be fun to wade into them like Randy did."

"The weather's good," Mitch said. "Let's start now. It'll take maybe half an hour to wall up that back cave entrance. We can leave all the corn except what we'll need to reach the panhandle country. No use carrying it."

Randy awakened to a world of searing, soul-agonizing pain. He groaned and tried to open his eyes. They remained closed, so far as he could tell.

"It's all right," a voice sounded in his ears. It was a soothing female voice with rich, mothering tones. It arrested his attention. The pain receded slightly under the influence of this new presence. "You're going to be all right," the voice added. A gentle but firm hand put pressure against his chest. He lay back.

"He has recov—" But Randy didn't hear the rest of what a deep, male voice was asking.

When he recovered consciousness again he remembered it, with the feeling that he had been unconscious a long time since he had heard it.

This time he lay still, trying to think through the almost overwhelming pain throbbing inside his skull.

There had been a woman's voice, then a man's. They had been strange. What had happened? Had he been playing in the woods and fallen? No no. He wasn't a child anymore. And his mother and father were dead.

There had been a roaring in the sky. He had rushed out of a cave in time to see three straight line streamers of clouds that seemed to come into being mysteriously from points moving toward the horizon.

The cave bothered him. He could remember running out of a cave, but he couldn't remember anything about a cave other than that.

He had called to Mitch and Dave to come out and see those three streamers in the sky. Mitch and Dave? No, it was his father and Mitch.

And Mitch had hit him with an ax!

The memory caused him to try to rise.

"He's awake!" a voice shouted excitedly. It was a girl's voice.

Randy groaned. He remembered the girl's voice. He fainted again.

Something soft and cold poked at his lips. It wedged itself in, twisting and turning as it went in and rode over his tongue. His mouth was filling with a liquid. Its taste was pleasant, but nothing he had ever tasted before. Automatically he swallowed. The liquid reached his stomach. That made him aware that he was hungry. He swallowed eagerly, marveling at the coolness of the liquid. It was as cold as creek water when the snow is melting.

Suddenly memory made him aware that the searing pain in his head was gone. He stopped swallowing for a moment, then began again. A moment later he stopped once more, sighing in contentment.

He tried to open his eyes. When they wouldn't open he remembered they hadn't opened the first time he tried. There was something holding them closed, something that covered his forehead too.

"He took it all," the woman's voice said pleasantly. The flow of liquid stopped as she said this. The round cool thing in his mouth slid out and was gone. A cool drop fell on his cheek. Something soft wiped it off.

An impulse faster than thought made Randy's hand dart up and close about a wrist. He held it firmly without pressure. It was smaller than his own. At once strong fingers wrapped over his wrist.

"Easy there, son," the male voice said warningly.

Randy consciously brought a smile to his lips and relaxed his grip, feeling the wrist pull loose.

"How long have I been asleep?" he asked.

"A couple of days," the male voice replied. "How do you feel?"

"All right, I guess," Randy said after hesitating. "But I would have thought it was longer." He frowned, feeling the skin of his forehead wrinkle against something soft. "How long has it been since —" He stopped, unable to find the words.

"Since you were hurt?" the male voice asked. "Would it make any real difference to you how long?"

"Maybe," Randy said, wondering at the question. "But I guess not. I'll have to stay here until spring anyway."

There was a deep throaty chuckle. "You have all the time in the world," the male voice said soothingly. Abruptly it changed its tone, talking to

someone else. "Stay here with him. He'll go back to sleep in a few minutes. Call me on your pocket radio when he wakes up."

There were footsteps. At least Randy thought they were footsteps, though they sounded utterly strange. Like Raymond, the Illusion Seeker, walking on the road from the east, almost.

Randy listened to them. Unconsciously he curled the fingers of his right hand. They dug into something yielding and soft. Softer than anything except hair or fur, yet more like cloth.

"Are you awake?"

It was the male voice, more than familiar now. It almost seemed that it had always been a part of things. Its owner was Paul.

"We have a surprise for you today," the motherly female voice said. Randy smiled. That voice belonged to Martha.

"Dad's going to take off the bandages this morning," the girl's voice broke in eagerly. That voice belonged to Grace.

Randy turned his head toward the direction of her voice, his smile broadening. He lifted up his elbows. Hands took him and helped him rise to a sitting position. Thick soft objects dropped behind him until he could lean back in their yielding depths comfortably. They were pillows. Martha had told him what they were. He was in bed. There were blankets and sheets over and under him. They were the extent of his physical world. He was more familiar with them than almost anything else. He was looking forward to seeing what they looked like.

"Yes," Paul said, "the bandages

come off this morning. But you'd better shave him first, Grace, so he'll look his best when he sees himself in the mirror."

"Shave?" Randy asked goodnaturedly. "What's that?"

Paul and Martha chuckled happily but didn't answer. Grace's footsteps went away, returning immediately. A strange humming started suddenly. Immediately afterward something cold and metallic touched his face, moving lightly along his cheek, tickling strangely.

Wondering, Randy reached his hand up and touched his face. His fingers encountered soft hair. Its implication so startled him that he sat erect.

"How long have I been here?" he demanded. He turned his head blindly, waiting for an answer.

"I guess we muffed that one," Paul's voice came regretfully. "It's been four years since you were hit on the head with an ax."

"Take off the bandage," Randy said hoarsely. He reached up, tearing at it himself.

"Easy there," Paul said. "Give me time." There was worried concern in his tone.

Randy waited impatiently while fingers fumbled about his head. The bandage had come off many times before, but only with his solemn promise to keep his eyes closed.

Now he was straining to open them. To see. Four years! And he had thought it only a few weeks! It *had* been only a few weeks.

The pressure on his eyelids lessened. He opened them. A latticework of white was all he saw. Whiter than anything except the whitest of clouds in the sky with blue around it.

It shifted, blurred, moved away.

He fought the pain and dizziness that came with vision. His eyes turned hungrily from one to another of the three faces. Paul was much like Raymond, the Illusion Seeker, though his nose was different, and his chin, and almost everything except that his face had no hair, and his expression was like Raymond's had been that first time. Martha was something more wonderful than the dreams of madness could conjure up, yet there was something undefinably like his mother in her expression, her eyes.

Grace — she was very beautiful. Her eyes were deep pools of dark blue filmed with the brightness of tears. Randy felt a vague disappointment though. She was older than he. Maybe twenty or twenty-one.

"Get the mirror, Grace," Paul said quietly.

And shortly Randy was looking into a *nothing* framed in a narrow blue circle, and from the depths of that *nothing* a face stared back at him. Slowly he realized that the face was his own.

There was a straw colored fuzziness growing within the normal confines of a beard, with the exception of an area on one cheek corresponding with where Grace had run the thing that buzzed.

Randy sank back weakly. Now he believed.

Time passed swiftly. The shock of learning he was now twenty-one wore off. There was a continual succession of things just as startling.

Grace told Randy what had happened. She had been out exploring when she first saw him and Dave and Mitch coming. She had hidden in the cave, only to find them coming toward it.

Frightened, she had retreated to the back of the cave, discovered the small opening that led back still further, and crept through. Safe for the time being, she had listened to them. To her horror she had heard Randy announce with finality that they would remain in the cave all winter.

"My only hope," she went on with her story, "was to wait until you were all asleep and sneak past you. But the one with the thick beard and funny little fingers growing all over the backs of his hands woke up and saw me. He woke you, and all three of you came after me.

"When you came through and stood there looking for me I was only ten feet away, pressed as close against the wall as I could get."

Randy listened, his eyes drinking in the beauty of her lustrous brown hair and the utter perfection of her beauty as compared to feminine beauty as he had seen it all his life in his mother with her bulbous, soft-boned skull and scraggy uncombed hair, and the other women and girls he had known.

"When you went back," she continued, "and plugged up my only avenue of escape, I was panic stricken. I didn't know what to do. The next day when you came in alone and talked I liked you, but I was still afraid of the other two. Shaggy, dirty brutes with evil eyes. I decided to wait and see what happened. I wasn't as afraid any more though, because I felt that if I revealed myself you would be my friend.

"Then the sacks were pulled away and they dragged you in. They were talking, saying they were going to wall up the opening and leave you there for some animal to eat. They also said

they were going away right away.

"I risked discovery by going to you as soon as the big one had gone back into the front cave. While they were bringing in rocks and walling up the hole I was determining that you were still alive. How nearly dead you were, I didn't fully realize then."

Paul took up the story.

"The ax had bit through your skull into your brain," he said. "For three weeks it was extremely doubtful you would live. When you did recover you didn't know who you were, and you were partially paralyzed. Part of your body has had to learn all over again. just like when you were a baby, while new neural passages took over the duties of the severed section of your brain.

"Eight months after you came here you were yourself for a brief moment. That encouraged us. We knew that eventually you would remember. And after four years you do. New contacts have been formed in your brain that reconnect the cut parts."

"It's really been a miracle," Martha said.

"No, not a miracle," Randy said quietly.

He didn't elaborate that aloud, but in his thoughts he was remembering that Raymond, the Illusion Seeker, had given him a charm against all harm. The pack of wild dogs had succeeded in merely gashing his leg, where they had always killed quickly. Mitch had split his skull with an ax, and still he lived.

Randy became acquainted with shoes, a fork, knife, and spoon, with cooked food, rooms with walls that were smooth and in restful colors. He watched a strange contrivance

spin a flat disc slowly and produce music as strange and wonderful as the tune Raymond, the Illusion Seeker, had been whistling when Randy first saw him on the road to the east. He watched a strange flat thing like the mirror except that it reflected things not there, and learned it was wire-recorded television, in color, with sound.

It was high as a man and twice as wide. With the lights in the room dimmed, Grace touched knobs that made the white expanse come to life.

In its depths Randy grew familiar with a world that seemed utterly fantastic to him, in which four legged animats called horses carried men swiftly across wild country in what Grace called "Westerns," people in strange clothes carried out plots of murder, intrigue, and adventure, and strange machines and structures became almost commonplace in their infinite repetitions.

The scenes where ships leaving trails of white clouds behind them interested him most. In one picture he followed several ships as they left the Earth and went to the Moon.

The Moon itself was fascinating. Randy recognized it in the screen. He saw it enlarge. Its surface rushed by swiftly, showing huge transparent domes over the tops of craters fifty miles across, under which cities could be seen.

He traveled the streets of cities on the Earth and on the Moon. He saw buildings that seemed to extend into the sky.

And once he saw what Grace called a space opera, in which a buttercup yellow ship with a black nose was wrecked on an alien asteroid. Out of the wreck climbed alien creatures that

walked upright like humans and spoke in incomprehensible sounds. Outside the wrecked ship, they huddled together, looking up into a reddish tinted sky. And suddenly a huge sphere of light appeared in the sky, alive with depths of blue and white, and from its depths appeared the face of a woman more beautiful than any Randy had ever seen. There followed a display of blasting force that destroyed the sphere in the sky. And this haunted Randy's dreams for several nights. But nothing he saw in the screen seemed real. It was some form of magic, not reality.

He had no curiosity about the limits of his immediate world. He didn't know where he was. He didn't even wonder where he was. He was content.

As the weeks passed and he grew accustomed to his surroundings, he grew to believe that nothing could ever happen to disrupt things. Then two things happened in swift succession.

Grace had become his almost constant companion, taking up the game of reading and writing where his mother had left off, and producing books and paper that opened up another new world to him. One day while they were sitting close together while she encouraged him to puzzle out the words in a book he felt a sudden uncomfortable awareness of her presence beside him. He drew away from her.

"What's the matter, Randy?" Grace asked.

"I don't know," he said honestly. "Suddenly I felt funny sitting by you. Where your side touched me my skin started to burn. Right now I feel — not scared exactly, but trembly. I — I want to grab you and — I don't know

what. Did you ever feel that way? I don't know how to explain it."

"Would you feel that way about Paul or Martha?" Grace asked, her eyes twinkling.

"I don't know," Randy said. "This is the first time I ever felt this way." He frowned in the concentration in self analysis. "Let's go find them and see if I feel this way toward them," he said in sudden decision.

"O.K.," Grace said, turning her head away to hide her smile.

She took his hand as they left the room, and it was perspiring. He pulled loose uncomfortably.

"Don't tell them about it," she said. "They're probably in their living room reading. Let's just go in and see if you feel that way toward them."

"Yeah," Randy agreed.

Grace took his hand and squeezed it. He jerked it away quickly, his breath coming fast.

"Don't do that," he said.

Grace laughed delightedly.

They went into the living room casually as they had done many times before. Grace watched Randy with secret amusement in her eyes as he studied the two covertly.

Finally he looked at her and shrugged his shoulders in mystification, shaking his head. He didn't feel that way toward them.

"What are you walking around so restlessly about Randy?" Martha asked, looking up from a book she was reading.

"I was trying to find out something," he answered seriously.

"He suddenly felt funny near me while we were reading together," Grace said with an air of naive innocence. "He never felt that way before, and can't describe it very well.

He's been trying to see if he felt that way near you two."

"Oh?" Paul said, looking up from his own book with a glint of humor in his eyes. "And do you feel that way near us, Randy?"

Randy shook his head. "No. Just near Grace."

"How does it feel?" Paul pursued the subject with delight.

"Funny," Randy said matter-of-factly. "My skin burns. I'm short of breath like I'd been running. My heart pounds against my ribs. I —" He looked over at Grace with an apologetic smile. "I feel like I want to pull Grace down on the floor and rumple her hair and — and — I don't know what."

"Would you like for him to do things like that, Grace?" Paul asked, turning his twinkling eyes on her. She nodded her head vigorously and frankly. He added, "Then why don't you two go back to the general living room and leave your mother and me to our books?" He glanced slyly at Randy, who looked frightened. "Go on, go on," he insisted with feigned impatience. "I want to read."

Grace ran from the room with a delighted laugh. Randy hesitated, looked pleadingly at Martha, then followed Grace slowly.

When he had left the room Paul and Martha looked at each other, then broke into laughter.

The second thing happened less than twenty-four hours after the world of sex opened up to Randy, leaving him staggering and in a semi-conscious state of bliss.

This second thing was a strange voice talking to Paul and Martha in

a room where Randy had never been permitted to go.

He had never been overly curious about this room. It was a place Paul or Martha went when a red light in their living room flashed on. After one of them went into it and closed the door the red light died out in the globe, and they came back shortly. Nothing was ever said to Randy about what went on there, and he had never asked.

This time Randy and Grace had been alone in the general living room when Martha knocked on the door and came in.

"It's the census, Grace," she said. "You have to come."

"Oh," Grace said. "You stay here, Randy. I'll be back shortly." She kissed him.

After she had gone Randy decided on impulse to go talk to Paul. He rose and went into the hall in time to see the door of the forbidden room closing.

He couldn't find Paul. His search led him near the forbidden door. Voices came through, and one of them was a strange voice.

"There are just the three of you living here?" it asked.

"That's all," Paul's voice answered. "Just the three of us."

"I have to ask that question, you know," the strange voice said. "I'm even supposed to look through the house to see if you might have some variant child hidden. But how can they expect us to search every house? We'd never get our work done. Be seeing you next year." There was the gentle slam of a door.

Footsteps sounded, approaching. Randy hurried away, reaching the entrance to the general living room

just in time. When Grace entered the room he was sitting in a chair turning the pages of the dictionary.

"Just increasing my vocabulary," he said, looking up with a casual smile.

She came over and sat on the arm of the chair. The dictionary was open to the V's. Randy turned the pages slowly. He had learned the meaning of the word variant.

"See any words you don't know the meaning of?" Grace asked.

"Let's see" Randy said. "I think I saw one in the middle of the book I don't know."

He slammed the book closed while they both chuckled at the absurdity of his statement. But Randy's laugh didn't reflect in his eyes.

"I think I'll lie down and take a nap," he said. "Do you mind, Grace?"

"Of course not," she said. "I'll call you when dinner is ready."

Randy went to his own room and lay down. His thoughts were in confusion. He had assumed without question that Paul, Martha, and Grace were a family along the pattern of his own as it had been. Incurious about its neighbors if there were any.

He had assumed that most of those neighbors would have various differences such as areas of thick pulpy skin, soft bones, extra appendages, huge head, and all the types of differences he had seen.

The room he was forbidden to enter made sense according to his conceptions as they had been since childhood. It was a room where strangers were met, to keep them away from the others. His own mother and father had often made him hide under something when he was small, so that neighbors couldn't see him.

But this was different. A picture was forming, in which his position was precarious. It was vague, fragmentary. Paul, Martha, and Grace were keeping him hidden because he was a variant. But he wasn't! That made it confusing. And if he were found, what would happen?

A panorama of all he had learned in this new world he had awakened to rose before him. The recorded television had shown people, all of them like himself, and none like those who had been struck down by virus plague. They were of all ages. There were a thousand other things that pointed to people in books and on the television having none of the things the dictionary called variant.

Maybe if he had any children they would be variants. Maybe that was what it was all about. But there was nothing wrong with that. People were people. No one was better than someone else — or if they were, his father was better than he was because his father had had very beautiful thumbs with several small thumbnails fanned out on miniature thumbs.

It didn't make sense. He would have to ask about it.

"What's the matter, Randy?" Paul asked, after dinner. "You're being awfully quiet. Something on your mind?"

"Yes," Randy said. "I was wondering, if Grace and I had a boy or girl, would it be like us?"

"Oh," Paul said with relief. "I suppose so. Of course it would be like you."

"It wouldn't have soft bones like my mother?" Randy asked.

"Of course not!" Paul said.

"Then," Randy said, taking a deep breath, "why am I like you — as Ray-

mond, the Illusion Seeker, was — instead of soft-boned like my mother or with fingers on the backs of my hands like my father?"

"You just weren't, that's all," Paul said worriedly. He frowned at the tablecloth for a minute. "Randy," he said abruptly, "I think the time has come to tell you everything we've kept hiding from you."

"No!" Grace said.

"If he doesn't learn everything he won't rest until he does — now," Paul said.

"Your father's right, Grace," Martha said gravely.

"First I'm going to answer your question of a minute ago," Paul said. "Yes, it's more than probable that if you ever have any children they will have differences of the kind you mentioned." He held up the palm of his hand as Randy started to speak. "Let me go on. There's a lot more for you to know in order to understand.

"Long ago, it was almost five hundred years ago, all people were like us here. There weren't any soft bones or extra fingers in the wrong places, or anything like that. I won't go into the details of what happened. But slowly people like your mother and father, and those two who tried to kill you, came into existence. It was known what had caused it, but there wasn't any way to stop it once it got started, except by trying to keep those people from having children, because, although normal people sometimes had children like that, those people almost never had normal children.

"By normal I mean people who were like the race had been before it started changing. Normal is a purely relative term. So don't misunderstand me and get the idea I look down on

people who aren't normal according to the race standard.

"It became a very serious problem. One group of normal people believed that all the variants should be killed and all variant babies born put to death. Another group believed that variants should just be fixed so they couldn't have children. That group won out, and a law was passed.

"But the variants didn't agree with what was to be done to them. They believed that they had as much right to have children as anyone else. So a lot of them ran away and settled down in places far away from the rest of us.

"That was as good an answer to the problem as any, in a way, so nothing was done to them — then, that is. The death rate among them was high due to lack of doctors and the general weakness of a variant body.

"As time rolled on the normal people occasionally made trips through variant country to study the changes in the variant population. Scientists studied inheritance characteristics of the various variant forms.

"When it became certain that the variant population would never become normal again the first group tried to get their belief accepted, to kill all the variants. They didn't succeed, but they gained a lot of adherents in their belief who were convinced that eventually the human race would become contaminated by the wild characteristics unless something was done.

"An ideal tool to carry out their plans was discovered in the form of a virus disease discovered and used at the time the variants first appeared. It was virus plague, a disease that was fatal while it lasted, but

died out quickly so that in a few days after it wiped out a population other people could come in without danger of catching it.

"The fanatics used this, killing all the people in one spot with it, then waiting until indignation died down and striking somewhere else. They went through the district on foot, making sure all normal people got the antidote to protect them from it, then sprayed the virus plague from planes."

"No!" Randy said hoarsely, rising to his feet. "You're wrong! Raymond didn't do that! He said he didn't do that!"

"Let me go on," Paul said gently. "I didn't say he did or didn't. It's not for me to say. May I go on talking?"

Randy sat down again slowly.

"A hundred and fifty years ago—it was in 2254, I think," Paul went on calmly, "a man by the name of d'Vorac published his statistical studies of the human race. He proved or seemed to prove, though the question is still disputed, that the so-called normal race was already so contaminated by the variant genes that in a few hundred more years it would be entirely variant.

"He called the concept of the norm an illusion. He called those who advocated killing off variants as fast as they were born to preserve a normal human race *seekers after an illusion*. The race-purity fanatics immediately brought out a book using the same data but a different theory of genetics to prove he was wrong. They took up his accusation that they were seekers after an illusion and started calling

themselves the Illusion Seekers. They were proud of the title."

"But it can't be so!" Randy said. "Not Raymond! He was not like that. I'll never believe it, no matter what you say."

"There are books you can read," Paul said. "They'll tell you the —"

"Papers!" Randy interrupted him. "That's it! Raymond, the Illu— Raymond gave me his coat. There were papers in it I was supposed to take across the rock mountains along the road from the east until I met someone who knew what they were about. Where are those papers?"

Paul looked at Grace questioningly.

"Dave had it," she said. "He was wearing it when he pulled you through the opening into the back cave."

"Then I've got to find him," Randy said.

"But that was four years ago, Randy," Paul objected. "You can't find him now. What were the papers? Do you remember anything about them?"

"Not much," Randy said. "I tried to read them, but they were mostly numbers put together and letters of the alphabet that didn't mean anything. What I could read had so many words I didn't know the meanings of that I couldn't understand anything. Maybe I could now. I know more words."

"Where would you look for him?" Martha spoke up, breaking her silence.

"He would go back home, to the Cour d'Alene country," Randy said. "He never wanted to leave it. He'll still be alive because I —" He hesitated, then concluded lamely, "I gave him the powder to protect him."

"He wouldn't still have the papers," Paul objected.

"Yes he will," Randy said. "He

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The WAY of a WEEB

By H. B. Hickey



The Weeb was scared. In fact the Weeb was always scared, each moment of its pitifull life more terrifying than the last. But fortunately for the men of the Virtus fear and cowardice were not always synonomous!

ACROSS the fringes of planetary space the ship of the line *Virtus* flung itself with comet speed and a comet tail of atomic flame from undamped motors. And huddled against a bulkhead sat Dimpo the Weeb, his three foot pipestem body shaken by sobs, his long ears drooping dismally over his thin cheeks, his huge, soulful brown eyes gushing oily blue tears.

Ensign Fuller, passing through, saw him and heard him and screwed up his face in contempt.

"What're you crying about now, Weeb?" Fuller demanded.

"I'm afraid," Dimpo wailed in his high, thin voice.

"Afraid? Of what?"

"I don't know. Just afraid."

"There is nothing to be afraid of," Fuller told him. "You are on the newest and finest type of ship in the Earth Fleet. There is not the slightest chance of our being overtaken or attacked by a ship of Pluto. You know that much, don't you?"

"Yes."

"Yes sir, when addressing an officer of the Earth Fleet. You're not talking to one of those scraggy prospectors."

"Yes sir," Dimpo said dutifully.

"Dimpo—" Fuller paused, his porcine features set in a smirk. "It is Dimpo, isn't it? Tell me, what walks like a man but has the soul of a worm?"

"A Weeb, sir." Dimpo's eyes were downcast. In their three days out he had learned the routine.

"What is it that can swim but is afraid of water, that would rather rat its dead fellows than go out and hunt?"

"A Weeb, sir."

"In other words, Dimpo, what is the lowest thing in all Creation?"

"A Weeb, sir."

"Except for a spit and polish wonder fresh out on Mars Flight School," a new voice said. "Nothing is lower than that."

Fuller whirled, his skin blotching with anger. It was Crag, one of the prospectors they'd hauled off Jupiter V.

For an instant Fuller thought of swinging on Crag. But the graying, stoop-shouldered man watched him easily, gnarled hands that had swung a pick from the Asteroids past Saturn balled into hard fists.

"A Weeb," Fuller grated. "A Weeb and five crumby rock knockers. And we had to swing twenty million miles off course for that!"

"If we'd known the company we'd be in we'd have stayed there," Crag said.

This time Fuller was definitely going to swing on him. The burly ensign bulled forward and Crag set himself, an expectantly pleasurable grin on his face. He dropped the grin when beyond Fuller's shoulder the captain appeared.

Dimpo was trying very hard not to cry. He couldn't help being afraid, any more than any other Weeb could help it. And now, with the captain's hard eyes on him, Dimpo shrank back and sobbed harder.

"I've had enough of this," Captain Mackey snapped. "Nothing but trouble ever since you fellows and that jonah came aboard!"

The captain's nerves were on edge as it was. Caught too far out in space by the sneak attack from Pluto, he was racing to beat a probably blockade. Stopping to pick up the five

prospectors hadn't been in his plans at all.

His eyes flickered to a porthole. "I've got a good mind to — He's a stowaway anyhow. He'd never got on board in the first place, if we'd known about him."

Glaring at Dimpo, he shouted, "What's he crying about?"

"He's afraid," Crag said.

"He ought to be. We'll be lucky to see Earth, with a Weeb aboard."

"Hogwash," Crag said calmly. "We got him from Deimos to Jupiter V without a crackup."

Mackey shuddered. "Ugh. How you can stand a thing like that is beyond me."

He pushed past Crag and marched toward the control room, Fuller falling into step behind him.

The prospector shook his head. "See, Dimpo?"

"I'm sorry," Dimpo said. "You should have left me on Deimos, with the rest of the Weebs. I try to be brave, like a human, but I just can't."

"It's your glands," Crag said. "You can't help being the way you are."

"I thought I'd learn, but I guess I never will. You should have left me on Deimos."

Which was exactly what Crag was thinking. What had ever possessed him and his companions to take off from the moon of Mars with a Weeb, he didn't know now. They'd been, he recalled, a little drunk at the time. It had seemed funny, when Dimpo begged to go, to take him along.

"A human is brave," Dimpo said, repeating his catechism. "A human is never afraid." He turned his immense eyes on Crag. "You're not afraid, are you?"

"What's there to be afraid of?" Crag demanded irritably.

The ship swung over into a sudden steep dive that almost tore his guts out.

On the dark screen the points of light grew larger, one by one, until there were six of them in a neat pattern. Peering over the radarman's shoulder, Mackey said, "Bracket one for data."

Five of the light spots vanished, the remaining one growing large and bright.

"Thirty thousand tons, about our own weight," the radarman said. "Speed, five Mach absolute, one Mach relative. Vector —"

"I can see the vector," Mackey said. He thought aloud, "Maybe we ought to take them on. No, I think not."

To the pilot he said, "Two degrees left. We'll cut back and outrun them, all except the last, maybe."

Behind him, huddled among the five prospectors, Dimpo heard his last words.

"They're going to get us," Dimpo sobbed. "I know they will."

Mackey whirled. "Get that damn jinx out of here!" he shouted.

"See, Dimpo?" Crag said. He led Dimpo from the control room and sat down beside him on a pile of gear.

"They'll get us," Dimpo bleated mournfully, the tears coursing down his cheeks. "I'm afraid, Crag."

Disgusted with Dimpo as he was, Crag could not help feeling sorry for the creature. Weeb or not, Dimpo had made a fairly pleasant pet and companion. He had done his best to make himself useful, even bringing in a few tiny animals for food.

"Look," Crag said kindly. "Look,

Dimpo. They can't get us. Really they can't."

"Honest?"

"Sure. The only ships Pluto's got that could catch us are too small to hurt us. And the big ones are a little too slow." He paused, wanting to make this clear. "You see, Dimpo, it's on account of the high density on Pluto. The big ships have a poor mass-thrust ratio when they're operating near a large planet."

"I don't understand things like that," Dimpo wailed. "I only know how I feel."

"Well, take my word for it." Then, to change the subject, "Say, how'd you ever sneak up on those little Jupe cats so you could kill them? I thought those things could hear a pin drop a mile away."

Dimpo stopped crying. His thin chest swelled with pride. "I sneaked up. Weeb's good at sneaking up. We can make ourselves light."

That much was true, Crag knew. He had seen Dimpo almost float above the ground on a low density planetoid.

"I don't understand things like that," he said, evening the score deliberately.

"I sneaked up," Dimpo continued, beginning to dramatize. He brought out a tiny knife with a half-inch blade. "Then I stuck them!"

Staring up at Crag with a gleeful grin, he said, "That was good, wasn't it?"

"You bet." The Jupecats ran to four inches in length and had no claws, but why make Dimpo feel bad?

The Ensign Fuller had to come along again and glower at the Weeb.

The tears came once more, with renewed force.

"Look," Crag said to the captain. "I know how you feel about Weeb's. But we learned this much living with Dimpo: a Weeb's got intuition. If Dimpo feels this bad, something's going to happen."

Beside him, Morris, another prospector, said, "No fooling, Captain."

They had left Dimpo in the care of the other three, for which Mackey was thankful. He was no more superstitious than any other spaceman, but no less.

"Those Pluto ships are acting funny, and that's a fact," he admitted.

In the last half hour the dark ships of Pluto had grown slightly larger on the screen, but not much. They were definitely not trying too hard to close for battle. And that fact, among others, was making Mackey suspicious.

Pluto had less ships of the first line than Earth. Pluto's ships were slower and no better armed. Then why had Pluto declared war suddenly, not even trying to take advantage of a sneak attack?

It didn't make sense, not to a man like Mackey, who knew how important even a five hundred mile an hour advantage could be.

"Captain!" the radarman called. "Those ships are carrying some kind of shields!"

Mackey looked at the screen, saw that only two ships remained, and that those had grown larger. He rubbed his jaw.

"We're just about in range. Give them a blast."

Deep within the *Virtus* there was the whine of a rotor. A long finger of light flickered out at the closer

dark ship and fell short by a thousand miles.

In reply there came a beam from the dark ship, also falling short. But there was now a change on the screen. The ships of Pluto were holding back.

Mackey rubbed his jaw again. "They're steering close. So it isn't an anti-neutron shield, otherwise they wouldn't be scared of our beam."

He had a difficult decision to make. With Jupiter so close now his mass-thrust advantage had grown. At the very least he could figure a five minute lapse before the other Plutonian ships caught up. And he wanted information.

"Maneuver Three," he decided. "Let's give them a whirl."

In the classic pattern of One-against-Two the three ships wove flaming paths through space, the Two trying to box the One and the One eluding them by sheer swiftness. Close to his receiver the communications man huddled, hoping to intercept a command that might reveal a coming maneuver.

"Anything?" Mackey demanded.

"Nothing," the communications officer grunted. He held up a hand and said, "Wait! They're calling us."

"What do they want?"

"Surrender or die," the c.o. replied laconically.

Everybody laughed, breaking the tension that had built up. "Reply?" the c.o. asked.

"No," Mackey told him. "They might have a lady on board. And I couldn't think of a nice way to word it."

Amid more laughter the radarman said, "Two man scout ship out!"

They watched the tiny ship break away from its darker mother ship

and hurl itself toward the *Virtus*. Too small to carry heavy weapons, the scout ship was also small enough to outspeed the *Virtus*. And if it got close enough it could do sufficient damage to cripple the Earth ship.

Watching the tiny thing come on, Mackey also saw a larger pattern evolving. He sucked in a jubilant breath.

"Get set for a one degree swing left!" he barked. He watched the scout ship bore in closer.

"Nail it!"

The beam flicked out again, like a snake's tongue darting. It touched the scout ship briefly. For an instant a miniature sun blazed, and then was gone, and with it the tiny ship.

"Now!" Mackey yelled.

The *Virtus* heeled over, running wide open now with Mackey babbling almost incoherently to himself. He was going to catch the two Plutonians in line with each other. He was going to execute the beautiful and ancient naval maneuver of crossing the T!

"Now!" he crooned.

They witnessed the awesome spectacle of a great ship atomizing, all its fissionables going at once. At a distance of millions of miles it would appear as a new star being born. Up close there was nothing but light. Light so incredibly bright that when it was gone the blackness of space was more intense than ever.

"My God," said Ensign Fuller, shocked for once into humility by what he had seen.

For the rest there was a momentary silence. No shouting, no back slapping, no jubilation. For an instant they had looked into the furnace of Creation, all except Mackey for the

first time. They felt hollow inside.

And then Dimpo was with them again, racing ahead of his three guardians to throw himself at Crag.

"Oh, my," he wept frantically. "Oh my oh my oh my." Teeth chattering in a paroxysm of terror, he flung his arms around the stooped prospector and clung tight.

"Sure, sure," Crag said soothingly. He patted Dimpo's furry head.

"What I saw," Dimpo said. He had been looking through a porthole. "Oh, what I saw!"

"I know, I know."

And over Dimpo's wailing the radarman said, "Captain! Something funny. That lone baby is trying to stick to us, not even waiting for its friends."

Mackey looked and it was true. The remaining Plutonian ship was riding parallel, instead of running or falling away as it should have.

"We'll knock them off too," Ensign Fuller exulted, and some of the younger officers joined him, their adrenals pumping again in the hope of a two-strike.

Mackey disregarded them, his thin, lined face set in the memory of other battles, the knowledge lying heavy within him that no two battles ever had the same pattern. He had gambled his ship once in the hope of learning something.

But he had learned nothing. So far there was no ace up Pluto's sleeve. And that didn't make sense. Nobody ever declared war in the certainty of losing.

"Aren't they doing *anything*?" he fretted.

The radarman twirled his knobs, trying for more detail. "Something,"

he said. "They just kicked off another one."

"Scout?"

"No sir. Smaller. Too small for even a one man job."

Mackey watched the thing grow on the screen from a pinpoint to an object the size of an orange. Definitely too small for even a one man job, he thought. And not moving fast enough, although faster than his own ship could travel.

"Give it a burst," he ordered.

His gunners were good. They hit it perfectly, the computers recording the object enveloped by the beam.

They found themselves waiting for the flash. Only this time there was no flash. The object was now the size of a very large orange.

Mackey cursed. "Something wrong with the detonator. Check it!"

"It checks," he was told.

They hit it again with the beam, and somehow Mackey and all of them knew that it was no good even before the beam touched it. Nothing was going to happen, and nothing did.

There was nothing to do but run. The thing was only thirty feet or so in length, trailing white flame that twisted into corkscrew shapes as it twisted and turned and dodged, mimicking every move of the *Virtus* like a distant shadow.

Except that now it was no longer so distant. A hundred miles, maybe, and even that being cut down slowly but surely.

With the reflexes born of long experience and a mind devoted to a single business, Mackey had headed for Jupiter. In open space you were a sitting duck, but any planet might afford protection. And Jupiter was a big planet.

They hopped the peaks and knifed down the valleys, too fast for safety and flying blind. And behind them came the tiny rocket, and now it was fifty miles away.

And somehow they knew that when it hit them they were finished.

They couldn't dodge it and they couldn't outrun it. And as they went around another peak they knew it was the last one, for the thing behind them was only a mile away and coming on with the dread certainty of doom. . .

Now they lay in a deep crevasse, the ship resting on its tail. And above them through the methane and ammonia fog the ships of Pluto flitted, probing, seeking, poking fingers of light through the murk.

"What happened?" someone asked.

They had seen the flash behind them and sensed the explosion that must have caused it, even seeming to feel the concussion of such a blast, although it was impossible for them to have actually felt it.

"It hit the mountain," Mackey said.

And that was it. It had hit the mountain and he had reacted instantly, seizing the chance to drop into this great glacial crack in the planet's surface.

Someone wondered aloud: "What in blazes was it?"

Mackey knew, but the knowledge was bitter as gall in him, for there was not a single thing he could do with it. His face was wan and gray with the weight of the knowledge.

"They dragged out the old proximity fuse," he said. "They tuned it to the metal of our hull and stuck an old fashioned molecular explosive warhead

on it and used a molecular motor for the rocket."

He cursed savagely, awkwardly, a man not given much to cursing. "Not any damn fissionable on it, and that's why the beam couldn't blow it!"

"But they've got the same metal on their ships as we have," someone else protested.

"Sure, except for the higher density. And that's what the shields are for."

Through the portholes they could see shifting fog, and now and then a vague light flickering. And sometimes there would be darker movements that were shadows of the ships of Pluto.

"They'll go away soon," Ensign Fuller hoped aloud. "They must think that thing got us."

Mackey might have let him hope on, but honesty won out. "If they'd got us they'd pick up radiation from the crash. And as long as they're not getting it they know we're in one piece."

"We could open a damper," Fuller suggested brightly.

"Too concentrated. Crash radiation would be scattered." The captain shook his head. "You might as well have it straight, men. We're alive, but that's about all. That mountain had enough iron in it to attract the rocket, and there's enough iron in the walls behind the ice in the crevasse we're in to keep them from picking us out of the landscape."

In an agony of frustrated anger he banged his fist into his palm.

"If we had some scouts of our own we might try a couple of decoys. Maybe one of them might get through." That was the c.o., already down to wishing for what might have

been. "They can't have many of those proximity deals."

"No," Mackey agreed. "Or they would have used one sooner."

Again he banged his fist. "But enough, I'll bet, to take care of our main fleet when it heads up here!"

The communications officer blinked. "I hadn't thought of that. We've got to get a warning through!"

He reached for his microphone and Mackey batted his hand away.

"One peep out of that and we're dead!" the captain snapped. "Why do you think I ordered all generators off? One emanation of any kind and they'll nail us."

He shrugged. "No, here we are and here we'll sit."

"Not for long," Crag said. "Not after the batteries run out." They all looked at him as though they'd never seen him before.

But the other prospectors knew what he meant. Their heads bobbed in silent agreement, their faces showing no fear but a certain resignation.

"That fog is methane and ammonia," Crag reminded them. "Not water vapor. It's a couple of hundred degrees below out there."

It was not yet cold inside the ship, but that would come in time. Already the men were getting up to walk past the thermocouple for a quick look.

That was the only activity. Except for Dimpo the rest was silence.

Dimpo wailed unceasingly, despite Crag's best efforts to calm him.

"I'll die," he wept. "I'm going to die. We'll all be frozen—"

"Shut him up!" someone shouted.

"There, there," Crag soothed. Too late for anything but kindness now. "We'll be all right, Dimpo."

"If it weren't for that damn Weeb we might've been," the radarman said. His eyes lingered on an escape hatch.

"They're going to throw me out!" Dimpo screamed. His little hands clutched at Crag.

"Don't worry," Crag told him. "This is one time the doors and windows stay shut."

It was a gruesome joke, but at least he could still joke. Dimpo's great eyes regarded him with wonder.

"You're not afraid, are you?" Dimpo asked. "I'm afraid, Crag. I'll die here and I'll never get to see Earth and all the brave people."

"You won't miss much," Crag grunted.

"Both of you shut up!" That was Ensign Fuller, the pink freshness gone from his cheeks.

Dimpo lapsed into silence, the tears rolling down his face as he huddled close to Crag. And the prospector put his arm around the Weeb and held him gently, as he might have held a son.

"Don't worry," Crag whispered. "Captain Mackey will get us out of this. That's how he got all those medals on his chest, getting out of tough spots."

Dimpo looked at the medals and was distracted for a moment. So many colors and so much glitter denoted an unbelievable amount of courage.

And yet — Captain Mackey seemed perturbed. He was pacing up and back, peering through the portholes, rubbing his hands over his face. Once he stopped and looked out a long time.

When he turned back he seemed to have reached a decision.

"Gentlemen," he said, "I think we'd better take off."

"But they're still there!" someone protested.

"More than ever," Mackey agreed. He pointed at a porthole and said, "Have a look."

Peering out, they could see the faint shadows now and then. It seemed that several of them moved very slowly.

"Looks like they're landing scouts," Mackey said. "They can't spot us from above, so the obvious answer is to send out surface crews."

In reality he was offering them a choice, a choice of dying one way or another. If they tried to take off they would certainly be blasted, either by an enemy beam or by another proximity rocket.

And if they sat tight they were almost as certain to be discovered by a searching party.

It was a knowledge that sucked their bellies in tight. Maybe at that very moment there were dim figures on the edges of the crevasse. And in another moment there might be an eruption of flame and a terrible roar, and the end of them all.

"A decision like this should be put to a vote," Mackey said. "As for myself, I'd rather go out with all guns firing. Think about it for a minute."

They thought about it, all of them except Dimpo. The Weeb was too terrified to think.

"They might miss us," the radarman said. "Maybe if we just sit it out..."

"If we only had some way of *knowing* how close they were," the c.o. fretted. "But to sit here like this—"

Mackey nodded. "There's a way, all right. If one or more of us were to get up out of the crevasse. Then, if we remain undetected, we sit tight. If we're on the verge of being found,

well, we'd have enough warning so we could get aloft.

"Under the circumstances, however," Mackey continued, "I can't very well order anyone to do it."

And they knew well enough why he wouldn't give such an order. To their enemy the intense cold was a daily hazard, and so was the greater gravity. But for an Earthman to climb a wall of ice, weighing what he would weigh on Jupiter, and knowing that a pinhole in his space suit would be sure death. . .

Dimpo, as well as they, understood the situation. Yet he was certain that volunteers would come forward. Humans were brave, humans were fearless. Especially military men, with medals.

But the silence grew long and uncomfortable. And in the end it was Crag who broke it.

"Hell," he grunted, "I'll do it. I'm used to operating in a space suit, crawling around god-forsaken terrain like this. And at least I know how to handle an ice-ax and a rope, which you military fellows probably don't."

Suddenly it seemed to Dimpo that his heart had stopped beating. He felt no sensation at all, only a queer numbness. Crag was gone from his side, was getting into his space suit with the axe and the coil of rope at his feet.

In another minute Crag would be gone. And he, Dimpo, would be left alone in this ship with all these men staring at him and hating him. As though he were a — a Weeb.

All alone he would be, with the only human who might protect him far on the outside.

"I want to go too," Dimpo said. Strange, he hadn't wanted to say it.

He hadn't willed his tongue to move. But there the words were; he could hear them and it was his own voice all right.

"I want to go. Take me along, Crag. Take me with you," he was crying.

He had his arms around Crag's middle, preventing the man from getting the space suit zippered up all the way. Very gently Crag tried to pry Dimpo loose.

"You better stay here," Crag said. "You'll be safer."

"Get away from him, you damn Weeb!" Clutching hands seized him, but he only held on tighter.

"Let me go with you," Dimpo begged. "I'll help, honest I will!" He knew he couldn't stay here, not with the eyes staring at him full of hate and blaming him for everything.

"I'll help. I will! I'll make myself light and help you and I won't get in your way or anything. Crag! Crag!"

Crag stopped trying to unclench his fingers, stopped pushing him away. The prospector's eyebrows were lifted as the gist of what Dimpo was saying struck him. He waved away the men who were trying so roughly to pull the Weeb from him.

"Wait a minute," Crag said. "Wait a minute."

It was going to be a climb up that wall of ice. It was going to be the worst climb he'd ever had, and it might just be the beginning. His weight would be enormous, but his strength would not increase with it.

On the other hand, Dimpo, in proportion to his own weight, would have the strength of a giant!

"Dimpo," he said, taking the tiny face between his rough hands. "Listen, Dimpo, do you *really* want to go?"

"Really, really," Dimpo assured him, the oily blue tears flowing.

"You won't get in my way? You'll watch my signals and do everything I tell you to do?"

"I promise," Dimpo said. He had heard prospectors strike bargains and he knew just how to word this. His great, moist eyes looked into Crag's and he said, "I give you my solemn oath as a — a Weeb."

"O.K. Go get your suit."

With a glad little squeak Dimpo ran for his small pile of gear. On the long haul from the Asteroids Crag had cut down an old suit of his own so that it fit Dimpo, and all of Dimpo's possessions that were prized most highly.

It fit around his thin body loosely, complete as any human's space suit. The chemical heat packs, the insulation, even the small two-way communications set; everything was there. The helmet was too big; that couldn't be cut down; but he'd never minded that.

Then Crag's hand made the signal for "Let's go," and they were moving along together.

Crag took a last look behind him at his friends and they jerked their thumbs upward. Hand in hand he and Dimpo went through the first lock. There was a quick hiss of escaping air and the lock was slammed behind them.

Another lock and then one more and then the last one.

They were outside the ship, standing off a tail fin in the shifting fog. The ship towered alongside them, and on the other side was the faintly gleaming ice.

Crag shuffled his feet, saving himself the effort of lifting them. Behind him now, Dimpo did the same. The Weeb felt the pull of the planet, somehow

greater than it had been inside the ship, and he took a deep breath and rid himself of the extra weight.

There was a set pattern to this kind of climbing and they fell into it. Crag inched upward and Dimpo stayed on his heels.

For Dimpo it was easier. He needed only a tiny handhold.

Time and again Crag's foot slipped, and each time Dimpo got a hand up to steady it. There was a glow of pride inside him. He was helping! He was really helping!

The fog was an eerie thing to Dimpo. Accustomed to the crystal clearness of Deimos days and nights and the airless clarity of the Asteroids, he felt as a man might feel swimming in murky waters. The fog swirled and shifted gently, and sometimes he could see a short distance, sometimes only Crag's bulky form above him.

He saw Crag's hand move now, in a desperate signal. Stuck, the signal said, and it was a feeble signal. Crag was tired.

But he couldn't be! They *couldn't* back down! They had to keep moving upward. To try to back down was sure death.

Dimpo's hand tapped against Crag's foot: Keep going. And Crag's signal came back: Can't.

There was only one thing for Dimpo to do. Breathing deeply, he made himself lighter yet. A gentle push and he moved upward alongside Crag. He got his arm under Crag's and lifted.

It would either work, or it wouldn't. Either he'd be able to transfer some of his own weightlessness to Crag, or the resulting tug was going to pull them both loose.

Dimpo lifted. There was no tug. Crag moved upward again.

They lay on the icy surface, Crag letting some of his strength flow back into his muscles. Dimpo exhausted by the effort of will he had made. Overhead, shadows flitted.

They had to move, they had to get going. Crag got up slowly, uncoiling the long rope. He fastened it clumsily but surely to a projection.

For an instant Dimpo hoped they were going down. He didn't want to stay up here in the fog, not with those dark shapes above, not with the possibility that at any moment other dark shapes might appear close.

But Crag wasn't going down. Motioning Dimpo to stay close to him, he started away from the edge of the chasm, his feet barely lifting from the surface so as to conserve strength.

They shuffled along, moving in a wide arc. They edged around a hump, they inched their way through weirdly shaped columns of ice that gleamed faintly green in the fog.

There was a solid lump of ice in Dimpo's stomach now. The crevasse was somewhere behind them now, but he didn't know where. If anything happened to Crag he'd never be able to find it again.

But suddenly Crag was no longer there! Dimpo's body shook with panic. Like the stupid Weeb he was he'd let his mind wander, he'd lost Crag!

He was all alone!

And then, just in time to save his sanity, the fog shifted. Near a great chunk of ice he saw Crag's figure again. He ran, his little heart beating wildly, his lips moving in a vow never to let Crag out of his sight again.

He stopped running. His heart stopped beating. Terror froze him in his

tracks, then let him move only enough to fade into the shadow of an icy pillar.

The fog had shifted again, and off to his right lay the bulk of a scout ship!

And moving away from it and toward Crag were two smaller dark shapes!

Like wraiths, the men of Pluto. Tall, immensely tall, and thin as boards, even in their space suits. They were used to such terrain; they moved surely; they moved right for the place where Crag was!

Without thinking, Dimpo switched on his two-way.

"Crag!" he screamed. And then just a long scream of terror.

Too late he realized what he had done. The two shapes were stopped. Now they were moving again, but now they were moving purposefully.

He'd given himself away. He'd given Crag away, he'd given all of them away!

They hadn't known there was anyone around. They'd just been moving along, and they might just as well have passed within fifty feet of Crag or himself and never known.

But now they knew. Coming from off to the right, they couldn't see Crag yet. But in another minute or so they would.

The prospector was trying to work his way into the deeper shadows of some nearby icy humps. But he was moving at the speed of a snail. He'd never make it! They were getting too close!

They'd get Crag! They'd kill him! And then he'd be alone, and he didn't know how to get back to the ship!

Maybe there wouldn't even be a

ship. Now they knew that it was close by. As soon as they'd killed Crag they'd have all those dark ships down here.

What had he done?

The only human who's ever had a kind word for him, the only human who would protect him, and he'd cost Crag his life!

They were moving faster now, those two tall shapes, faster than Crag could move. Another minute, a matter of seconds, and those terrible guns would eat the space suit off Crag, eat the skin and the flesh from him!

Dimpo couldn't breathe. But he caught a deep breath, sucked it into his little lungs.

He could hear Crag stumbling, he could hear the two tall ones, their footsteps rapid now.

But they couldn't hear Dimpo. Almost floating, with only enough weight to give him traction, he made no sound at all. To Dimpo the Weeb, his knife with its half-inch blade in his hand, this was old stuff.

There they were now, right before him, their awful guns rigid in their hands. Their eyes were forward, intent on what was before them.

Tiny Jupe cats hadn't heard Dimpo. Neither did these towering men of Pluto.

There they were, one ahead slightly and one a few feet back to the left.

Now!

A small cut, only a few inches in length. That was all. No need to pause. Faster than a shot the intense cold had done the work. It was inside the suit. The towering figure was still, frozen forever, a statue of ice.

Once more. *Slash*. Another statue.

It was easy, so easy. And there was Crag, still desperately stumbling.

Dimpo floated around him, waving. For a moment, he thought Crag was going to fall. He jumped forward and caught the prospector's arms and helped him regain his balance.

Quickly he tapped the message: Are you all right?

Crag nodded. That was good. He'd been terribly afraid. What if Crag were not all right? Then what would he have done?

But Crag was looking back, pointing at the frozen figures behind them and then pointing at Dimpo. You? came the taps.

Dimpo bobbed his helmet, waved the tiny knife to show how he had done it. He was happy, very happy, for the pressure of Crag's hand on his arm told him he had done well.

Now what? Dimpo's taps went, and Crag's reply was: Back. And that was good, too, because more than anything Dimpo wanted to get back to the ship, to get out of this awful fog.

And Crag was wonderful. With the infallible sense of direction that had taken him across the barrens of Mars and the shifting sands of Deimos and a hundred other trackless places, he was picking his way back.

Somehow Crag knew. Somehow there were signs that had registered in his brain, without his even thinking about them.

Here were the icy mounds he had stumbled across in his flight, here were pillars of ice, here a jagged, up-ended cube gleaming faintly.

Overhead a ship moved now and then, making a shadow. But not more ships than there had been before. They had received no message.

And there at last the dark hull of the scout ship. It would be some time

before it was missed. There would not be two patrols close together.

Not much further now, Dimpo thought happily. Just a little way and they would be at the crevasse. And then a slide down the long rope and they would be inside the ship again.

But Crag was stopping. He was looking back, at the scout ship.

Dimpo's heart contracted in the clutch of fear. More scouts? It was a two-man, but maybe there'd been a third one squeezed in. He was afraid to turn and look.

But Crag was turning him about. What was he doing? He was walking toward the small ship! He was waving Dimpo to come along!

Then the ship was directly before them and Crag was looking it over. Why, Dimpo couldn't see. It was just like the big ones, except in size. The same materials, even, except that it didn't have one of those shields around it.

Now Crag was tapping the ship, making strange motions with his hands. What did he want? Try to lift the ship?

It was impossible. With the first thrust of his thin shoulders Dimpo knew he could never budge this thing. A hundred Weeb might have lifted it, but not one.

But that wasn't what Crag had wanted. He was going to tap it out. First he was pointing up along the side of the ship to an escape hatch; now he was pointing to himself, and now tapping: Lift me.

So that was it! The hatch was too high for him to reach, but maybe with Dimpo giving him a boost he could make it.

Dimpo bent low, grabbed Crag's ankles. With all the strength he could

muster he pushed upward, Crag helping as much as he could by pulling with his hands.

Somehow he made it. He had the hatch open and was signalling Dimpo to come up. That was the easy part of it. A leap and he was up there, and Crag had a hand outstretched to help him in.

And finally they were inside the main compartment and it was just like the other rockets Dimpo had seen. Crag had his suit off and was checking over the controls.

And now Dimpo knew what Crag was going to do. He was going to take off in this ship! Before anyone knew what was happening he would have them both out of here! They'd be safe!

He felt the ship lift. But why so slowly? It was only a few hundred feet and Crag was stopping it. It was tilting, moving slowly to one side. It was dropping!

It was dropping into that awful crevasse, right alongside the Virtus!

Dimpo began to weep.

"Sure," the captain said. "It wouldn't be too difficult. No tougher than shooting a flea off a dog's ear at a hundred yards, with a bow and a crooked arrow. Standing on your head, that is."

Crag shrugged. "All right. It was just an idea. You don't like it, Dimpo and I can slide that scout back out of the ship-release port and try to make it on our own."

Mackey laughed.

"No, no, don't get me wrong. I like it. I'd like anything better than sitting here, wondering if this is my last breath."

He looked at his men. "Well?"

"It's a lousy break on mass," the radarman said. "We total more than fifty times the scout. We'll have to come darn close."

"If we don't get hit before we even have a chance to try it," someone else grumbled.

"If the dog hadn't stopped —" Mackey began disgustedly. "Look here, the man and the Weeb are waiting. They could have taken off without asking us; maybe they still have time. They're entitled to a fast answer. All right now."

He raked his eyes around. "Hands!" he said. "All in favor. . ."

The hands went up. There was no need to count. They were all tired of sitting and waiting for it to hit them.

"Good," Mackey said.

He clapped his hands. "All right, engineers! Get those controls wired. And make sure those scout motors are absolutely balanced. When I push the button I'd better not throw a curve."

He was moving now, the gray gone from his face. Any plan was better than none, and if he died at least he'd die out in space, not in this miserable glacial crack.

They all felt better now. The engineers vanished down the hatch to the ship-release port and came back trailing wires. The radarman hummed as he leaned over his switches. Even Ensign Fuller sang snatches of a song about rocketeers not having ears but only holes in their heads.

And suddenly Captain Mackey was shouting, "Belts, everyone! We hit it on all six!"

His hand went up. "Five-four-three-two-Hit!"

There was no sound but Dimpo could feel the roar in his stomach.

He tried to cut his weight but it was no use. He couldn't catch his breath; it was all squeezed out of him. He couldn't even scream.

Outside the portholes there was a gray wall a thousand miles high and it unrolled like a ribbon until suddenly it was gone and there was nothing but black outside. And the radar screen was spangled with ships.

"Fire at will!" Mackey commanded, and threw the ship into a crazy spiral that gave the gunners no hope of hitting anything.

The c.o. was pouring stuff into the transmitter, praying that enough of it got through even if he himself didn't.

Too fast for them to keep track. The defense computer was calling the enemy blasts: "Miss left port, miss right tail, miss right bow, miss. . ."

They were all misses, some of them hundreds of miles off, some of them too close for comfort.

"Dropped one behind!" the radarman yelled. A moment later he shouted, "Lost another!" The ships of Pluto were fewer on his screen, and each one left behind was a millstone from their necks.

And then at last the only thing that counted, the thing they'd been waiting to hear.

"Here it comes!"

It came from off their port side, from a thousand miles across the void, and it was only a tiny thing, comparatively, a relic of bygone days.

It was a missile off the military junk heap. It was a slingshot against Goliath. And it could do to the *Virtus* what the slingshot had done to Goliath.

They watched it come on, watched it creep closer, watched its inexorable march across the screen.

"Good thing they didn't use two," Mackey said, and picked up the wires and the makeshift switch.

"She's off our bow," he said, checking the screen. "Put her on our tail."

And they wasted a precious minute cutting back so that the thing now flew directly behind them. "How far?" the captain asked.

"Hundred miles," the radarman said.

"We'll wait. Keep her steady."

They waited. They kept her steady. They watched their doom move up to seventy-five, to fifty miles, to forty miles.

"Pray," said Mackey.

He pushed a button and a red light went on. The release was open. He closed the switch.

It was like being kicked in the back by a mule. A flash of fire and the scout ship was away, flying blind.

It had to be close, it had to be awfully close. It had to miss by less than a mile, otherwise the relative mass of the *Virtus* would remain greater.

But it was less than a mile! It was far less!

Like an angry hornet the proximity rocket spun, its dreadful affinity now centered on the closer ship.

They watched the chase, they saw the flash. And then the sky was black and there was nothing but space between the *Virtus* and Earth.

Crag lolled in his seat, a cigar clamped between his teeth, and watched the blue ball that was Earth grow larger through the porthole. Beside him Dimpo sat and trembled.

"Take it easy," Crag said.

"Maybe they won't like me," Dimpo moaned.

(Continued on page 139)

STENOGRAPHER'S HANDS

DAVID H. KELLER, M.D.

Illustrated by FRANK R. PAUL

When he wrote Stenographer's Hands, Dr. Keller had already established a reputation as a major figure in SF publishing. Departing from "pulp norms" he combined a deep understanding of human nature with what, for the times, passed for "impeccable" science. Silhouetting people against backgrounds of sometimes shattering technical concepts he wove one Keller-tale after another, each one solidifying the approach which was to become his trademark. Thus, in the by now classic Stenographer's Hands, Keller's characters sometimes strut and sometimes pose, but finally are forced to rebel the way people do when trapped by their own emotions and in this case by genetic horrors created by all too human greed.

THEY make too many errors!" cried the great man in intense irritation, as he turned restlessly in his chair. "We keep a chart of the errors — we keep a chart of everything we do — and the number of errors a day per stenographer is constantly increasing. These errors are annoying, and they are costly. No matter how hard our office force try, they do not correct all of them. We were awarded a bid last month — one of the typists put a period in the wrong place and it cost our firm over a quarter of a million. In another instance the omission of a comma caused us to lose a law suit. Constant inefficiency — causing continual irritation and a lessened production of business! Our experts tell us that if the stenographic force were one hundred per cent perfect we could nearly double our business. I doubt that, but we could do much more than we are doing. I want you

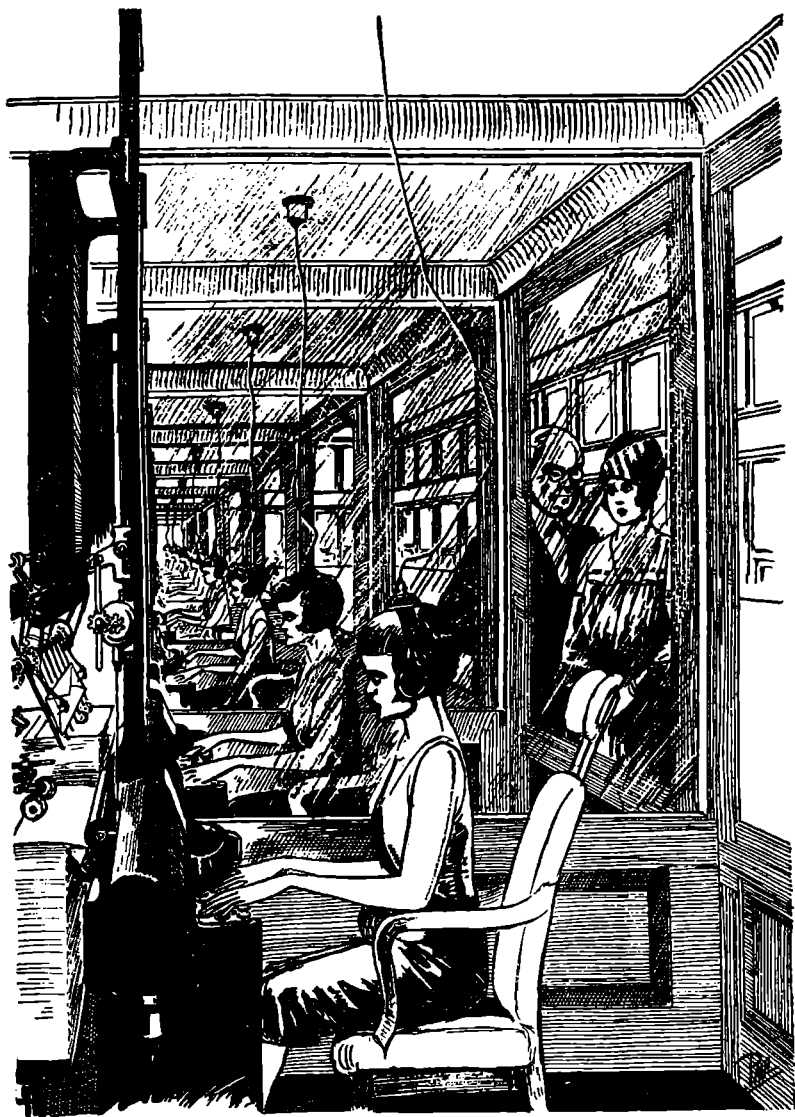
to devise some plan to stop the errors!"

Dr. Billings, eminent biologist and sociologist, looked curiously at the speaker. He had worked for Jerome Smith, President of Universal Utilities, for several years and had always found him an interesting personality and his problems vitally important. After a moment's pause he asked:

"How many stenographers do you employ, Mr. Smith?"

"Ten thousand in our New York offices. As you know, we decided to centralize all of our offices some years ago. We need ten thousand — but usually we have only about nine thousand and have to replace them constantly. We handle millions of letters, a year, personal, individual letters — our business life depends upon the character of these letters — and we cannot secure the right kind of stenographers."

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"Why not raise their pay?"

"That has been tried. The more pay, the more pleasure; the more pleasure, the more fatigue and the greater the number of errors."

"Then educate them!"

"They refuse. We have free night schools — one fifteenth of one per cent attend. They won't even go when we pay them. Claim they want relaxation at night. Do you know what the average stenographer does with her twenty-four hours?"

Dr. Billings laughingly confessed his ignorance of their special habits.

"We studied a thousand of them and made a composite picture of their daily life," said Jerome Smith, answering his own question. "They are High School and Business College graduates, about twenty years old. They stay in bed as long as possible, dress as fast as they can, bolt an insufficient breakfast and spend about one hour in the subway, or elevated, going to the office. From 9 A.M. to noon their work is fairly correct. During the noon hour they window-shop and eat a poor lunch. They would rather spend their money on silk stockings than beefsteak. From 1 to 5 their work becomes more careless as they become more fatigued. It takes them an hour to return to their home where they eat the only hot meal of the day. At 8 their boy friends come and take them to a movie or dance hall. They usually retire between 11 and 1. On Saturday afternoons they go to Coney Island. Sundays are periods of relaxation, unless their boy friends have a Ford. After an average of two years and three months of work they marry and keep on working till the first child is born. Then they cease to work, but from the day of their marriage, they

become less and less efficient. If it were not for humanitarian reasons, we would discharge every woman as soon as she is married. The capable clever ones become private secretaries, the beautiful ones marry or go into private apartments, the dull ones are discharged, and last year our turnover was sixty-five per cent. We can hardly hire and train them fast enough. Something has to be done. I engaged you with the understanding that you could solve such problems and I want you to get busy!"

Dr. Billings looked irritated as he replied:

"You talked to me about this a year ago and I gave you several models of a phono-stenic machine, invented in our laboratories. As I recall it, I advised that you have five thousand of these machines made and discharge ninety-nine per cent of your stenographers. You never commented on my suggestion."

"We gave it a trial! We are always willing to try anything! At first it looked as though it might work: it really was a beautiful piece of machinery. All our men had to do was to talk into a receiver and the sound was transmitted to the machine, transformed into mechanical activity and the letter was finished a second after the dictation ended. As I remember the details, the machine was entirely automatic, had a paper feeder and discharged the letter into one tray and the carbon into another. As a machine, it was perfect, but it could not think, consequently, there were many words that could not be used — for example, to — too — two — three different words, three different meanings, but only one sound for the three. Another difficulty was in the matter of pro-

nunciation. In adjusting the machine you used an actor who is credited with having a wonderful voice and speaking perfect English. Unfortunately, in our office we have men from every part of the United States and many foreigners who have had to learn English. All of our men spoke English, but they all had a different accent, and none spoke as perfectly as the actor. The machine typed exactly what he spoke, but the letters it produced were certainly queer affairs. I was sufficiently interested in the proposition to invite the actor to come and dictate for us, and the letters he produced were perfect, so long as he was careful in not using words with two meanings."

"You could have had the machine adjusted to suit different accents," replied Billings in a rather irritated voice.

"Certainly. I knew that! Then they would have been one man machines. If adjusted to a Pennsylvania Dutchman, it could not be used by an English speaking Spaniard. The invention was simply not practical. What I demand is better service from more efficient stenographers!"

"I do not see how that can be obtained!"

"You had better see! That is what I hired you for and let you write your own salary. I am a business man and not a scientist. All I know is that the stenographer is a human machine. She uses her hands to work with. The hands are connected with the brain. Brain, hands and typewriter produce letters — I must have perfect letters. It is your business to produce them. Get busy! When you have a plan, come and see me. Till then stay away from me, because the presence of inefficiency irritates me."

The biologist lost no time in leaving the office, while Jerome Smith turned restlessly to his next task. Having given this definite problem to Dr. Billings, he promptly forgot it — for the time being. He knew, and so did Dr. Billings, that unless the problem were satisfactorily settled, there would be a new biologist employed within a few months.

For the next month, Dr. Billings and his subordinates studied the race of stenographers. He found that practically every statement that Jerome Smith had made about them was correct. Those who were capable ceased to be mere stenographers and filled offices of trust as private secretaries. They ceased to function as mere letter writers. Many married. The dull ones remained dull. Gaps in the ranks were easily replaced by very ordinary material from business colleges. Replacements were frequent and the yearly turnover large. The average office worker was fairly capable but absolutely undependable. Most of them had ambitions and dreams, but these did not extend in the direction of writing a perfect letter. A few grew old in the service, but most changed occupations before twenty-five. Socially, they were middle class, poorly housed, inadequately fed, but rather elegantly dressed.

Dr. Billings worked and studied and yet failed to see how the work could be more efficiently performed. His inability fretted him. His pride was hurt, and, in addition, he was faced with the loss of his position in case he failed to satisfy his employer. Worry, nervous strain and overwork produced insomnia. Finally tired, nature demanded sleep, and in this slumber came a dream from the subconscious.

From a high balcony he overlooked in his dream an office where several hundred stenographers were working at noiseless machines. He could tell from the continued intensity of their labor and the satisfied expression on their faces that they were happy in their work. Someone put an opera glass in his hands, and he focused on one individual after another. He was at once impressed with the intelligent faces and the enormous, capable hands — large strong hands; long and wonderful fingers, racing surely over the keyboards. In his dream he watched them, hour after hour, as they wrote letters — and he knew, without reading, that they were writing perfect letters at a terrific speed.

Waking with a start and shivering, he turned on the light. Unable to forget those hands, he placed his own between the light and the calcined wall, making huge extremities appear as shadows with twisting menacing fingers. Then he went to sleep, and the next morning, after shaving more carefully than usual, he called to see Jerome Smith; and in spite of his efforts, it was the scientist who was excited this time and not the capitalist.

Without preamble or delay, he blurted out the marvelous solution, which had come to him after his dream.

"We will secure better stenographers by breeding them!"

The astonished leader of finance could only stammer, "W—w—what?"

"Breed them!" repeated the scientist. "When man wanted to develop the carrier pigeon for speed, the trotting horse for racing, the pointer dog for hunting and the cow for increased

milk production, he bred them. Burbank bred a spineless cactus — we will breed errorless stenographers!"

"You must be insane, Doctor!"

"Not at all, but I cannot blame you for thinking so. The students of developmental neurology, headed by Frederick Tilney and Dr. Huntington, organized the Galton Society of America. They have for years studied the growth of the brain, and they have shown that the development of certain areas in the cerebral cortex is directly controlled by the use made of the hand. They believe that there are certain undeveloped areas in the brain, especially in the frontal lobes, and that, as the use of the hand increases, these lobes will correspondingly be developed to greater usefulness.

"You spoke of human machines: you said that the perfect stenographer would have wonderful hands and an acute brain. That made me think. Stenography and typewriting are highly specialized uses of the hand, controlled by certain brain centers. The more expert the hand, the more highly developed will be the brain; the finer the cerebral growth, the more wonderful will the hand be in its accuracy. If we can develop new sections of the cortex, deepen the grooves between the convolutions, we can produce stenographers who are more nearly errorless. If we can breed them for accuracy and speed, we will have creatures as highly specialized as the racing horse or the bird-dog. These stenographers will remain faithful to their work, because they will be so bred that they will never want to do anything else, even if they are able.

"They will be perfect human machines, capable of doing one kind of

mento-physical work and unable and unwilling to do anything else. By a process of selective breeding, we will increase their speed and decrease their errors. That is the solution to your question."

Jerome Smith remained silent for many seconds. Even though he was accustomed to tremendous problems, this was almost too much for his intellect to grasp. Finally he asked, almost in a whisper:

"But how can you breed them?"

"That is simply a matter of detail, technique, something for your experimental station to work out. I give you a fact — '*Breed them.*' The rest can be left to your subordinates. Yet I will give you the main outline of my plan. You appreciate the fact that most of your stenographers are women. When they marry, they mate with artisans, salesmen, street car conductors, occasionally with a business man, but never with another stenographer. I understand you have about ten thousand stenographers in your employ; gradually replace five thousand of the dull ones with five thousand male typists, the best you can find in the entire world. Build a suburban center with comfortable homes — and offer to every male stenographer who marries one of your office a home, rent free, and complete maintenance. Do not let them marry unless they both pass certain examinations for speed and perfection of copy. Give an extra bonus for every child born. Have a community hospital, day nursery, kindergarten, and school. Thus the mothers can soon return to their office, but the children will remain under your control. From their youth they will be taught stenography and typewriting; they will be made

to live with their machines. As soon as they are efficient enough, put them to work in your offices. Make them independent of their families. From the first, control their twenty-four hours' activity. Always they will be stenographers — encourage them to marry stenographers — and breed stenographers. I believe that in ten generations you will be able to produce office workers that will turn out perfect letters and be glad to do it."

"Nonsense!" shouted Jerome Smith, springing from his chair and walking excitedly up and down the room. "Ten generations would take two hundred years. You and I would be worm's food long before even a start was made."

"Under ordinary circumstances, your criticism would be warranted," replied the biologist, soothingly, "but wait till you hear the rest of my plan. In this special colony, we will have complete control of the food supply. The food will be part of the salary. We will furnish three meals a day — the nourishment of the babies will be completely under the control of our dieticians. With these foods we will incorporate certain chemicals, especially some obtained from the ductless glands. Thus, the growth of the babies will be accelerated. They will mature more rapidly than the average children. The first generation will be ready to marry at sixteen, whereas, the next generation will be working at ten and marrying at fourteen. Eventually, these specially bred stenographers will be doing full duty at six and marrying at eight. I do not believe we should force nature beyond that point. In fifty years, sufficient results will be obtained to make the experiment profitable. I thoroughly

believe that five generations of such intensive breeding will yield a race of stenographers who are able to produce the finest work and absolutely incapable of doing anything else."

Jerome Smith shivered. The idea, for some reason, was distasteful to him — and he said so.

"I admit that the average stenographer is rather poor material, but they are human beings, Dr. Billings. I can hardly reconcile myself to your idea."

The scientist, however, was unable to brook opposition. "But it is for your own good, Mr. Smith! If you were just selfish in the matter, it would be different. You said yourself that their life was unhappy and unsatisfactory. You insisted that they had no future that was worth while — they few of them could advance. Your idea was that they were poorly fed, badly housed and that their sexual life was inadequate and unsatisfactory. If you follow my plan, you can make them comfortable and happy. Once they are bred to be capable stenographers, they will not want to do anything else. They will be able to attain the greatest satisfaction in their work. They will only be happy when taking dictation, and transposing it into type. Their motto will be, 'Efficiency plus Contentment.' No doubt, the time will come when we can have a new generation born every ten years; and every child will be born with the inherited desire to become a perfect stenographer. If it works, you can follow out the same plan with your other workers, but that is for the future to decide. You will be able to secure a great advantage over your competitors. In fifty years, Universal Utilities will control the market of the

world—. In two hundred years, you can have a specially bred line of workers. I can see that finally your organization could so breed workers that they would be willing to work for no other reason than the pleasure they had in it, or because they were forced to by the inherited urge. That is the picture of the future. We need only make a start."

"But won't they object? Can they be controlled?"

"Certainly! At first they won't realize what is happening — all they will know is that they are being well housed, excellently fed and beautifully clothed. The changes in the generations will come gradually. When the realization comes, it will be too late to resist. They will have only one ambition then — one primitive urge — to write perfect letters. They will be machines, but human — they will know the difference between *to* and *too* and *two*. Can they be controlled? Why, Mr. Smith, the only strike you will ever have will come when you are unable to supply them with work!"

And Jerome Smith, President of Universal Utilities, was finally convinced. He was big enough to see that he was only a small part of an organization that might some day control the destinies of the world, that would hold in its grip the commerce of a universe. A small man might plan for a generation, but a big man would arrange a programme that would carry on in every detail a thousand years after his death. Alexander might make Macedonia famous for a generation, but William the Conqueror would found an Empire that would grow greater for a thousand years.

Jerome Smith looked into the fu-

ture. He saw an organization, an office force that functioned perfectly, a sales organization of five thousand trained men, dictating to ten thousand errorless stenographers. He envisioned a constant flow of perfect, beautiful letters, streaming in every direction from the central offices to all parts of the world, bringing in a volume of business that was the envy and despair of his rapidly weakening competitors. But he saw more than this. In his factories he saw specially bred workers, working rapidly with skilled hands, perfectly co-ordinated with highly developed brains. He wondered if the same principle could be applied to other departments of Universal Utilities — if salesmen could be bred to trail the uninterested customer with the unflagging interest of a blood-hound. Whether even the higher executive offices could not be filled with specially bred managers.

Realizing that time meant nothing, if only in the end the results were satisfactory, he gradually thought in terms of Universal Utilities, rather than in units of isolated humanity. Everything must be sacrificed for the organization. The individuals were of no value. In fact, he considered them simply as pawns on his chess board, things hardly human, living in human shape but somehow not worthy of sympathetic regard. The more he thought about the breeding of capable stenographers, the more he felt that the end result justified the means employed. He even reached the point where, in his grandiose pride, he felt that, like a true creator, he was changing something useless into a thing of beautiful utility. Without further delay, he gave the necessary orders.

The final arrangements were made easily.

Universal Utilities manufactured everything necessary for the building and equipment of the suburban homes; the arrangement of a new salary scale and system of bonuses was also easy. The hard part was to find five thousand competent unmarried male stenographers to take the place of the five thousand incapable females who were to be discharged. Yet, even this was finally done — social centers were organized — every opportunity was given the ten thousand young people to spend their spare time with each other, thus encouraging matrimonial possibilities in every way. As a result, six thousand of the stenographers were married within a year and another two thousand at the end of eighteen months. Those who refused to marry were discharged and their places filled by younger and more socially inclined typists. As fast as they married, each couple was given a comfortable home in one of the apartments in the new community centers. The generous system of bonuses made the birth of a child an unqualified pleasure rather than a foreboding of disastrous poverty.

Such a programme could not be kept a secret. In fact, Universal Utilities used it as one of their most striking advertisements — not only to bring their firm into world renowned fame as unselfish philanthropists, but also to attract to their employ the most skillful office workers from all over the business world. For several Sundays the leading newspapers ran long advertisements in their Magazine section. One was headed:

**SKILLFUL
STENOGRAPHERS
SEEK
SUBURBAN HOMES**

“Universal Utilities promotes health and happiness among its office force by encouraging its employees in every way to lead normal lives. Marriage among the Stenographic force is encouraged and every inducement given the young people to become parents. Stenographic suburban centers are thoroughly equipped with hospitals, day nurseries and kindergartens. For the first time in the history of the business world the lesser employees of a great corporation are being given an opportunity to live the kind of lives that the Creator intended all men and women to live.”

Naturally, children were born in these centers. In fact, many more children were born than were either expected or necessary for the continuation of the experiment, which both Dr. Billings and Jerome Smith were watching with the greatest interest. When, at the end of five years, the scientist reported to the Corporation president that there were now over ten thousand specially bred stenographic children, he anticipated his employer's question by ending his report with the statement:

“Under the present conditions of life in the stenographic centers, there is no doubt but that there will be many more children born and raised to maturity than there will be needed to carry on the experiment at the end of eighteen years. This is really a necessary part of the programme, especially in the early generations of breeding. There will be many children who will not be true to type.

Later, we hope, by a series of carefully conducted measurements, to eliminate the unfit at a very early age. Even now we believe that much can be told by the shape of the hands and the length of the fingers. In this generation, however, a certain number of the children will resemble their grandparents more than their parents. We feel that we shall have to have thirty thousand children born as soon as possible in this generation in order to be sure of ten thousand adults who are perfect enough to carry on the experiment. Realizing the necessity of having as many children born as closely together as possible, we are now giving an extra bonus to stenographers who are twins. In this first generation, we will begin at once to teach stenography and typewriting in the primary grades, and we believe, that by the time the children reach the age of ten, we shall be able to pick out one-third of them as giving promise of special speed and accuracy. These will be trained in a separate schools, while the duller ones will gradually be isolated, and in the course of years, be amalgamated with the ordinary city workers. I might add also that the special diet is working favorably; all the children are, on the average, two years in advance of the ordinary child in size, weight and intelligence.”

Twenty years passed and eighty per cent of the old stenographers were retired on a liberal pension, being replaced in the offices of Universal Utilities by the first generation of specially bred and highly educated office workers. One out of every four of the children in the first generation had been able to pass the necessary

tests. These had been sent to special schools where the entire time was spent on spelling, punctuation, grammar, stenography and typewriting. At the age of fourteen, they were working in experimental offices, while at fifteen they were being given positions in the main offices of Universal Utilities. As a rule, they were fine specimens of manhood and womanhood, having been given the best of care in every way since their birth. Irrespective of any ability they possessed, none in this generation were given positions unless they manifested genuine love for the work. Records were carefully kept and every precaution taken for the continuation of the work after the death of Jerome Smith and Dr. Billings. While the actual details of the proposed reform were only known to a few of the higher officials, still it was generally understood that Universal Utilities was sold on the idea that the business success of the future lay in perfect letters, written by errorless stenographers.

In such a company, more like a machine than an organization of human individuals, events moved with the regularity of clockwork. Jerome Smith at seventy-five was still watching the daily curve of errors which was placed routinely on his desk. With grim satisfaction he saw the line indicating the volume of business and the daily number of letters rise steadily towards a peak that could not even be estimated, while at the same time the number of errors per stenographer per day was steadily falling. This record was carefully watched and the results published. A definite scale of advance in salary was the reward for weeks

and months of perfection. Some stenographers were able to go an entire month without spoiling their record. The perfect stenographer had not yet been born, but a wonderful advance was already apparent. The gain in speed was as remarkable as the improvement in accuracy. Special inventions had to be devised in order to allow the typewriters to respond rapidly enough to the flying fingers. It was even found advisable to devise an automatic paper feeder so that the typist would not have to stop to insert a fresh sheet of paper. A touch on a button put in a piece of correspondence paper, while pressure on a different button inserted an envelope.

It might seem that with the increasing speed and greater accuracy, the correspondence of Universal Utilities could be carried on with five thousand office workers instead of ten thousand. The truth was that the ten thousand stenographers were doing ten times as much work as the same number had accomplished twenty years before. The business had correspondingly increased. The carefully kept charts showed that the experiment was paying for itself in every way. When the third generation was born, there was a smaller per cent to be discarded — the result of the intensive breeding was beginning to show. As an old man, aged in body but still active in mind, Dr. Billings in his annual report to his employer, Jerome Smith, made the interesting statement:

"In the fifth generation, we are finding less than fifteen per cent of the babies who are not running true to type."

Two hundred years passed. Universal Utilities, now governed by Hiram Smith, descendant of Jerome Smith, ruled the financial world. During that two hundred years, the basic principle that "better letters produce better business" had never been forgotten. There were new ways of reaching the ultimate consumer: the radio constantly endeavored to furnish new contacts, salesmen in monoplanes reached every small town, but still the great bulk of the business all over the world had to be carried on by correspondence.

And that correspondence, carried on by Universal Utilities was now approaching a state of wonderful perfection. Errors might be made in dictation, addresses might be wrong, but a mistake made by the ten thousand stenographers, was now so unusual that the heads of departments were always inclined to blame the mistake on the other portions of the official force. Year after year the stenographers approached the perfection of beautifully adjusted machinery, with this difference: they could think, reason, evaluate, differentiate. To their finely co-ordinated muscles were added harmonious and specially trained minds. And most important of all was the pleasure that they took in their work. They were content only when working, they were happy only in the office. Nothing but severe illness might keep them from their machines. Their homes were simply miniature offices, where they talked over the work of the day, helped their children write letters and vied with each other in speed contests.

The increased love for their work influenced their social contacts. Those who were recognized as being ninety-

nine per cent efficient hesitated in seeking the society of the eighty-five per centers. An unmarried girl who was ninety-seven per cent perfect in accuracy and speed was willing to keep company only with a young man who was as brilliant as she was—she certainly would not consider matrimony with one who was rated at ninety per cent. Their one track minds ceased to consider personal wealth, beauty, fame or sexual allure as reasons for marriage. All they could think, talk and dream of was their work and the possibility of some one, some time, working a whole year without making an error.

Sundays and holidays were observed but were always followed by days of increased production, as the ten thousand workers carefully rested, avoided every form of fatigue during their hours off duty, and in every way conserved their energy for the hours of production following the holidays.

One afternoon Hiram Smith was entertaining a young lady in his office. In fact, it was his daughter, recently returned from one of the most fashionable colleges in Massachusetts. Hiram Smith was disturbed, even though he tried to conceal his annoyance. His only daughter, in fact, his one and only child, had been dismissed from college on account of complete failure to make the necessary grades. The father had tried to keep her in college, but even his great wealth and unusual power had been insufficient to bribe the President of the college, who had simply said that the young lady was unwilling to study and could not stay.

There was nothing in the general appearance of the late collegian to indicate mental deficiency. In fact, she

looked unusually alert and mentally active as she sat on the other side of the central table.

"Well?" grunted her father, savagely smoking a cigar.

"Well!" answered the daughter. "Is this the way you welcome your only-only?"

"You have disgraced me!" Hiram Smith replied. "Only my position has kept it out of the afternoon papers. All of New York knows about it. My daughter, Mirabella Smith, great, great, etc., granddaughter of Jerome Smith, thrown out of college, because she could not pass the necessary examinations."

"That is wrong, Dad!" protested the girl; "I could have passed them, but I did not want to — I told you that I did not want to go to college: I simply abominate mathematics and languages. I did not try to study."

"What are you going to do? Marry at eighteen?"

"No. I want to be a stenographer."

Hiram Smith nearly swallowed his cigar.

"A stenographer?" he whispered weakly.

"Yes. Your hearing is all right, is it not? You heard me the first time, didn't you? I have been practicing on a machine for over a year and can do some shorthand. I want a job in Universal Utilities."

It was then that the great man laughed—so heartily that his daughter began to blush in anger.

"I don't see anything funny," she protested.

Finally the man controlled his laughter.

"Have you ever seen one of our central offices?" he asked.

"No. Of course, not. You never let me know anything about your business: and you should, because some day I am going to run it!"

He looked at her in astonishment, but this time he did not laugh. He simply stood up as he asked her to come with him.

Walking through long halls, they finally went by elevator to the tenth floor of the building, which cared for much of the clerical activities of Universal Utilities. They entered a large room where, in glass enclosed, soundproof, individual offices, five hundred men were apparently talking into telephone receivers, though not a sound could be heard. As they walked slowly around the room the father explained the system to the daughter.

"In order to handle our tremendous volume of mail it is necessary to employ ten thousand specially trained clerks who do nothing except dictate answers to the hundreds of thousands of letters we receive daily. Years ago these letters were all dictated and taken down in shorthand. Now each clerk is connected by telephone to a stenographer, and as fast as a letter is dictated, it is written. Some of our men talk at the rate of one hundred and fifty to two hundred words a minute, but we have never found one who could talk faster than one of our average stenographers could write. Our business is a peculiar one, and we take great pride in our letters. They have to be absolutely individualistic. For over one hundred years we have tried to avoid the semblance of anything like a form letter. When John Jones of Honolulu receives a letter from us, it is a highly personal one from Universal

Utilities to John Jones. He likes it. Our millions of customers like it. We are able to establish an individual contact and our customers stay with us. We have the world divided into ten thousand districts, and the mail from each district is answered by a man we have familiarized with that particular district; a man who is keenly alive to the special needs of the people, who seem to be his neighbors. He understands their habits, thoughts and reactions. Of course, we write letters in many languages, but eighty-five per cent of all our correspondence is conducted in English. We try to answer every letter within two days of the time it is received. Of course, some days are very heavy — Mondays and the days following holidays for instance — but we never fall very far behind. Each one of these ten thousand letter clerks dictates eight hours a day. There is a fifteen minute rest period after every forty-five minutes of work and an hour off at noon — a fairly long day."

Mirabella Smith looked with interest around the room. There were fifty offices on each side, and above them, in four rows, were four hundred more. In each cell a man was dictating to an invisible stenographer.

"We will now go into the next room," said her father. "Here you will find five hundred glass enclosed rooms in a similar arrangement, but in each of these rooms is a stenographer, connected in every instance with a letter clerk. They each have one of our noiseless, self-feeding electrical machines, which automatically discharge the letters, with envelopes attached, into wide tubes. These letters are then carried by endless conveyors back to the dictator, who

takes the fifteen minute rest period to sign the letters he has dictated in the previous forty-five minutes. All he has to do is to sign them as they come to him, and another machine blots them, folds and seals the envelope. During the fifteen minutes he is thus occupied, his special stenographer sits motionless, eyes closed, relaxing every muscle, ready to spring into intense activity, when the dictating again begins. Of course, we have some stenographers, who still take dictation in shorthand, but only from the higher officers, who have not learned to dictate at the high speed necessary to make the most of this highly trained mechanical ability."

Mirabella looked at her father as he closed his sentence with the words, "mechanical ability." As though understanding her questioning glance, he went on, rather rapidly, seemingly defending himself from an implied accusation.

"You know, my dear, that is what these stenographers are — simply human machines. We take very good care of them — feed, house and clothe them nicely and provide for their every need. They are really very expensive to produce, but well worth all they cost."

"You mean they are slaves?"

"Not at all — go near that glass window and look at them. You will see they are human beings."

Mirabella stifled a swelling groan-like scream, mingled with nausea, as she looked into the cell of human machines. Live beings — god-like with the most lovely, most perfect, long-tapering fingers she had ever seen — hands, the sight of whose beauty summoned worship; but ere the sacred rite was completed, those emaciated

faces, bulging foreheads, staring eyes, hideous expressions met the view. She was sick. Her ancestors had done it — martyred humanity for commercial greed.

But, grasping a plan, like a flash she covered her feelings and enthusiastically answered:

"Oh! Father, it's all so wonderful—this working plan of Universal Utilities."

"Yes. It is a great plan. They have bodies very similar to ours, only there is a slight bulging to the forehead, and the hands are larger and the fingers longer than in the average individual. Their shoulders are broader and their arms longer and more muscular. Our medical department says there is a shrinking of the body and lower limbs, but only slight. You see, they take practically no exercise, except what they have at their machines. We send them back to their community homes in special passenger planes. Once home, they relax. They go to bed early and have practically no amusements or sports. All they know, or want to know, is how to write a perfect letter. We have ten thousand human machines like that, almost evenly divided between the sexes — for two hundred years we have bred stenographers — we have raised them on an intensive scale, specially fed and educated them. I will tell you something that few realize, because we have thoroughly bribed and controlled all sources of information. These human machines mature at the age of nine years, marry at ten and produce baby stenographers at eleven years of age. In other words, we have bred stenographers on a scientific scale as race horses or blooded cattle. Your great-number-some-

odd grandfather started the plan — we are reaping the benefit. Before his time, they had a great deal of trouble with their office force — now we have no trouble whatever. They are simply wonderful pieces of living machinery. Now you understand why you cannot be one of the stenographers. You are a wonderfully beautiful young woman. These living beings you see in these glass cells are simply machines — living, capable of some emotion, able to reproduce other generations of machines, but absolutely incapable of doing any other kind of work. They are human beings so highly differentiated in their heredity and development, that they are no longer to be considered on the same level with the rest of humanity. They have gained efficiency in one direction at the loss of initiative in every other plane of human endeavor."

The girl frowned.

"And Universal Utilities did this to these people and their ancestors without their consent?" she asked.

"Certainly. It would never have been done, if we had waited for their approval. They were mentally our inferiors — they made no attempt to progress by their own efforts. We took them and made them worth while, to themselves and to Universal Utilities —"

"I do not want to be that kind of a stenographer," said the girl hastily. "I want to be one of the old-fashioned kind I have read about, the gossiping, gum-chewing, error-making, soda-water-drinking, flirtatious kind of a girl, who went into the business world for the thrill she received. I want to be a stenographer, but not like those poor things. I

think I will go back to college and graduate."

Her father really meant to check up on her movements, but he was so busy with a new side line, which Universal Utilities had absorbed, that he had absolutely no time to think about his family. This new project was nothing less than assuming a directing control of all the Protestant Churches of the world by welding them into one gigantic merger. The plan had long been dreamed of, but no one force had been powerful enough to bring it about. Now, with Universal Utilities to finance it, the scheme was accomplished, and there were no longer Baptists, Methodists or Presbyterians, but over four hundred and twenty sects, united to form the University Protestant Church. In every small town the little churches were torn down to be replaced by one beautiful chapel or cathedral. Hiram Smith attended personally to many of the details. In the meantime he neglected his daughter.

She never returned to college. Instead, she stayed in New York as the stenographer of a young physician. He was poor and his patients were poorer, but he was rather rich in having Mirabella in his office. In fact, they had decided on such a future while he was yet a medical student and she a student in college. They had met at a dance. In a moment of confidence, she explained to him that she wanted to be a stenographer. That interested him and he returned her confidence by telling how he had bitterly disappointed his parents by becoming a doctor instead. At that time he did not know that she was the only child of Hiram Smith, owner

and president of Universal Utilities—she was just a rich girl who wanted to be a stenographer, while he was only a poor boy who did not want to be one.

Mirabella Smith had gone directly from her father's office to the residence of the young physician. She lost no time in announcing her decision to him.

"I have come to be your stenographer, Carlton," she said in a very serious voice. "More than that, some day, I hope. I have just had my talk with father and he has told me some horrible things, and shown me even worse sights. For over two hundred years the company, which I will some day own, has been deliberately breeding stenographers — as cattle or white rats — breeding them to write perfect letters so Universal Utilities can become great and crush out its competitors. Now, after two hundred years, the poor things are just like machines. I saw them writing with the speed of a tornado for forty-five minutes and then resting quietly for fifteen minutes more till the sound of the dictating voice again spurred them into an almost super-human frenzy. I will own that company some day and with it will come the ownership of ten thousand human machines and their pitiful little children. Think of the babies — I understand that when they are old enough to talk they are put to work on miniature machines. They mature at nine, marry at ten. They have no childhood, no playtime. Why, even a hunting dog plays when it is a puppy. I wonder what they are like — socially. Can they talk — as we do?"

The doctor looked at her lovingly, as he answered. "I can tell you a lot

about it, Mirabella. I never wanted to tell you before because I did not want to hurt your feelings. My mother and father were stenographers, working for Universal Utilities, just as you say those people are working today. I was their first and only child. They had great hopes for me — I was a well formed baby — they longed for me to grow to be the Perfect Stenographer. But when the time came for my earliest training, something went wrong. I screamed at the sight of the toy typewriter that they put in front of me. I never did learn to use it — would not even touch it. To my parents' surprise, I only grew half as fast, both mentally and physically, as the other children of my age. At ten, when the other children were working and thinking of marrying, I had not yet entered my adolescence. Horrified, degraded by the thought that they had produced a monstrosity, my parents had me placed in an average New York City home, where they contributed liberally to my support, though the family that cared for me learned to love me and wanted to adopt me legally. As I grew older, my mother lived in the hope that I would change. She would come to see me once a year, carrying a portable Underwood with her. With tears in her eyes she would beg me to try to write. I tried to humor her. I even promised her that I would take lessons, but it was impossible. Finally she lost hope and told me that she realized that I was right in planning to lead my life in my own way.

"Last year I made an investigation. An ancestor of mine was a great New York surgeon. His daughter ran away, became a stenographer and worked for Universal Utilities.

Scientists tell me that I am a throw-back — a case of atavism. So, you see, I know what Universal Utilities has been doing. I am one of their experimental babies. I was born in one of their colonies, educated in one of their community schools. I will tell you one thing more — for the last year I have been part time physician in one of their smaller colonies. It is a poorly paying position but it helps me to meet expenses. While practicing in this colony, I found out something — I will tell you what it is, when I am more sure of it. Just now it is so horrible that I hesitate to believe that it is true.

Carleton continued to practice medicine and Mirabella wrote his letters. Now and then she sold one of her diamond rings.

Meantime, life was not going smoothly for the thousands of people working in the gigantic office building, owned and operated by Universal Utilities. At first the truth was covered up, but finally it could not be concealed from Hiram Smith. He sat silently, white, sweating, trembling as the chairman of the Board of Directors told him the horrible fact.

"The stenographic force no longer can be trusted. The number of errors they are making is unexplainable and unheard of. Mistakes in spelling, punctuation, addresses, use of capital letters — in fact they are making every possible mistake. The survey shows that there is no change in the Colony life — the habits of these workers are unchanged. They are still interested in their work — they are doing their best, but for some reason they are making mistakes by the million, and, what is worst of all — they do not seem to be conscious of the fact that

they are making them. When their attention is called to the inaccuracy of their work, they seem unable to comprehend the gravity of the situation. As a result of the multitude of their errors, the entire machinery of the Universal Utilities has become completely demoralized. Over eighty per cent of the letters have to be rewritten. The correspondence is three weeks behind hand, the letter clerks are becoming exhausted and neurasthenic, the sales force is discouraged and our shipping department no longer can work in harmony and with accuracy. Unless something is done at once, Universal Utilities will lose eighty per cent of its customers."

Something had to be done! But first of all the cause had to be determined, the reason for these errors. All the science — the entire skill of the research department of the company, was put to work and yet, at the end of a week, nothing was learned, and another week of disastrous errors followed.

In the strain of events, Hiram Smith died. His daughter, Mirabella, at once took charge of Universal Utilities. Her first act was to call a meeting of her Board of Directors and speak to them. She began her address:

"Over two hundred years ago an ancestor of mine decided to breed stenographers. He succeeded rather well. He not only bred like to like but eventually had a great deal of inbreeding. In this last generation, almost every husband and wife were cousins of some degree. No individuality was allowed and no initiative; he merely bred for accuracy and speed. All of you have followed in his foot steps. You have mated human

beings as if they were rats or cattle. If you had studied the nervous systems of horses and dogs that have been bred in this way for many generations, you would have suspected the trouble with your present generation of stenographers. Any dog fancier will tell you how careful he has to be of white collies and fox terriers. One of your community doctors last year suspected what was going to happen.

"Over eighty per cent of your stenographers have nocturnal epilepsy. That means that they have convulsions which occur at night during their sleep. After the tonic and clonic muscular movements, they drop into a deep sleep, from which they only waken in time to dress, eat breakfast and go to work. They have no consciousness of the convulsion and no memory of it. On account of the intense muscular activity during the attack, they are tired, sore and bruised when they start to work. That in itself would produce fatigue and errors, but in addition, there is in epilepsy, especially the nocturnal type, a very definite deterioration of the higher mental faculties. These unfortunates become dull, listless, incapable of highly specialized cerebration. They degenerate into listless animals. In their work, dress and speech, they give plain evidence of this dullness of the mind. Emotionally they change, become quarrelsome, abusive and indolent. This is what has happened to your office force. Two hundred years ago my ancestor started it; you have tried to carry out his plans — to breed stenographers. Instead, you have bred a race of demented epileptics. My medical friends, who are in your employ as physicians to the colony children, tell me that almost all the

little children are showing definite signs of the same nervous disease. You were not told of it sooner, because they were afraid of my father."

The Chairman of the Board looked dully at the young woman. Then he roused himself to action.

"How did you learn all this?"

"Oh! the doctor who made the discovery was a colony child. For some reason, your special foods and glandular preparations did not work on him and in his tenth year he was taken away from his parents and put in the home of common people. During those ten years he saw a great deal of the colony life — he used to play with the other children, and spend the nights with them. Things happened during the night that he could not understand, but he remembered them, especially when he started to study medicine. After he graduated, he worked for Universal Utilities as one of their Colony physicians, and his observations there made him positive of the presence of nocturnal epilepsy. Since then the disease has developed rapidly."

"Is there no cure?"

"None whatever. Universal Utilities has on its hands and conscience ten thousand epileptics and their children. All that can be done is to allow the defective race to die out. You will have to reorganize your entire office force — go back to the old system of incompetent, error-making stenographers who, in spite of their faults, are at least intensely human."

The Chairman, in his indignation

at a woman's talking so disrespectfully and at such length to a dignified Board of Directors, demanded what the result would be.

"Under the stress of reorganization," Mirabella calmly replied, "Universal Utilities will lose over eighty per cent of its business. The time will come, however, when once again it will function smoothly, under conditions similar to its competitors. I will try to make the lives of the new stenographers happy, but never again will any effort be made to interfere with the normal progress of nature in the breeding of human beings. The unfortunate epileptics will be well cared for, but will die rapidly, and in twenty-five years the colonies will be converted into suburban homes for normal workers from the great city."

"Enough of this outrage!" stormed the chairman. "This meddling physician you speak of — who is he? Where is he? We'll teach him—"

In reply, Mirabella Smith simply called a young man from the back of the room where he had been silently listening to the entire proceedings.

"This is my husband, Dr. Carleton Thoney," she said softly. "He used to be a colony child, but Providence made him a healthy physician instead of an epileptic stenographer. Together, we will do all we can, not only to make Universal Utilities a great business once more, but also to make full amends for the errors its leaders have committed in the past."

The End

**On Your Newstands Now -
THE MOST THRILLING SCIENCE FICTION EVER TOLD**



LORELEI STREET

CRAIG BROWNING

Illustrated by EDMOND SWIATEK

Either you couldn't find Lorelei Street at all or—it came looking for you, its shops luring you with "giveaway" luxuries to hide the fact that its roadway was paved with death!

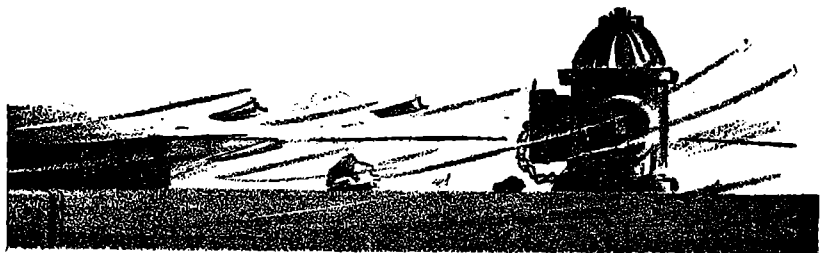
CLANCY was a cop because all men named Clancy seem to automatically become cops. They're forced into it. He was standing on the corner of Fourteenth and Archer because he was married. In other words, his wife didn't give him spending money for idle snacks; the waitresses on his beat wouldn't give him a handout because he wasn't eligible, and his feet hurt too much to do much walking unless he had to. In short, he was standing on the corner because he was married.

His thoughts were on—well, if someone had stopped and asked him what he was thinking about he wouldn't have been able to tell them. Why? Because he never bothered to remem-

ber what he thought about. It wasn't important, even to him. He did think. All the time, in spite of constant accusations from his wife Nora and his immediate superior Mike Nolan that he didn't. But it was like the smooth idling of a motor out of gear. It didn't put miles on the speedometer.

He was standing on the corner of Fourteenth and Archer. The stranger passed by, walking with head down and hands in his pockets. Three steps after he passed Clancy he stopped and came back, as though it had taken that long for his brain to work on his feet.

"Pardon me, officer," he said po-



lately, "but can you tell me where one thirty-six Lorelei Street is?"

"Two blocks down and turn to your right a block and a half, sir," Clancy said, saluting carelessly for no other reason than that the stranger had been very polite of tone.

He watched the man depart, head down and hands in his pockets. He resumed his idle thinking with a pleased smile left on his lips, forgotten. After awhile it faded slowly, like the back end of a departing bus in a fog. And the expression that took its place reflected an inner state that closely resembled a fog, because it had suddenly occurred to Clancy that there was no street named Lorelei and even if there were, one thirty-six would be eight blocks to the left instead of a block and a half to the right.

"Why did I tell him that?" he asked blankly to no one. He thought about it for a minute. "I said it just like it was true, too," he added.

Two blocks down would be Church Street, not Lorelei. A block and a half to the right would be nine thirty-six. He knew that as surely as he knew his name was Clancy.

He shrugged mentally. It wasn't likely the fellow would come all the way back to ask him what was the idea of giving him a wrong direction.

But the mental shrug didn't shake it off. He tried to remember a Lorelei Street. If he could remember such a street maybe he could find something to account for his having given such a direction.

In his fourteen years on the force he had walked nearly every beat in the city. Not once had he heard of such a street. In his five years as a cab driver before that he had never

heard of a Lorelei Street. In the twenty-one years before that in grade school, high school, and a few jobs in various parts of town he had never heard the name.

And yet he had said, "Two blocks down and turn to your right a block and a half."

He shook his head sadly. It was a mystery.

Twenty minutes passed. Then he saw the man coming back. His head was down. But his hands weren't in his pockets. One arm was swinging at each step. The other hung straight down under the weight of a full shopping bag.

He looked up as he came to Clancy, smiled, and said "Thanks."

Clancy turned slowly, watching the stranger's departing back. He took off his uniform hat and scratched his scalp with one finger, perplexed.

Then he sighed and walked the two blocks. When he came to the corner where he had instructed the man to turn right he looked up at the street sign. It said **CHURCH ST. Not Lorelei.**

Clancy stared at the sign, a dogged stubbornness growing on his fine honest face. He hunched his heavy shoulders until his neck was nonexistent and turned right, walking the block and a half as he had told the stranger to do.

He found nine thirty-six but no one thirty-six. And it was a beauty shoppe, not a grocery store.

By the time he relaxed in his favorite chair in the living room and pulled off his size twelve B's that evening, Clancy had completely forgotten the mystery of Lorelei Street. If his wife Nora had asked him if

anything had happened at work he might have recollected it. But she had religiously asked for the first ten years of their married life and never received anything but a grunt. She had given up after the time the warehouse had burned down on his beat and he had become a hero by risking his life to save a cat and three kittens living on the third floor in pianos, and had given the usual noncommittant grunt in the evening when she asked him if anything new had happened during the day.

The days passed without event after that. Clancy moved through his daily routine of living as unmoved from his accustomed habit pattern as the Earth moves in its orbit about the Sun. Until one evening after supper when he picked up the paper and saw the picture on the front page.

He never forgot a face. Even if he did occasionally forget one, he would never have forgotten the face staring at him from the upper center of the front page of the paper.

If only John L. Lewis or Truman or even Molotov had said anything that day the picture wouldn't have been in the paper at all. But Truman had a cold and wasn't seeing the reporters lest they start a rumor he was on his last legs, John L. Lewis was half asleep in his Washington office waiting for the mine operators to show up and talk with him about averting the threatened fall strike, and Molotov hadn't been heard from for three weeks. So the story of Mr. Travers rated page one and a picture.

Mr. Travers' face was identical with that of the man who had asked directions to Lorelei Street. Clancy crossed his legs and settled down to

see what it said about Mr. Travers under the picture.

The account was a trifle confused. It said that Mr. Travers had been found near death from starvation in his walk up apartment. He was still conscious when found by a relative. Up to that point there was nothing remarkable. But the kitchen of the apartment contained a garbage can filled with emptied cans which showed that someone had been eating quite regularly. Mr. Travers insisted he hadn't missed a meal for months, and didn't feel hungry.

A quart of plasma had already started him on the upward path, and after several failures the doctors had managed to get him to keep a small amount of Pabulum in his stomach.

But in the face of incontrovertible proof he still insisted he hadn't missed any meals. Since the empty cans were in the kitchen to lend weight to his assertion, it was somewhat of a mystery.

Clancy leaned closer to the paper as he read the next paragraph. It said that Mr. Travers ate most of his food from cans, and always bought his groceries at a store on Lorelei Street. But since there was no Lorelei Street, it was obvious he was out of his head.

The newspaper account concluded with a final mystery. Although the labels on the cans were those of standard brands, they differed in design from those brands, and the prices marked on the labels were only a tenth of current prices.

Clancy let the paper drop slowly into his lap. He was recalling Mr. Travers coming back, carrying a shopping bag loaded with groceries.

He debated briefly whether he should

go down and tell what he knew. But Mr. Travers was recovering, and his story could be brushed aside as caused by starvation. If he were to say anything it wouldn't solve the mystery, and would more than likely make Mike Nolan suspect him of publicity seeking. Mike had accused him of that when he had saved the cat and her kittens.

Sighing, he turned to the sports page. He promptly forgot about the front page story. He was memorizing the latest baseball news so he would have something to talk about when he stopped at Garibaldi's fruit stand as he always did at ten thirty each morning to eat a free apple or banana to tide him over until lunch time.

It was a week later that Clancy was transferred to another beat. It was one he had had four years previously. He spent the first three days getting acquainted all over again with old friends. One of the cafes had changed ownership, and the new owner promptly invited Clancy to have his lunch on the house every day. The waitresses were young and of that wonderful type that flirts harmlessly with all old married men to brighten their humdrum existence.

On the fourth day he captured a robber in the act of holding up the candy store. He brought the fleeing gunman down with his second shot. A leg wound. It earned him an immediate reputation for marksmanship and bravery on his beat that more than compensated for the bawling out he got from Mike Nolan for his first shot breaking a two hundred dollar plate glass window.

On that fifth day as he stood talk-

ing to the short fat man on the corner of Thirty-second and Baker Streets he felt very pleased with himself at the way things were going.

The woman walking hurriedly along the sidewalk toward him was a definite type. Neat, fortyish with good quality clothes of yesteryear covering her rather thin frame, so that she reminded the casual glancer of a well preserved period chair.

She passed by without pausing, continued on for three or four steps, then stopped abruptly and came back.

"Pardon me, officer," she said with that air of abstraction of a confused shopper, "but could you tell me which way to go to one twenty-four Lorelei Street?"

Clancy opened his mouth, but no speech came out. The short hair on the back of his head was crawling. Into his mind had suddenly come directions; but at the same time he had recalled that other incident.

It was the short fat man who spoke.

"A block down and a half a block to your left," he said. "Be careful in crossing the street, lady. There's some crazy drivers at that corner."

"Thank you," the woman said. She hurried away.

Clancy watched her go with a mixture of feelings that worked against one another, paralyzing his faculties.

With his mouth still open he looked down at the short fat man who returned his gaze with a bright amused smile. Clancy glanced again in the direction the woman had gone. When he turned back to the short fat man to ask him how he knew the directions, the fat man wasn't there.

Clancy saw him across the street, walking away with a wobbling gait.

He took a step to follow, then closed his mouth and remained where he was.

Grimly he stood, slapping his nightstick against his trouser leg, waiting for the woman to come back. And half an hour later she did, carrying a neatly tied suitcase under her arm.

As she passed him she looked up and smiled brightly.

"Thanks officer," she said.

"Wait a minute, lady," Clancy said hastily.

She stopped and turned back, a questioning frown on her characteristic but pleasant face.

"How'd they treat you?" Clancy asked, smiling disarmingly. "You get a good bargain?"

"Oh, wonderful," the woman replied. "A brand new two piece business suit. Excellent material. It would cost at least forty dollars any place else, and I got it for six ninety-five. I don't see how they can *do* it!"

"Uh, that's fine," Clancy said with hearty hesitancy.

He could think of nothing more to say. The woman looked at him expectantly for a moment, then turned and continued on her way.

Mr. Travers and his groceries, the woman and her business suit, the short fat man, and Lorelei Street might, by a transposition of logic, be conceived as four mental points determining a mental circle. And such a circle grew in Clancy's mind as the days wore on.

His train of thought went around the fine microgroove encompassing those four points until it became a deep rut from which he could not escape.

His inner thoughts were no longer

an idling motor. They were a car in gear with one rear wheel on a jack. The speedometer piled up the miles while the scenery remained maddeningly the same.

None of this showed on his face at any time. Thoughts did not have a habit of registering there. Or if they did on occasion they managed to look like stomach trouble, eye strain, or something equally unrelated to their cause.

And since none of his thoughts showed on his face, no one, not even Nora his wife, suspected that he knew anything about the mysterious Lorelei Street—more especially because they didn't even know there was such a mystery. Not yet.

Nor did Miss Mae Lavender have any inkling that there might be a mystery connected with her smart new business suit as she strolled primly along the sidewalk, window shopping.

Her window shopping generally consisted in examining the latest styles and reassuring herself that what she was wearing was infinitely better. And this particular morning was no exception to that rule. That is, it wasn't until she saw her reflection in the window of Facey's Style Shoppe.

It was a Tuesday morning, and what caught her eye first was the word Tuesday in embroidered script in reverse.

One of the most intimate secrets of her existence was panties for every day of the week. She studied that reversed Tuesday for a long second, her mind unable to quite adjust itself to facts.

The facts, as she found when she made the mental adjustment necessary to accepting them, were simple. A crowd was gathering around her on

the sidewalk. Her wonderful business suit had vanished off her. She was dressed in a brassiere, a garterbelt covered by her Tuesday panties, a pair of nylons, a pair of neat brown slippers, a pair of brown suede gloves, and a brown plastic purse.

It was rather cruel of the newspaper photographer who happened on the scene at the moment to snap her picture. But he couldn't altogether be blamed. Actually, she had a much more photogenic body than her usual attire and her face suggested.

The reporter who wrote up the thing was no more able to account for her having gotten where she was discovered without being noticed by someone than were the police. Nor were they willing to accept her story of having been properly dressed a moment before at face value. Its corollary, that her clothes had simply vanished, was, to say the least, "rather weak," to quote the newspaper account on the front page under the picture.

But to Clancy when he read it after supper it was not weak. It was the only sensible explanation. After all, a suit bought on Lorelei Street would naturally partake of the properties of that evanescent thoroughfare. More especially since groceries bought there had previously done the same thing.

When he finished the account he turned to the sports page more disturbed than he would admit to himself. A feeling had settled over him that sometime, someday, someone was going to ask him the way to Lorelei Street again.

It angered him in a deep way. It was too much like *something* was indulging in a sly jest at his expense, though in what way and for what purpose he couldn't guess.

"Clancy!" He glanced up guiltily from his minute reexamination of the front page picture of Miss Mae Laverder in her Tuesday panties.

"Yes Nora," he replied as she appeared through the door from the kitchen.

"Do you remember my telling you last week that the radio won't work?"

"No," he answered truthfully after a moment's thought.

"Maybe I forgot to tell you," Nora said. "I was going to have it fixed when I got the time. But now I'm going to trade it in on a new one."

"Why?" Clancy asked. "It might need only a little fixing. It's a good radio."

"I know," Nora admitted, "but a circular came in the mail today. It's too good an opportunity to miss. They allow you the new value of your radio when you bought it as trade-in on one of their television radio-phonograph consoles."

"They probably make so much profit on it they can afford to," Clancy said skeptically.

"I don't see how," Nora said. "I brought out the sales contract on our radio, and for twenty dollars and our old one we can get it."

Clancy suddenly went cold.

"Let me see that circular," he said quietly.

Nora padded back into the kitchen and returned with it, handing it to him.

It was a many times folded sheet that unfolded into a large poster, big as a sheet of the newspaper. Covering two thirds of its surface was a full color picture of the radio, a truly wonderful set.

Its rich walnut doors were open, revealing the television screen, the

AM/FM radio, and the phonograph. Underneath the screen was a solid bank of knobs.

Clancy glanced at it approvingly, then searched the print for the name and address of the store. It was CALVA RADIO, and the address was 218 Lorelei Street.

"Two eighteen Lorelei Street," he said slowly, aloud.

He waited for the inevitable question of where that might be. It didn't come.

"Well," he said, handing the circular back to Nora, "why don't you go look at it tomorrow."

"I intend to," Nora said.

She folded the sheet up and returned it to its envelope, and went back to the kitchen. She had not asked where Lorelei Street was.

Clancy stared at the kitchen door for a long time, making his plans. He knew without troubling to wonder how he knew, that Nora would come to him on his beat tomorrow and ask him where Lorelei Street was, and that he would be able to tell her.

"Yes," he thought to himself, "I'll be able to tell her. And after I tell her, I'm going along with her and see this Lorelei Street for myself. That's the only way I ever will be able to."

One thing was definitely solved. The mystery of how only certain people knew about the street, and were headed there to get some special thing. They received a circular. It was as simple as that!

Although it didn't show on the surface, Clancy was on pins and needles all the next morning, fidgeting in a motionless, statuesque sort of way.

Nora did not show up. By four
LORELEI STREET

o'clock when it was time to report to the precinct station at the end of his day, he was convinced that she must have found her way to Lorelei Street unaided.

But when he arrived home he discovered Nora peculiarly non-interested in going to CALVA RADIO.

"Oh, I'll get to it in a few days," she said in reply to his discreet questioning. "There's no time limit on the offer or they would have said so."

It was the same thing the next day. That night when he let himself go so far as to express his eagerness to get the new radio Nora came almost to the point of deciding to get the old one repaired and keep it.

On the third day at precisely ten o'clock in the morning Clancy found himself standing on the corner of Thirty-First and Baker Streets. His emotions and expectations had not been able to remain keyed up. He was his old, unemotional self.

He didn't even get excited when the short fat man appeared, walking toward him along Baker Street. He recognized idly that he had seen the man before, but couldn't remember where.

Even when the short fat man stopped to talk to him he couldn't place him. And he was to remember this later and decide that it must have been due to some sort of hypnotism.

They exchanged opinions on the weather, agreed with each other on the prospects for and against various ball teams, and were just touching on politics when Nora showed up.

Clancy was so abstracted that for a moment he wondered why she was there. He hadn't seen her until she stopped in front of him.

"Hello, Nora," he said, "What

brings you on my beat? Oh, by the way, this is my friend—"

"Nicolas Calva," the short fat man supplied, holding out a soft pudgy hand that Nora decided felt like a potato pancake dipped in flour before it's put in the skillet. "You're Clancy's wife?"

"Yes," Nora said. The name clicked in her mind. "Are you the owner of CALVA RADIO? I was just going there to see about your special sale on television sets."

The whole setup penetrated Clancy's mind. He remembered that he had seen Nicolas Calva when Miss Mae Lavender had asked for Lorelei Street. And now he was here again. He spoke up hastily.

"There ain't much doing on the beat this morning, Nora. I think I'll go along with you and look at the radio."

The short fat man had been about to lead the way. He paused, frowning at Clancy, as though he had not expected this development. Then he turned his head and looked out into the street intersection.

Clancy was watching his puffy features. He saw lines that might be a frown of concentration appear on Nicolas Calva's forehead. He saw the thick chest under the dark business suit become even thicker as the short fat man drew in a deep breath.

Then his attention was jerked into the street by the loud rending of metal as two cars came together.

One of the cars turned over, spilling its occupants into the street. The other seemed to come to a complete stop, then continue on for another fifteen or twenty feet, somehow defying gravity by staying a good foot and a half above the pavement and

moving over onto its side in a deliberate movement.

Other cars from all four directions were stopped, as though at some signal they had cleared the intersection for this accident to happen.

Clancy's heart sank. He wouldn't be able to leave now. He'd have to stay and direct traffic, and collect the names of witnesses.

Witnesses! He pulled out the notepad he carried for just such an emergency and shoved it into Nicolas Calva's fat hand.

"Put your name and address down here, Mr. Calva," he ordered. "You're a witness."

He glanced briefly at the bold scrawl on the sheet. Then he was caught up in the mad whirl of action that ended an hour later with the wreckers hauling the two cars off the street.

Miraculously no one had been seriously hurt, though three of them had gone to the hospital in the ambulances to be examined for the possibility of internal injuries.

With traffic normal again, Clancy looked around for Nora and Nicolas Calva. But of course they were not there. It was one of the very rare times that Clancy cursed out loud. His opportunity to visit Lorelei Street was gone.

It was almost as if Nicolas Calva had deliberately caused an accident to prevent him from going along with Nora!

Nora was not at home when he got there. Clancy hung up his hat and coat dispiritedly. Mike Nolan had not been too pleased with the way he had handled the accident. He not only had not obtained any signatures, but he had also lost his note

book. He had completely forgotten about the note book until he was at the station making out his report. Then he remembered vividly that the last time he had seen it was when Nicolas Calva was scrawling his name and address.

He was tired and hungry. He wished Nora were home getting supper ready as she usually was. He started toward the refrigerator, changed his mind, and went toward the front room.

He paused in the doorway, surprised. The new radio was there where the old one had been. It was even more luxurious than it had appeared in the circular.

"So they've brought it!" he muttered.

He approached it cautiously, deciding that Nora must be next door telling the neighbors about it.

He swung one of its two doors open experimentally, revealing the television screen and the dizzy array of knobs underneath it.

He ran his fingers over the knobs without twisting any of them. He would wait until Nora came home, and find out more about the new radio before touching it.

Taking his fingers away from the temptation of the radio, he gripped them together behind his back and went out on the front porch. If Nora happened to be in one of the houses across the street she would see him and come home.

"Good evening, Clancy," a familiar voice beyond the end of the porch said.

"Oh, hello, Jerome," Clancy said. "I couldn't see you at first, cutting the border on your knees like that."

"Nora not home yet?" the neighbor asked, getting stiffly to his feet.

"Oh she's been home all right," Clancy replied. "Our new radio is here. She would have had to be here for them to bring it in."

"I saw it come," Jerome said. "Just an hour ago. And I don't think she was here then."

"What makes you think that?" Clancy asked.

"Well," Jerome hesitated. "They used the key to get in. Of course, that was quite all right. Probably they made immediate delivery, and being a reputable firm Nora gave them the key rather than coming home before she wanted to. They took your old radio away with them."

"Yeah yeah," Clancy said, frowning, little alarm bells sounding in the back of his mind. "Tell me, was one of these guys a short fat man?"

"How did you know?" Jerome asked in surprise.

"I guess maybe Nora went to a show or something," Clancy said, ignoring the question. "Think I'll go fix me something to eat."

"Why don't you come over and have supper with us?" Jerome asked. "It's just about ready." And as Clancy hesitated, "Save you some dirty dishes."

"Thanks," Clancy gave in. Jerome's wife was too talkative, but less uninviting than dirty dishes.

By ten o'clock Clancy began to be sure something had happened to Nora. He had had supper at Jerome's, then came home. In the hope that Nora might have been home and left a note, he passed a dismal hour searching the house for one, even getting down on hands and knees and searching under tables, the bedroom dresser,

and even in the bathroom. But he searched without any real hope.

He was as sure as he had ever been sure of anything that Nora had *never left Lorelei Street*. His mind was basically unimaginative and logical. It had soaked up a certain logic from the mystery of Lorelei Street, and that logic whispered that Nora was still there—perhaps unable to find her way out just like people outside couldn't find their way in except at certain times.

There was something basically sinister about it. The short fat man, Nicolas Calva, had been there to take her to the street without having to give directions Clancy could hear. If it weren't absurd it would appear that the fat man had also caused that accident to keep Clancy occupied when he expressed the intention of going with his wife.

And one thing Clancy was morally certain of. Nora would never have given the keys to the house to anyone under any circumstances. She would have come with them instead, to make sure they didn't track in dirt.

But what could he tell his superiors in the police department if he reported that his wife was missing? The whole story coming from him would just get him locked up in psycho while they dug in the basement and in the back yard for the body. Maybe even a night at old Bailey blinking at a spotlight while guys took turns making you say something to senseless questions like, "Where did you ditch the corpse?"

At ten thirty he paused in front of the radio. It was the only clue, the only tangible thing in the whole business. He stuck out his lower lip stubbornly. Nora wouldn't like

it, but he was going to turn it on and see what happened.

One knob had a plainly labeled ON and OFF in two positions. The white line on the knob pointed to OFF. Very carefully so as not to break anything he twisted it to the right. Two thirds of the way to the ON position something clicked audibly and the knob jumped the rest of the way under its own power.

He waited. Nothing happened.

Maybe it wasn't connected. He looked in back for the cord. It lay neatly along the wall and ended at the wall outlet. That was O.K. so the trouble must be that it wasn't tuned to any station. He went to the front of the cabinet again.

The television screen was lit up. A wrestling match was going on. Clancy grunted in a satisfied tone. Pulling his favorite chair into the middle of the room he sat down to watch.

But he couldn't enjoy it long. His thoughts kept returning to Nora. He missed her. Of course, wherever she was, she was all right. She was the type that would always be all right. Capable.

His attention drifted back to the wrestling match. One of the men was wearing brilliant red trunks, the other gold. Color television was great.

The wrestler in the gold trunks won the fall. The announcer said it was intermission. The ring shrunk in the screen, bringing in a large section of the audience.

Suddenly Clancy sat up and leaned forward in his chair. There was Nora and the short fat man was with her. They had been sitting together and were rising to join the crowds heading toward the exit.

The scene was replaced by one of

a radio like the one Clancy was looking into. A man started expounding on the merits of the set. Clancy glared at him.

"Not only do these sets sell for the unheard of low price of one hundred and forty-nine ninety-five," he expounded, "but in addition we allow you full trade-in price on your old set. Just bring your old set with you, or we will pick it up on delivery of the new set. Call or come to three five Lorelei Street tonight. We're open until midnight. Three five Lorelei Street. Catch the H car to Division Street, walk two blocks east and half a block north. Before midnight."

He looked right at Clancy as he spoke, and Clancy, returning the stare, felt butterflies crawling in his stomach, because he *knew* that if he followed those directions he would find himself at last on that evanescent thoroughfare!

The sign sticking out ten feet up the light pole said LORELEI ST. The other sign, at right angles to it, said DIVISION ST. They were both well lit up by the street light. Other than the difference in street names on the two signs, there was one major difference between them. The one for Lorelei Street was a trifle blurred. Out of focus.

Clancy, standing on the sidewalk under the signs, dropped his eyes to the street itself, looking up it curiously. It was paved with porous blacktop. The blacktop began about a quarter of a block away, blending into the cracked and patched concrete that came to Division street.

The blending of the blacktop and the concrete was not clearly defined. It would seem a quarter of a block

away until Clancy tried to see exactly where the concrete left off. Then the blacktop would seem to come closer.

He lifted his eyes to the street sign quickly. For just an instant it read LEE ST., then it was innocently displaying the spelling of Lorelei. He looked away slowly, then jerked his eyes back to it, but it remained LORELEI.

He took his watch out of his pocket and held it up to the light. It was after eleven thirty. Sticking it back he turned into Lorelei Street without further hesitation.

The blacktop seemed to come to meet him. Before he had gone three steps the paving was blacktop.

He turned and looked back. As far as he could see a block and a half away the paving was new looking blacktop.

He switched his attention to the store he was in front of. It was a bakery. The number on the door was three two.

Clancy looked across the street. There, a quarter of a block down, was the Calva Radio store. Across its front was a big sign proclaiming the big trade-in sale. He stepped off the sidewalk, crossing the street diagonally toward the store.

When he reached it he peeked inside. The place was crowded with people and radios. Yet there was no one outside on the sidewalks, and there were no cars in the street.

Clancy pressed his lips together firmly, the only outward sign of what might be going on under his expressionless exterior. Pushing through the entrance, he joined the milling crowd inside, working his way patiently toward the back, where he could see

the top of a partition that would be the offices.

"Are you waited on?" a clerk asked.

Clancy looked at him blankly. "No," he said gruffly. "Where's Mr. Calva?"

"He's out," the clerk said. "We expect him back almost any minute now, though." He glanced toward the front of the store. "Here he comes now, sir."

Clancy followed the clerk's gaze and saw the people parting in a way vaguely analogous to wheat parting with the passage of a concealed animal. Then Nicolas Calva's short squat figure emerged from the crowd, a pleased expression on his face.

"Hello Clancy," he said, the pleased expression increasing.

"Where's Nora?" Clancy asked without smiling.

"On her way home," Nicolas Calva answered. "I just saw her onto the streetcar from the wrestling match. I wouldn't take every customer to the wrestling matches, but she said she had always wanted to watch one, and that was the reason she was looking forward to getting a television set. So there was a match on tonight, and she was the wife of my friend Clancy. So I took her."

"Ain't that thoughtful of you," Clancy said. "To show you how grateful I am, I'm arresting you for conducting a confidence racket. Will you come to the station peaceable or must I muss you up a bit?"

"Arresting me?" Nicolas Calva exclaimed incredulously. "A confidence racket? Are you being ridiculous, Clancy?"

"I don't think so," Clancy said stiffly. "Are you coming or do I

have to drag you? I intend to be off Lorelei Street before midnight, and you with me."

Nicolas Calva turned three shades whiter. An inner struggle was going on in him. As Clancy made a threatening move toward him he held up a pudgy hand.

"All right, Clancy," he gave in. "I'll go peaceable. But you're going to regret this."

It was the tenth time Calva had warned Clancy he was going to regret arresting him.

"I don't think so," Clancy said unemotionally. "Book him as a suspect in a confidence racket, Dave."

"Right, Clancy," Dave, the desk sergeant said. "Empty your pockets on the desk, Mr. Calva."

"I won't," Nicolas Calva said emphatically. "I want to call a lawyer."

"Empty his pockets for him, Clancy," Dave said quietly. "And don't object, Mr. Calva, or we'll make you strip down."

Clancy glanced briefly at each thing he brought to light, grinning in satisfaction at the array of business cards proclaiming Nicolas Calva to be owner or proprietor of a large variety of stores, all on Lorelei Street. He handed each to Dave, whose face brightened.

"This ties in with those two cases the newspapers ridiculed us so much on," he said. "We can get Miss Mae Lavender and Travers down here tomorrow morning and clinch this case."

Nicolas Calva opened his mouth to say something, then brought his lips together in a quiet sneer, and said nothing.

Clancy watched him as he was led through the varnished doors to

the back of the station where the lockup was. His lips were quirked into a satisfied smile.

"Good night, Dave," he said.

He pulled out his watch and looked at it as he went toward the entrance. It was going on one o'clock.

When he reached home the lights were on. Nora was watching the television so intently she didn't hear him come in. He settled a heavy hand on her shoulder affectionately. She looked up at him, smiled briefly, then turned her eyes back to the television screen again.

Clancy saw that the images were the plain black and white now, a regular program. He watched until Nora reached up and patted his hand softly.

"Let's go to bed now," he said. "I'm going to have a hard day tomorrow."

"All right, Clancy," Nora said. "I'll have lots of days to watch the television."

"Yeah. Sure," Clancy said gruffly. "Come on, Nora."

Clancy violated a self imposed rule of a lifetime and read the newspapers while on duty the next day. He had spent two hours closeted with Mike Nolan before going on his beat. He told a story that was as close to the truth as credibility would allow.

The gist of his story had been that he had been present when the short fat man had taken Miss Mae Lavender in tow, and that he had talked to her later and learned of her buying the suit that had later vanished off her back. He hadn't said anything because he knew no one would believe him. Instead, he had kept looking until he had found Nicolas Calva, and when he accidentally

ran into him that night while out taking a walk he had arrested him.

The newspapers said nothing of this private talk with Mike.

CALVA THE GREAT ARRESTED, they bannered. Underneath in the center was a double column picture of the fat man's face with the eyes obviously touched up to look large and hypnotic. Under this was the story the police had handed out.

Michael Nolan, police captain, recognizing the handiwork of a noted hypnotist swindler in the recent mysterious occurrences that included the near death by starvation of Mr. Travers while convinced he was not missing a meal, and the appearance of Miss Mae Lavender in public in undress while convinced she was wearing a respectable business suit, quietly put his force to work on a citywide search for this criminal, which had produced results in the form of Calva himself the night before.

This morning Mr. Travers and Miss Lavender identified Nicolas Calva in the police lineup as the man who had sold them groceries and a suit that didn't exist.

It went on at great length, saying nothing about Clancy, subtly implying that all the credit belonged to Mike. Clancy, reading this, put his tongue in his cheek and chewed on it, thinking of what Nicolas Calva had said about regretting arresting him.

WILL CALVA VANISH BEFORE TRIAL? the next day's paper asked. A picture of him peering from behind the bars of his cell was under the headlines. The article under that, and continued on an inner page for three full columns, tried to answer the question. It told of cases of magicians

who had vanished from more escape proof prisons than that of the fifth precinct. It described some of the possible methods Calva might use in an attempted escape. It described the special precautions that Michael Nolan was taking to prevent such an occurrence. And it left the reader, including Clancy, with the impression that Calva would be able to escape with ease in spite of all precautions.

CALVA TRIAL SET FOR JULY 14, the next day's paper shouted. Clancy got out his pocket calendar and did some figuring. The fourteenth was two weeks and three days away. Three weeks from when Nora had bought the television.

He put the calendar away and paced his beat, a dark suspicion in his mind. Calva had said, "You will regret this!"

CALVA VANISHES IN COURTROOM! a red streak special screamed at noon of July fourteenth. Clancy read it without changing expression. he didn't bother to even pick the paper up off the pile and see what it said. He knew without reading it that all the tangible evidence had vanished at the same time.

He spent the rest of the afternoon trying to think of ways Calva could get revenge on him. He was sure revenge would come. Just as sure as he had been that he could go to Lorelei Street that fateful night when he arrested Calva.

When he went to the station to check off for the day there was a summons for him to appear in court next day. On the streetcar on the way home it suddenly occurred to him that the radio would be gone now. He made up his mind to get another.

The dirty white house that served as landmark for him to get out of

his seat and start toward the car exit appeared. Absently Clancy pulled the bell cord and got up. He was the only one to get off tonight.

He crossed the street. His mind still on the television, he looked up at the street sign.

Suddenly his mind flashed into startled attention. The sign said Lorelei St.! It should be Archer Street, the one he lived on. He looked both ways on Davis Street, the street the car tracks ran on. All the landmarks were familiar. It was Archer Street.

Or was it? Suddenly he was unsure of his memory. Something seemed to whisper that it had *always* been Lorelei Street.

Of course it had! He looked up its smooth pavement with a glowing feeling inside him. He lived up that street—somewhere.

He took a quick step, then paused, perspiration dotting his forehead. Deep in his subconscious something was trying to hold him back. But he fought against it, and slowly he took two more steps. The blacktop paving of Lorelei Street was at his feet now. He took another step.

An impulse possessed him to cross the street to the other side. Half way across he was seized by a sudden nausea. It lasted only a moment, then was gone. He continued on across the street and up the sidewalk . . .

WITNESS IN CALVA CASE KILLED, shrieked the papers the next day. In smaller caps under it was **STRUCK BY AUTO HALF BLOCK FROM HOME**. Under it was a two column wide picture of Clancy. But Clancy didn't get to see it.

Papers aren't delivered to Lorelei Street.

The End

FOUR MEN

AND A

SUIT CASE

By RALPH ROBIN

If they handled it right, the thing that made the pretty pictures was going to get them off of skid row and into a wino's version of heaven. The only trouble was you had to slap the whatever it was to make it react and after a man had a few drinks it became so easy to slap it just a little too hard . . .

BILL was standing on River Street wishing he had twenty-five cents for a drink. He had seventeen cents. It would have been easy enough to bum ten cents if he could have got up the nerve to stop someone, but without a drink first he never had the nerve.

Three other men who looked alike and looked like Bill — as four orientals might look alike to a tourist — were in a huddle a few yards away.

One of them turned from the others and walked over to Bill.

"Listen. We're going to split a pint. Want in? How much you got?"

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"Twelve cents," Bill said.

The man shook his head and started to walk away.

"Wait. I've got seventeen cents. It's all I got. Let me in for that much."

"I'll ask them."

Trembling, Bill watched the men: he could not hear them. There was a nodding of heads, and they waved him over.

"This is Frank. That's Smitty. I'm Lester."

"My name's Bill."

"We're going to drink it in Frank's room," said Lester, the man who had approached Bill. "He has a room."

"Yes, sir, I have a room," Frank said.

Lester counted the quarters, dimes, nickels, and pennies. He held the money in his cupped hands and they marched him to the nearest liquor store, where he bought a pint of blend.

The four men went to Frank's room, which was big enough for them to sit on the edge of the bed if they didn't stretch their legs. There was nothing to be seen in the room except the bed, a broken rocking chair, and a half-filled bottle of milk on the window sill. The milk looked soured.

Lester opened the whiskey. He measured with his fingers; placed his thumb firmly near the neck of the bottle.

"That about right for Bill? Might as well let him have his

first, then share and share alike."

"Let's see," said the host, squinting. Not much light came through the dirty window. "That's about right. Mind you don't go below it, Bill."

"Check," said Smitty.

Bill put his thumb beside Lester's and they raised the bottle to Bill's mouth. He drank and let go the bottle, and it snapped back. Lester drank and handed it to Frank.

Bill felt a little more like a man. He stretched his arms in the air; he kicked forward and backward.

His heel rapped something hard.

"Watch it," Frank said.

"Watch what?"

"Just watch what you're kicking."

"All right. I didn't mean any harm."

"Frank's pretty careful with that suitcase," Lester said.

"He don't want nothing to happen to that suitcase," Smitty said.

"That's enough about that suitcase," Frank said.

Bill's eyes followed the bottle as it went around. He wished he had another seventeen cents.

"It's a mighty important suitcase," Frank said.

"Frank's going to make a lot of money out of that suitcase some day. Soon's he figures out how to handle the deal."

"Shut up, Smitty. You fellows

promised to keep your mouths shut. After all we don't know this guy from a hole in the ground."

"Who's doing all the talking?" Lester said.

"I won't bother your suitcase," Bill said. "I won't bother you fellows at all. I've had the drink I paid for and I'll beat it." His feelings were hurt, and anyway he wanted to get out on the sidewalk and start mooching before the drink wore off.

"Aw, don't be like that," the host said. "Here, have another pull — I'll pay for it, fellows."

But he didn't bring out any money, and Lester and Smitty looked unhappy while Bill took a timid swallow from the bottle.

"I think Bill's okay," Frank said. "Maybe he'll have some ideas how to handle the deal. You promise to keep your mouth shut, Bill, and I'll show you what I got in that suitcase."

Bill wasn't interested, but he was hoping the bottle would come back to him once more before it was empty. "I'll keep my mouth shut," he said.

"Make him swear," Lester said importantly.

"Swear you won't tell anybody," Frank said.

Bill held up his right hand. "I swear I won't tell anybody. So help me God."

Frank nodded. "You'll have to get off the bed," he said.

The three guests crowded at

the door, while Frank dragged out the suitcase. It was made of fiber and was very large. It was almost a small trunk.

Frank pulled up the frayed top, lifted something carefully in his arms, and put it on the bed. Smitty shoved the suitcase back under the bed.

At least four feet long, the object on the old army blanket seemed a giant egg. It was shaped like an egg and in the dim light it looked the color of a brown hen's egg. But it didn't have the rigid shell. It lay quivering where Frank had placed it: quivering softly, like an egg hard-boiled and peeled.

"What is it, Frank?" Bill asked. Not that he cared.

"Damned if I know, but wait till you see what it does. It's going to be worth a lot of money to me, when I figure out how to handle the deal."

"Frank gave a fellow a whole unopened quart for it," Smitty said.

"It was worth it," Frank said seriously.

"What's it do?" Bill asked. He casually held out his hand and Frank passed the bottle to him. He drank, never taking attentive eyes from Frank's face. He quickly handed the bottle to Smitty.

"Yell at it," Frank said.

"Boo."

"Naw. Yell at it good like you

were going to hurt it. And get close up."

"Hey, this isn't a trick, is it? It won't do something to me?"

All his life people had played tricks on Bill.

Lester snickered.

"What've you got in your blood?" Frank demanded. "You always been that yellow?"

Shamed, Bill bent his head over the bed and yelled, as he would have liked to yell at Frank: "I'll tear you apart with my bare hands."

But he couldn't help jerking his head back.

Light traced a circle in the center of the egglike thing; the circle filled with light, was a glowing disk. Black dots and lines shot across the disk.

"Is it some kind of television set?"

"That's what I thought," Smitty said.

Indeed, something like a television image was forming.

The image sharpened. It was at first a square, as if neatly drawn, cut cater-corner by a straight line into two triangles. One triangle abruptly vanished. The remaining triangle drifted to the center of the disk. A square appeared on each side of the triangle, so that each side was one side of a square. New lines crisscrossed each square into little squares.

On two sides of the triangle the

little squares drifted away, mixed together, and formed a large square. It was the same size as the other large square.

"That reminds me of something in school . . . a long time ago," Bill said. He remembered but did not speak of a tall Miss Bruce in a yellow dress proving on the blackboard that the square of the hypotenuse is equal to the sum of the squares of the other sides.

"It likes that one," Lester said.

"It often starts with that one."

"You talk like it's alive."

Lester and Smitty looked at Frank.

"It is alive," Frank said. "I'll show you something."

He picked up the bottle of milk from the window sill. A sour smell filled the room as he pulled the cap out.

"He gets it from the chefs in restaurants," Smitty explained. "Spoiled milk. He tells them he drinks it hisself."

Frank swirled the milk, loosening the chunks of curd. He bent over the bed.

He squeezed the narrower end of the egg. A slit opened in the soft, tan surface. Frank poured in some sour milk and let the slit close. Bill could barely see the place, even knowing where it was.

"It eats!"

"When I feed it," Frank said.

Bill looked at the lighted circle.

"The picture's fading."

"It always does when you treat it nice."

"Yell at it, Frank," Smitty said.

"You goddamn rotten egg, I'm going to kick the living hell out of you," Frank shouted.

Now there was a new picture. It was a cross formed of two straight lines that cut the bright disk like a pie into quarters. And there was a different figure in each quarter. A short straight line. A circle. A thing like a letter O. A figure like the nose of a bullet. Bill did not remember and the others had never seen Cartesian curves.

"That won't do you any good," Smitty screamed. "He's going to kick the living hell out of you."

The picture faded. The bright area dimmed; diffused into the mottled tan skin.

"It's something, all right," Bill said. "You ought to get a lot of money for something like that." *I wish they didn't have to treat it that way, he thought. I don't like hearing them yell at it. I wish I hadn't yelled at it.*

"I am going to get a lot of money for it. Soon as I figure out how to handle the deal. Got any ideas, Bill?"

Frank had the whiskey bottle again, and it was almost empty. Bill looked at it sort of absent-mindedly. "Here. Finish it," Frank said grandly.

Bill took the bottle quickly, afraid the others would object. He gulped what was left in the bottle, wiped his mouth, and looked thoughtful. "A circus might give a lot of money for it."

"There won't be no circus here for three months," Smitty said.

"Those circus guys aren't honest," Lester said. "I worked for a circus one time and I know. They'd gyp you, Frank."

"Circus is one thing I'm considering," Frank said. "Got any other ideas, Bill?"

"How about some rich man? Some big banker might find a thing like that mighty handy for tickling his friends at his big parties."

"He'll tickle his friends hisself," Smitty said.

Lester roared.

"This is serious," Frank said. "That's a good suggestion, Bill. Have another drink."

"The bottle's empty," Lester said. "Mr. Seventeen Cents polished it off."

"I vote we get another pint and figure out how to handle this deal. I won't forget you fellows, you help me."

"You've been singing that song for a long time, Frankie," Lester said. "I don't think you're ever going to figure out how to handle the deal. I got a proposition. I know where I can lay my hands on some capital. Why don't you sell it to me? I'll give you two full

quarts —" Smitty's eyes were wide — and that'll make you one hundred per cent profit on your investment and no more worries about how to handle the deal."

"It's not for sale. I've told you that before, goddamn it."

"Okay, okay. No harm in asking."

"How about that pint?" Smitty said.

"Are we all in?" Lester jerked his head toward Bill.

"I guess I'll blow," Bill said. "I don't have any more money."

"No, stick around, Bill," said the host. "You've got some pretty good ideas. Course we can't stake you any more. Say! Those shoes look almost new. Where'd you get them?"

"Fellow left them in an open car," Bill looked around nervously.

"We know a guy loan you fifty cents on shoes like that," Frank said.

"But I need them —"

"What've you got in your blood?"

Frank and Smitty pulled out the coins they had been saving for a meal. Lester was sent with the money and the shoes, for they had drunk enough to trust him. And he was back before anybody got anxious, with another pint.

The bottle went around.

For once the drinks didn't make Bill feel happier. He leaned against the dirty wall and wiggled his toes

in and out of his torn socks. He wished he had his strong shoes back. He wished he had a pint all his own. He wished he was by himself.

He looked at the egg-shaped freak shivering gently on the army blanket. *Poor old egg*, he thought. *Poor old egg*. He didn't know whether he meant himself or the freak on the bed. Sadness was prickling in his eyes and nose. He did not want to burst into tears.

"How about it, Bill? How about it, Bill, boy? Any more ideas how to handle the deal?"

"Sell it — sell it — to the people who make movies in Hollywood — the big directors," Bill stammered. Then he blurted: "But you oughtn't to treat it the way you do. You oughtn't to yell at it and hurt its feelings. If that's what you've got to do to make it do things, you ought to just give it to somebody who will give it a good home. Somebody kind."

"Tie that. He's sorry for it," Lester said.

"He thinks we're brutes," Smitty said in falsetto.

Frank said: "It's all business with me. Just a matter of figuring out how to handle the deal. But if I have to kick the living hell out of it to make me some money, don't think you or anyone else is going to stop me."

"I didn't —"

"We thought you were a good

guy and here you are drinking our whiskey —"

"You took my shoes."

"— and telling me how to treat my own property. This is a free country and a land of opportunity and you're not going to tell me what to do."

"That's giving it to him," Smitty said. "That's laying it on the line."

"I'll show him what I can do with my property." Frank put his mouth close to his property and screamed: "I'll cut you in pieces, goddamn you, and flush you down the can."

Its middle glowed again; then darkened; then began to glimmer with stars. Then the moons appeared. There were four moons in different phases, from a thin crescent to a full face.

"It's beautiful," Bill murmured, "but you shouldn't make it do it that way. I think it's something from — far away. I think it's trying to tell us. You should treat it right. And you should take it to —" He searched his mind for someone in authority. "You should take it to the President."

They laughed; they hooted; they thumped each other. They jumped up and down. They slapped Bill's shoulders in mock admiration.

"The President. Take it to the

President. Yes, sir, Napoleon, your majesty, we'll hop the next freight going straight to Washington."

They dug their hands in their clothes, imitating Napoleon.

"Or the cops," Bill said desperately. "They'd know where to take it."

There was silence.

"The cops," Smitty said. He spat on the floor.

"Copper-hearted," Frank said. "A cop-crier."

He bent over the bed. "Show us something different," he screamed. He pulled back his hand and slapped the soft form. The marks of his fingers were dark on its side.

Lester looked worried. "Be careful, Frank. You'll ruin it."

"You keep out of this too!"

The stars and the moons vanished. A single gray figure took their place as the background brightened.

"That stinks," Frank said.

"It looks like a toadstool," Smitty said.

Bill said slowly, "I've seen a picture like that."

"That makes it stink worse." Frank slapped his property again, on the other side. "Show us something better."

"Why —" Bill started. It was the last word he said.

The city crumpled, and the screaming began.





THE MECHANICAL HEART

H.I. BARRETT

Illustrated by MOREY

The fruition of years of experimentation in the art of organ transplant in one of the most breathtaking developments in contemporary medicine. In this classic tale, published in 1931, author H. I. Barrett gives us Jim Bard, Co-inventor and recipient of a truly ingenious mechanical heart—a man whose devotion to experiment is so great he sacrifices one success to achieve another!

DR. Wentworth sympathetically shook his grizzled head as he laid the stethoscope on the table.

"Jim," he said, "you have asked me for the truth; if I didn't know your character so well I wouldn't tell you—Jim, you may live three months—and you may live only five minutes; that heart is going to stop mighty sudden."

Jim Bard's blue eyes stared unseeing-ly at a pictured skeleton hanging on the wall. When he spoke, his voice was vibrant with an intense earnestness.

"Doctor, I am not afraid to die—I am even curious to know what comes next—but I must live till the telephoto device is completed. I've been at it five years now and it has come to mean more than life to me; it is my life's ideal; the fulfillment of the purpose of my living in this world. God! Doctor, I can't die—yet. There must be some way?"

"Jimmie," the old doctor laid a kindly hand on the young man's shoulder, "I'd give my right hand to help you. I know what that telephoto means to you, and I can realize what it would mean to the world—but I can do nothing, and medical science can do nothing. All I can say

is, take life easy, eat lightly and quit smoking—and get your affairs in the shape in which you wish to leave them. Jim, you are a scientist, and have no sentimental misconceptions of life or I would not have told you this."

The two men shook hands as only two men with a perfect understanding can, and Jim left.

Jim entered the door of his small laboratory and greeted his assistant, a dynamic little man, whose apprenticeship had been served in a Switzerland watch factory, where precision had been a religion.

"Hello, Henry, making any headway?"

"No. Nothin' but trouble, trouble, trouble with these damn selenium cells."

The little man gesticulated violently as he spoke, and Jim, as always when listening to him, repressed a smile with difficulty.

"Had some bad news this morning, Henry."

"What?"

"Wentworth says I'm going to die one of these days—that the old heart is going to quit pumping."

"Put new valves in it," said Henry sourly. "Who's Wentworth, anyway?"

"Wentworth! You haven't heard of

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him! Why, he's the wizard of the medical profession—what he says is gospel. Brought me into the world when he was the 'struggling young physician' back in Iowa."

"Yeah? Well, if he's so great, why don't you have him graft a heart into you—they graft everything else?"

"Will you donate the heart, Henry? I'm afraid a monkey's wouldn't work."

"Get a goat's," said Henry acidly, "that would fit better. Better yet, make one—you ought to be able to do that. I've heard it noised about that you are the coming inventor of the age."

"At that," said Jim, "it doesn't sound more impossible than the telephoto did five years ago. But let's quit this foolishness, Henry, and get to work on that cell."

The two men walked to their respective benches and were soon concentrated in their work. For an hour all was quiet in the laboratory, then Henry looked up and called to Jim:

"Say, Mr. Bard, I wish you would see what you can do with this mechanical heart."

"What?" asked Jim in surprise. "What do you mean, 'mechanical heart'?"

The little man flushed, then stammered, "Mech—mech—I mean selenium cell."

"What made you say 'mechanical heart'?" insisted Jim.

"Aw," exclaimed Henry, disgustedly, "I've been seeing some crazy sort of contraption strapped to your chest and pumping your blood."

"The only way," said Jim, "to get that kind of bug out of your head is to take a pencil and paper and draw a plan of it—the heart, not the

bug—to show that kinky part of your brain how crazy it is. At least I'm that way, I'll get a crazy idea of something and if I don't try to work it out, it will run through my mind for weeks. I want your mind clear tomorrow, so play with your blood-pump for awhile."

"Bah!" spat out Henry. Then wiping his hands on his immaculate overalls, he again bent studiously over his bench.

It was getting dark when Jim called, "Let's go eat—it's way past quitting time."

He received no answer; nor did the other look up. Curious, Jim walked to the little man's bench and looked over his shoulder. He smiled as he gazed at the penciled lines that so engrossed Henry; then, as his expert eyes took in the details, the smile gave way to an interested look; he leaned closer and studied the outline intently. Suddenly, he put a finger on the paper and spoke—the little man jumped.

"You'll have to have a vacuum to suck the blood back through the veins as well as a plunger to force it through the arteries."

Henry looked up guiltily and blushed like a school girl. He muttered something under his breath and started to crumple the drawing. Jim calmly took it from him and straightened it out again.

"Hmmm," said Jim, scanning the lines. "How many cubic inches per minute does the heart pump, anyway?"

"Dunno."

"Well, then, tell me the pressure of the blood as it leaves the heart."

"Dunno."

Just then the door of the laboratory

opened and Dr. Wentworth walked in.

"Hello," he called cheerily, "I didn't know whether or not you were here, there was no light."

"Dr. Wentworth," shouted Jim, "just the man I wanted to see. Turn on the lights, Henry. Say, Doctor, what's the pressure of the blood as it leaves the heart—how many cubic inches per minute does the heart pump—what are the diameters of the arteries and veins—what—?"

"Hold on, hold on," laughed the doctor. "We'll have a traffic jam here in a minute. Now—one at a time, and slow."

As the doctor answered his questions, Jim made notes on a paper.

"What in the world, Jim," asked the doctor curiously, "are you going to do with all that information?"

"I'm not going to do anything with it," answered Jim. "Henry, here, is making me a mechanical heart, so when mine quits he can attach it; so you see he had to know all those things."

"I am not!" shouted Henry, red in the face. "I quit and he took it up."

Jim winked at the doctor. "Henry," he said, "you have always prided yourself on finishing what you started, are you going to lie down on a little thing like a mechanical heart?"

"No," exploded the little man. "I'm not—I'm going to make the damn thing if it takes the rest of my life—and you're going to wear it if I have to cut out your heart and put it in, myself."

He wrathfully grabbed a bunch of papers, took his hat from a nail and smashed it on his head and went outdoors, slamming the door behind.

"Fiery tempered little devil, that," observed the doctor amusedly.

"Sure is," answered Jim, "and stubbornner than a Missouri jackass—but he's the best mechanic I've ever seen."

"What," asked the doctor, "is all the noise about a mechanical heart?"

Jim laughed, "Oh—Henry, with that streak of insanity possessed by all geniuses, is obsessed with the idea of me wearing some sort of machine to pump my blood; he couldn't get the picture from his mind, so I told him to work on it awhile—but you know, doctor," he continued more seriously, "that rough plan he drew didn't look so preposterous as it sounded when described."

"Careful, Jim," warned the doctor, "you'll be as bad as you say the little fellow is, first thing you know."

"No danger of that, doctor," smiled Jim. "But, say, just to satisfy my idle curiosity, what would be the effect on a man if the nerves to his heart were severed and yet his heart kept beating?"

"Hmm-mmm," answered the doctor, thoughtfully. "In the first place, such a case would be quite impossible—no heart could continue beating with the nerves severed; but taking a hypothetical case and admitting anything possible, I would say a man would be a sort of an automaton; he would breathe, eat, sleep—in fact, take care of all the necessities of living—and I guess he could think to some extent."

"Wouldn't he find," asked Jim, "that while his heart was pumping at the normal rate of seven-two beats per minute that his emotions would be purely mental—that is, they would not affect him physically in the slightest? As I remember my physiology, there must be accelerated heart action before

any emotion can affect the nerves or muscles; and with no nerves to the heart, there could be no accelerated action in this case."

The doctor studied a moment. "Yes, Jim, I believe you are right. Take any of the emotions such as hate, fear, anger, love; they are, in their incipency, mere thoughts or ideas in the brain; the brain nerves transfer these impulses to the heart, which becomes accelerated, and then the body muscles and their nerves are affected—but say, I didn't stop in for a conference on biology, I'd rather hear about the telephoto; how's it coming?"

"Slow, doctor, I can't get the receiving set to take the pictures properly—and I hate to admit it, but I seem to have lost most of my ambition since you told me I haven't long to live."

"My boy," said the doctor, with a paternal kindness in his voice, "that isn't the right attitude—and I'm surprised that you, of all people, should take it."

"I know that," admitted Jim sheepishly. "My idea has always been that if a man works till he dies, then—and only then—has he accomplished what the Lord put him here for; but now, the telephoto means more to me than just working till I die—I want to finish it, and if I can't, what's the use of working?"

The doctor smiled. "Jim, as your physician, I prescribe that you go home, go to bed and sleep for at least ten hours, you are totally exhausted."

"Guess you're right," admitted Jim, then, "Say could you hook up a properly constructed mechanical heart to the body?"

The doctor picked up his hat and gloves and said:

"I'm going to leave you before you get completely delirious. Good night, Jim."

Jim followed the doctor's directions; he turned out the lights in the laboratory, went home and to bed, with no dinner. But he could not sleep. Each time he closed his eyes there floated into his consciousness the diagram of Henry's mechanical heart; platinum plated steel plunger, iridium valves, selenoid wound with silver wire. Basically, thought Jim, the little man's idea was good, but he had overlooked some of the most important parts. Finally, he went to sleep and dreamed of an enormous machine clamped to his breast and pulsing the blood through his arteries with titanic force.

Early next morning Jim went to the laboratory. Henry was already there, bent over his bench in deep concentration. Without a word, Jim went to his own bench and started working on the telephoto projector. He found it impossible to concentrate. Everything was a compact, little machine that pumped, pumped, pumped. He picked up a pencil and started idly tracing lines. Hours later he startled the little man across the room with his loud shout:

"I've got it—I've got it!"

"You sound like you had it, all right," said Henry crossly. "What have you got, measles or delirium tremens?"

Jim grabbed a paper and ran to the other's bench.

"Here," he pointed, "is the engine that will run your mechanical heart."

Henry looked at the drawing glumly,

then disgustedly crumpled the paper on which he had been working.

"Hell," he snorted, "I've been working on the damn thing all night and couldn't even get a good start."

"Say," said Jim, suddenly, "let's make this machine; what do you say?"

Interest gleamed in Henry's eyes. "Uhuh," he grunted, "We'll all be crazy together."

"You get the things together," said Jim, "I'm going to take this plan to Wentworth; the thing has to be installed, you know; and he is the only man living who could perform such an operation; but by all that's holy, if *he* won't, *you'll* have to install it—that thing will work."

Wentworth snorted derisively when Jim showed him the plan.

"Heavens, Jim, you're crazy as a loon! Come, wake up, man, you know that's preposterous."

"Look at it, doctor," pleaded Jim, "I'll stake my soul that it will work."

"Well," replied the other, "there's no harm in looking—but I tell you frankly, Jim, there's no use in it. I can never be convinced."

Jim started pointing out the different parts and explaining them to the other. The doctor listened patiently a few minutes, then interrupted:

"I'm not mechanic enough to make heads or tails out of what you are saying; it's all Greek to me."

"Very well," answered Jim, picking up the paper, "I'll make the machine and demonstrate it to you."

"For Lord's sake, Jim," exclaimed the doctor, irritably, "have done with that foolishness; there's not a doctor in the world will have anything to do with that hare-brained idea."

"I'm going to make the machine and someone's going to install it, doc-

tor or no doctor," said Jim stubbornly, as he rose to leave.

The next two weeks were busy ones for Jim and his assistant. From daylight till dark, and sometimes all night till Hilda, the Swedish scrub maid, lumbered along in the early morning hours, they worked; calculating to an infinite detail; measuring with delicate precision; standing for hours at the humming lathe; scarcely taking time to eat; sleeping only when exhaustion claimed them. And at last the heart was built. It stood on the bench, a shiny little thing of mechanical perfection.

Jim packed the heart and a circulatory system he had made of glass tubes, in a small suit-case and sent to Dr. Wentworth's office. A look of comic dismay crossed the doctor's face as Jim unpacked the paraphernalia.

"Humph," said the doctor, "if that thing's a heart, I'm a hen's gizzard!"

Jim paid no attention to his remark. "These tubes," he explained, "are an artificial circulatory system; as soon as I get them together, I'll show you the heart in action."

He soon had everything hooked up and started the little machine. The only sound it made was a "tick" like that of a watch. A thick, red fluid pulsed through the tubes evenly.

"Here," said Jim, "is the selenoid; it is wound with silver wire. This steel plunger is silver plated—the valves are iridium. These steel hair-springs close the valves. Pivots for the armature are all jeweled. In pushing the fluid forward, it creates a vacuum that sucks also. If it gets seventy-two impulses a minute, it will pump for twenty years without attention—the whole thing is to be enclosed in this small platinum case. This other small case is

to be carried in my pocket; it contains two six-volt flashlight batteries and the impulse machine—which is nothing but a watch arranged to give the proper number of impulses per minute. When the whole thing is attached to my body, all I must do to live is to wind the watch each day and renew the batteries when needed.”

There was silence as Jim finished, a moment and he again spoke.

“When will you perform the operation, Doctor?”

“Never!” answered Wentworth; then he continued, “Jimmie, you have built an exquisite little machine, and I can see that it might work if it were connected to a human system, but that operation is almost impossible. Why, one little bubble of air in the blood might be enough to produce death. Be fair, Jimmie, look at it from a sane standpoint.”

“Doctor,” Jim’s voice was vibrant with passion, “I can look at it from no standpoint except that it is my only chance of life—my only chance to finish the telephoto. You say I can live only a short time anyway, and a few days living is not worth more than even one chance in a million to prolong my life. Perform the operation in secret, if you are afraid of the penitentiary, and if the outcome is fatal you can doctor the death certificate—it’s done every day of the year, and you know it. As for the bubble of air getting into the blood, I can remedy that; I will fix up a tank of salt solution and you can perform the operation under that—no chance, then, for air to get in. Doctor, for God’s sake forget the individual and think of the boon to humanity, should it work. At the worst we are losing a few days only of my life; at the best we are

freeing humanity from one of its greatest evils. Doctor, you are an honest man, a just man, a brave man, you can only say, ‘Yes.’”

The doctor had risen and was pacing restlessly to and fro. He stopped at the window and peered far down at the busy street. Suddenly, he turned, his face pale and set.

“Jimmie,” he said simply, “you win.”

One week later Jim Bard, Doctor Wentworth and Henry stood in Jim’s laboratory before a glass tank full of salt water. Jim, calm and unhurried, was undressing. The doctor, with a bluff professional manner, was arraying sharp steel instruments on a small table; his features, set in a smile, looked as if they would shatter at a twitch of a muscle. Henry, his black eyes glittering strangely, was glancing from Jim to a long, thin knife that lay on one edge of the doctor’s table.

Jim finished undressing and lay down on a carefully spread cot bed. The doctor picked up an ether mask and adjusted it over his face.

“Well, Jim,” said the doctor, “when you waken, you will be the only man living who has an artificial vital organ.”

“You mean,” said Henry sourly, “if he wakens.”

The doctor sat down by Jim’s side and took hold of a wrist. Jim’s breath came slower and slower, soon his muscles relaxed. A few minutes elapsed and the doctor spoke to Henry:

“He is asleep; are you ready, sir?”

The two men fitted a contrivance that looked like a diver’s helmet over Jim’s head, then carefully lifted and placed him in the tank of salt solution. A great battery of lights above the

tank was switched on. The doctor selected an instrument, bent over the tank and plunged his hands down to Jim's body. Henry stood by, his rubber-gloved hands holding a tray on which lay a tiny, bright, metal device from which two wires extended.

Thirty minutes later the doctor and Henry, their faces red and strained, clothing glued to their bodies with perspiration, lifted the inert body from the tank and placed it again on the cot. They rubbed it briskly with coarse towels, then wrapped it in woolen blankets.

Tick, tick, tick. The figure on the cot stirred slightly.

"He's waking!" came a whisper from the doctor, who was holding the patient's wrist. "And he's going to live—live as long as the machine works. It's a miracle—the miracle of the ages."

"Course he is," said Henry. "That machine had to work; it was perfect."

Jim slowly opened his eyes and looked around drunkenly.

"H'lo evr'budy," he mumbled. "Wha's all th' racket about?" His eyes fell on Henry. "Is the telephoto all right?"

Henry nodded his head in the affirmative and slightly turned the knob on the battery box which lay on the bed. Jim fell into a deep sleep. He awakened later, able to converse intelligibly.

"So it worked—and I'm alive," Jim said weakly to the two figures standing over him, "and now I can finish the telephoto—oh, God! I am glad. Say, this contraption makes an awful noise; I can feel it jarring my whole body. How long before I can get up, Doctor?"

"Two weeks."

"Two weeks! Say, I'll rot alive if I have to stay here that long."

The others left and he again fell into a deep sleep. After many hours he awakened. Henry, who had returned in the meantime, brought broth, and Jim ate heartily.

"So," thought Jim, "I am alive, and can eat." He could feel the blood coursing strongly through his veins. That metallic "tick" was bothersome, but he'd soon get used to it. Curiously, he fingered the battery box; his fingers strayed to the accelerator, pushed it. Weak as he was, he almost jumped out of bed. Blood surged madly through arteries unaccustomed to such strains; his temples pounded; and his whole body jerked to the beat of the mechanical heart. Quickly, he pulled the button back, and breathed a sigh of relief as the blood resumed its normal rate of flow. Have to be careful or he'd have himself cutting all sorts of didoes.

The days seemed endless to Jim as he lay waiting the time when he again could work on his life's achievement, the telephoto. Were it not for the doctor who visited him several times a day, the inaction would have been unbearable, for Henry, outside of taking care of his physical necessities, winding the impulse watch and changing the batteries, paid him no attention.

One day the kindly old doctor placed a hand on Jim's shoulder and said:

"Jim, I'm going to let you up tomorrow if you promise to be careful and follow directions implicitly,"

Jim promised. Next day he was up. He soon became accustomed to the little machine clamped to his chest and to the weight of the batteries in his pocket. But the batteries and watch bumped into everything, so he had a

special vest made in which to carry them. Two weeks and he was working on the telephoto. All his waking moments were spent in the laboratory, where he threw his whole mind into completing the instrument. But he was still weak and could not get into the work with the same spirit he had had in the past. Wondering what heart acceleration would do to his present state of mind, he edged the button forward; immediately he found it possible to concentrate, and plunged into details with a vigor that was astounding.

Every night, and far into the morning he worked at the telephoto device in one corner of the laboratory. He found that when exhaustion was on the point of overcoming his body, a slight push on the knob put new life into lagging muscles and stimulated his mind to greater activity. One night he became so engrossed in his work that he forgot to go home at all. Night passed and dawn's gray light peeped into the windows, throwing outlines into cold relief. Hilda, the Swedish scrub-maid, came into the room, carrying bucket and mop. Many times she had walked in on the concentrating Jim, so neither was surprised.

"Hallo, Mizter Bard."

"Morning, Hilda."

"It bane awful swell mornin', ain't it Mizter Bard?"

"Sure is, Hilda."

The text of one of his conversations with the doctor flashed into his mind. "Hate, fear, love, anger will be mere thoughts till the accelerator button is pushed forward, then those emotions will grip you physically." Here was a chance to test that theory.

With all his will, Jim concentrated on the thought of love for Hilda—and slowly pushed the button forward. His face grew hot and a warm glow enveloped his body. The button went another notch. Blood became sparkling wine and sang through veins; strange, delightful thrills wrestled in his stomach; breath came short and fast.

"Hilda—Hilda!" he breathed softly.

She came swiftly to his side.

"Vot's der madder, Mizter Bard, is you sick?"

"Hilda, girl—Hilda." In a panic he tried to pull the button back. It would not come. He jerked frantically, but the button was stuck—caught in the vest.

"Hilda, sweetheart, how I have longed and waited for you. Life has been one, long night of black despair without you, girl."

"Mizter Bard! You is jokin' of me."

"No, no, Hilda, I am more serious than I have ever been before."

For a second his mind again flashed clear. Vainly, he tugged at the unyielding button. A yearning that would not be denied brought him to his feet. His hot, dry hands slid up her chubby arms and into rolled sleeves.

"Mizter Bard," she squeaked. Her dead, gray eyes peered at him in alarm, and her calloused hands thrust him back.

"Hey, Mr. Bard, are you here?"

Quickly, Jim turned. "What the hell are you doing here, Henry?" Jim's voice was thick with passion. "Get out before I throw you out—you cur."

"Der man is crazy, Mizter Henry, he is try to make funny of my inflections."

Jim advanced threateningly on Henry.

"What's the matter, Mr. Bard?" Henry's voice was shaky.

"I'll show you what's the matter," grated Jim, as he grabbed the little man. His strength was a terrible thing to behold as he jerked Henry off the floor. But Henry's mind hadn't undergone years of training for naught; quick as thought he reached in the front of Jim's coat, caught hold of one of the wires to the battery, jerked it upward—one end of the wire came free. A pained, startled look twitched Jim's features; his body sprung taut—quivered—slumped to the floor. A bluish tinge spread over his face; his breath rattled. Quickly, Henry fastened the loose wire to the battery terminal—meanwhile unfastening the accelerator button from the tangled vest. Jim breathed easily again and his face resumed its normal hue. He rose with a sickly smile.

"That was a close scratch, Henry. You sure used your head."

Then turning to Hilda, who stood with open mouth:

"I'm sorry, Hilda, I was very sick—temporarily insane—heart trouble, you know. You don't need to finish cleaning this morning."

"Bet chur life, A don't. A ain't never goin' t' clean here no more—A ain't goin' t' work round' no crazy heart troubler." With which she flounced out the door.

The telephoto was nearing completion. The sending set was done and the two men were working feverishly on the last detail of the receiver. Their eyes were red-rimmed from sleeplessness and their hands trembled. Jim finished tightening the last bolt.

"Henry," he said, "Let's try it—you take the sending set; I'll receive."

The set did not work at first and

they tinkered with it for some time, then tried it again. Ten minutes later Jim jumped with an intoxicated:

"She's workin', Henry, she's workin'!"

Henry came running the length of the room.

"Does it show plain—could you hear me?"

"Yes, I could see and hear you as plain as if I could touch you. Henry, it's done; it works perfectly."

Jim sat down weakly. "God, Henry, this is the happiest moment of my life—I'm so happy, I could die."

"Hello, everybody," called a cheery voice, "did some one die or are they tears of inebriety?"

Both men looked up and shouted at the same time, "It works, Doctor, it works!"

"You don't say—my, isn't that nice: what's it working at—how long has it been working—do you think it will continue?"

"Yes, it just started; and it will," answered Jim.

"What is it that's working?"

"The telephoto," answered Jim.

"Yeah," shouted Henry, "he could see an' hear me like I was here."

"Where were you?" asked the doctor.

"Here," answered Henry. "That is, I was in the other end of the room."

"Jimmie," the doctor's eyes shone with an honest gladness, "I knew you would do it. Any man with your determination is bound to succeed—let me see it work."

The doctor sat for an hour, entranced with the wonder of the machine; watching the lifelike images of both Jim and Henry, and listening to their voices.

Finally the doctor asked:

"When are you going to give a public demonstration, Jim?"

"First of next week—at the Associated Scientists' convention."

"Fine," exclaimed the doctor. "I'm going to be there, too. Makes me think, I stopped in to see if you'd come down to that same meeting; I want to show them that heart of yours. It will be the surprise of their lives. Boy, with that heart and this television machine, you will certainly set that convention on fire. What are you going to broadcast?"

"I have," said Jim, "made arrangements with the Hippodrome in New York to broadcast their latest play. I'm going to send Henry there with the sending set. I'll have the receiving set on the stage in the auditorium, throw the pictures on a screen and use an amplifier for the voices."

"I must go now," said the doctor. "Probably won't get a chance to see you before the big party—say, I'll drop down here a little early and we'll go together, eh?"

"Fine," answered Jim.

The doctor left.

Monday night Dr. Wentworth led Jim into the great auditorium. Every seat in the big room was full, and men were standing packed in every aisle. A blue haze of tobacco smoke hung low over the multitude of heads, and the hum of conversation filled the room.

The doctor led Jim straight to the platform. They mounted the steps. The doctor spoke to an official looking man there, then turned to the audience and announced:

"Gentlemen, I have with me tonight the greatest inventor the world has ever known—the inventor of the mechanical heart. Some time ago I told

him—his name is James Bard—that he had only a short time to live; his heart had been bad from birth and was likely to stop any minute. He had a stronger determination to live than I had ever witnessed. Gentlemen, he invented himself a mechanical heart—it is now pumping the blood that is keeping him alive. I will let him explain it. Mr. Bard is also the inventor of the telephoto—just completed it last week. He is going to demonstrate it to us tonight."

A strained, expectant silence hung over the room. Jim knew he was expected to say something—and that's all he did know; his mind was blank. He rose, trembling. Seconds passed. A cold sweat broke out on his body. The sea of upturned faces reeled dizzily before him. He tried to focus his eyes on some single face but could not. He became aware of a slow, even pounding on his breast—the accelerator! Why hadn't he thought of it before—his nervous system could not act from lack of circulatory stimulant. He pushed the knob. A warm glow stole over him and his mind cleared at once; multitudes of ideas thronged his brain.

"Gentlemen," he spoke simply, "my assistant and I made this heart—the miracle is that any man could connect it with the human system. With a skill and courage never before equalled, Dr. Wentworth did that. I give homage to the greatest man of all time, Dr. Wentworth."

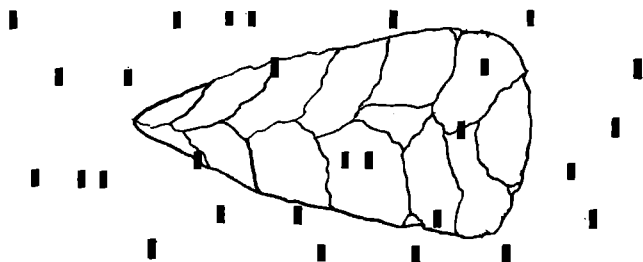
Jim's hand had remained on the knob. In the excitement of a new conquest he pushed the button far down. His voice rose loud, clear.

"Gentlemen, all my life I have striven for a goal. Until five years ago I did not know what that goal was—

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SCIENCE OF MAN

by LEON E. STOVER



DOGS, DOLPHINS AND HUMAN SPEECH

CONTACT with alien beings is a favorite theme in SF. The imagination of stories which credit man with adventures of communication with extra-terrestrial forms of life has the virtue of glamorizing the possibility of unexpected and sensational communication with other forms of animal life here on Earth.

SF readers, then, are well disposed to give a hearing to Dr. Lily's experiments in attempting to bring dolphins into contact with humans. Dr. Lily believes that the bottle-nosed dolphin, given a translating machine for its clicks and clacks, can be taught to talk English.

Dolphins, however, are no more capable of handling human speech than are dogs.

It is almost impossible to persuade devoted dog owners that their non-human pets lack the singularly human ability for language. Dog lovers stoutly insist that dogs understand them and that communication is easy.

Yes, dogs and people *do* understand each other and they *can* communicate. But, while all languages known to man are a form of communication, not all forms of commu-

nication are based on speech. It takes more brains than a dog has to be capable of *linguistic* communication. Dolphins have large brains, much larger than those of man. It does not follow, however, that dolphins are intelligent enough to talk with humans.

To dispose of dogs first.

With few, exotic exceptions, man's pets everywhere in the world belong to the Class *mammalia*. Or land mammals, at any rate. In the United States, dog and cat owners far outnumber people who keep birds, snakes, turtles, or tropical fish. In *THE SKIN OF OUR TEETH* by Thornton Wilder, it was a fraternal convention named the Ancient and Honorable Order of Mammals, Subdivision Humans that Mr. Antropus attended in Atlantic City.

Non-mammals for the most part are beyond the pale of human empathy (although not of anthropomorphism when artistically rendered). People who fear snakes build their psychological reaction on a universal recognition that the Class *reptilia* is alien in behavior in mammalian terms. Reptiles are cold-blooded animals which save their en-

ergy for locomotion; when at rest they hold frozen unblinking postures, occasionally shifting the position of an organ with a mechanical tracking movement. Mammals, by contrast, are warm-blooded animals with energy to spare for investigating the environment; they are alert and make active body movements even when at rest. The activity level and muscular rhythm of mammals in motion is something that we humans can understand and almost "feel" in our own bodies. A cat stretching can trigger off kinesthetic memories of the same action by our own limbs and muscles. Mr. Anthropus, who stands for mankind, does not admit animals other than fellow mammals into his fraternal order.

The dog began its association with man in post-glacial times, within the last 12 thousand years, as a hunting partner. Wild ancestors of the dog were pack-running wolves—social carnivores. Domesticated, the dog cooperated with human hunters as it had with its ancestral fellows. Dogs were useful to Paleolithic man—and still are useful to the small groups of primitive hunters which survive today—in driving and beating game, in tracking game by smell, in listening for sounds of danger beyond human hearing, and in guarding the campsite at night. And with the help of man, the dog is certain of his share of the kill, the bones and entrails.

Even as a domesticated house pet today, the dog remains a close companion for those who like living with dogs. Dogs and men still understand each other because, until a few thousand years ago, both lived the same kind of life, as social carnivores, hunting game larger than themselves. Human hunters, of course, organized their

cooperative hunting group on the basis of a highly evolved system of vocal-auditory signaling—language. The barking of a pack of dogs also relies on vocal-auditory channels of communication, but the level of signaling is that of a call system, quite distinct from that of language. A call system is no more linguistic than the system of visual signals dogs communicate to each other by means of facial expression, body movement and position of the tail. These signals dog owners also readily understand.

Altogether, dogs do a lot more significant signaling than do monkeys and apes, man's closest relatives. (These latter make much more noise for its own sake, however.) But then again, apes are vegetarian browsers, not group hunting carnivores as are men and dogs. Sheepdogs, responsive to a large repertoire of auditory signals emitted by man, will never be replaced by trained chimpanzees . . .

No doubt dog lovers persist in the illusion that dogs understand linguistic communication as well, owing to yet another feature of behavior shared by social carnivores. Like human hunters cooperating with their group in rounding up their prey, pack hunting dogs and wolves must show some sense of individual control in the interest of the group. And like the human hunting band, the pack shares its kill. Dogs, like men, are taught discipline by their peers and elders. Domesticated dogs can be taught to keep away from a hunk of steak left alone on the kitchen counter to thaw, even when their master is out of the house. What is more striking, disobedient dogs will feel guilt and show it when the master returns. Any dog owner can testify

to the anticipation of punishment in such a case.

Men and dogs understand each other more than any other animals because they both experience self-discipline and a social conscience. Doting dog lovers, however, mistake this remarkable instance of inter-species understanding to imply, in addition to a shared sense of social conscience, the capacity for self awareness. This is particularly true among people who keep dogs as substitutes for children. But the fact is that because dogs are capable of experiencing guilt *after* the act, it does not follow that they can foresee the experience of guilt in *advance* of the disobedient act. Such foresight requires self-awareness and the ethics of choice, which in turn require language.

Language differs from call systems and other non-linguistic means of communication in no uncertain terms. Language and only language is a symbolic form of communication. Symbols are arbitrary. No intrinsic connection exists between the physical signal and its message content. With humans, of course, vocal signals are not alone among physical properties which may take on symbolic meaning. Take holy water, for example. Holy water is made up of two things, a substance found in nature, H₂O—water—and a meaning assigned to it by man. No dog can be taught to tell the difference between holy water and drinking water, but any normal human being can be taught this.

Lewis Carroll wrote knowingly of semantics in the whimsical discourse of Humpty Dumpty in THROUGH THE LOOKING GLASS:

"When *I* use a word," Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean—neither more nor less."

We all are Humpty Dumptys in the use of language. The fact that the same signal may function as a symbol in human communication, and may not in communications with dogs or other animals, should not lead to confusion.

In teaching a dog tricks, and man may establish the words "roll over!" as a cue for rolling over. The dog could just as easily be conditioned to perform that action in response to a whistled sound of a particular pitch or a beam of light of a certain wave length.

Humans are conditioned to respond to signals from other humans much the way dogs are cued by their human masters. But man has more than a *passive* role to play. Man alone can *actively* determine what meaning vocal stimuli, and any other stimuli, will have. A man can teach another man that "halt!" means to stop. A man can teach this to a dog. A dog cannot teach this to a man and one dog cannot teach this to another dog. The only difference between the use of speech among men and Humpty Dumpty is the fact that when men impose meaning on vocal signals they do so not individualistically, but as members of speech community who share the semantic conventions of their language.

To repeat, all language is communication, but not all communication is language. Speech is a property of *Homo Sapiens* and of no other living organism. Language is distinct from the call systems of other mammals—the barking of dogs; the trumpeting of ele-

phants, the hooting of gibbons—and the underwater noises made by dolphins. The distinction may be summarized under four headings.

1) Other mammals emit signals only in the presence of the stimulus to which the call is a response. Take gibbons, a species of Asiatic ape, for example. The presence of an enemy alerts adults to make defensive growls. Little hooting noises are made by all members of the group, whereby it defines its territory from that of neighboring groups. Playmates chirp and squeal at each other. And the adult male chatters and clucks by way of leading the group in its daily progression through its territory. Language, by contrast, enables humans to speak about things out of sight, about non-existent things, or about things in the past or in the future. One can think about preparing a steak dinner, in the absence of hunger, while seated during lunch.

2) Call systems are largely inborn. The growls, hooting, chirping, squealing and clucks of gibbons are genetically determined responses. The gibbon, as a species of primate, inherits a fixed, inflexible repertoire of sounds which invariably relate the same stimulus with the same response. Language is transmitted by a tradition of teaching and learning. There is only one species of men, but there are many different languages. Man's capacity to memorize and utter the sounds of his particular speech community is the genetic trademark of his species.

3) In the call systems of the non-human mammals, there is only one vocalization for each appropriate situation. The repertoire of sounds is closed. Speech is an open system. It makes possible the production of novel combinations of sound never

heard before. A trained dog may learn to take his cue from 77 to 100 different signals. And these signals are mutually exclusive.

4) The open-ended productivity of language owes to the fact that a limited set of sounds (phonemes) can be arranged into an infinite number of larger combinations ("words" and sentences). Speech operates at two levels. The building blocks of speech at the phonemic level are in themselves meaningless. These phonemic units, the actual sounds of language, do not at all determine the concepts, thoughts or meaning of language. The symbolic form of communication known as language appears at the next highest level when these phonemic events are arranged and rearranged in strings of vocal utterances. For example, the sounds represented in the international phonetic alphabet by (t), (i) and (m) may be put together one way to pronounce "team," and another way to pronounce "meat." The phonemes generate word units and, according to the rules of the language, spin out whole strings of thought in the form of sentences.

There it is. The barking, howling and whining of dogs cannot be analyzed in terms of phonemic structure. No phonemes, no language.

That takes care of dogs. Now what about dolphins? Dr. Lily claims that these sea mammals can be taught to communicate with man, *linguistically*, because they are highly sociable and because their brains are large enough to rival human intelligence.

The brains of dolphins are indeed bigger than human brains. A dolphin is about 30 times as heavy as man! And elephants are even bigger. The brain, however, does not increase in

simple proportion to the increase in body size but by the power of 0.66 of that increase.

The absolute size of the brain, then, is no indication of intelligence. What is more important is the ratio of brain weight to body weight. For night monkeys, chimpanzees, man, elephants and bottle-nosed dolphins, the figures are as follows:

Animal	Brain weight (grams)	Body weight (grams)	Brain:body ratio
Night monkey	190	9,200	1:84
Chimpanzee	400	45,000	1:112
Man	1300	60,000	1:47
Elephant	6000	7,000,000	1:117
Dolphin	1750	150,000	1:86

The brain-body ratio of the bottle-nosed dolphin, then, is on a par with that of monkeys! And nobody ever has suggested that monkeys might be taught human speech. Actually this is a very respectable comparison, for primates generally possess brains about twice the size of the typical mammalian brain including that of dogs, for any given body size. Both elephants and dolphins are atypical mammals in this respect; they are in the same league as primates, the Order of Class *mammalia* to which man belongs.

It is not necessary, however, to postulate elephant culture, complete with burial customs, or dolphin language in order to account for what these peculiar animals do with all their brains. How the brains of dolphins function to meet the demands of their environment is not yet known, but it is a sure thing that research will show that symbolic behavior, like

language and culture, is not part of that adaptation.

Man's ability to handle a symbolic form of communication, language, is very much related to the fact that he is a primate. The potential for language simply does not reside in the evolutionary history of any other mammal.

What gave primates their head start on the way to linguistic communication, culminating in man, was their adaptation to life in the trees. Primates, with few notable exceptions, such as the baboon and *H. sapiens*, are tree dwellers. They are not just visitors to trees, like cats or raccoons or squirrels; they live there. The exceptions, of course, are descended from arboreal primates.

Arboreal life is a secure life. Until the advent of man, with his hunting expeditions for primate hides, bones and live specimens for zoological gardens, primates of all species were safe from ground dwelling predators. The orgies of noise continuously indulged in especially by howler monkeys, guerezas, gibbons and chimpanzees is a tribute to the safety to the primate niche in life; no harm can come from their giving away their location by noise making. The babbling of babies is a gift from our primate ancestors: it is the very foundation on which human language is built.

The intellectual capacity to reshape babbling into speech, however, must be attributed to the very special features of primate vision. Man, like his primate ancestors, is a highly visual animal. Above the ground the forest environment is a three dimensional environment. Movement through it places a premium on depth percep-

tion. Primate vision is almost fully stereoscopic. The field of binocular vision in monkeys, apes and man is 120° (out of a total field of vision of 180°) as against (say) horses, whose eyes are so rotated to the sides of their head that they can see in all directions in a visual field of 360°. But the eyes of horses can focus in a binocular field of only 57° out of the total. Dolphins likewise are extremely limited in the amount of double-image overlap, if any. The higher primates, with their forward facing eyes, can see in three dimensions almost everything they see. Monkeys, apes and men perceive the world through a pair of exceedingly fine range finders.

Depth perception is important to primates as they move their way through the branches and limbs of forest trees by leaping, clinging and climbing with all four hands. Rapid movement of this sort requires exceptional coordination between hand and eye. Precise visual information about a three dimensional environment is coordinated in the brain with precise movements of the limbs. Anyone who ever has watched and marveled at the flashing grace of gibbons in their acrobatic passage through the tropical forests of Thailand must also marvel at the gibbon brain, more exacting than any of man's electronic computers, with its complex interconnections between visual and motor centers. These neural interconnections within the brain may be seen at work even when primates are at rest; they pick up loose objects and examine them in front of their eyes. Compare this with the simple way in which most land mammals investigate their environment, like a dog putting his nose to a bone, not handling it,

not looking at it. The watchmaker, with his eye glass and tiny screw driver at his finger tips, is true to his primate heritage.

The primate brain is an evolutionary novelty. Basic to its ability to coordinate hand and eye is a build up of its memory banks which, in particular, may be identified with the temporal lobes. These tissues of the brain have expanded in primates beyond anything to be seen in the other mammals. Without extensive memory banks, primates could not maneuver through the trees the way they do. First of all their brains must compare the two overlapping images of the branch they are going to leap to if the correct distance is to be estimated. Secondly, they must draw upon stored memories of the feel of previous jumps, trajectories and landings.

Human intelligence, with its capacity for speech, is primate intelligence carried to an extreme. But note this: intelligence is not seated in some locality of the brain. It is, rather, a highly generalized facility for input analysis and memory. Our primate ancestors developed this facility through the adaptive requirement of their brains, in arboreal life, for relating visual input with motor output.

Men evolved in Africa as a ground dwelling primate, walking on platform feet, whose forelimbs were freed from locomotor tasks. His grasping hands, retaining the prehensile capabilities of his arboreal ancestors, were then coordinated with his eyes by way of handling tools rather than by way of locomotion through a forest environment. The African plains, in Miocene times about 25 million years ago, held an opening for a

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THE FUTURE IN BOOKS



SEEKERS OF TOMORROS, Moskowitz, San. Ballantine Books (New York), 1967. Paper, 428 pp. + indices; 95¢

Sam Moskowitz is often called "*the* historian of science fiction," and held up as the field's only thorough, dedicated scholar. The only extent to which this reputation is ever questioned usually takes the form, "Sam's literary judgments may be unreliable, but he certainly does have the facts." Does he?

The present volume makes an excellent case in point. It is one of the very few books *about* science fiction ever to be reprinted by a major paperback house. It is accepted by *Publishers Weekly*, and by others of what we might call the lay public, as a legitimate source book. And it is inaccurate, prejudiced, filled with false assumptions and jejune literary comparisons, very badly written and utterly unproofread. If this is scholarship, we could do with a lot less of it.

Documenting these accusations in

depth would take more space than I can consume here, but finding typical examples is simplicity itself; one need only open the book at random. It is an interesting illustration of the way reputations are built that nearly every reviewer of the hard-cover edition who was himself either a writer or a student of SF caught SaM in the act of being wrong about matters of which the reviewer had personal knowledge—and yet went right on assuming that the rest of the book was probably factually reliable. It is not, as just adding up these previously-spotted errors (all of them different) should lead one immediately to suspect.

For instance, the book is wrong about the antecedents or "source of inspiration" (the author's only critical tool, which he grinds mercilessly and humorlessly on nearly every page) of Judith Merrill's ". . . That Only a Mother . . ." (misspelled); of Harry Harrison's "Deathworld" (misspelled); and of my own four "Okie" books (misspelled three different ways), "There Shall Be No Darkness" and "A Case of Conscience." (In

the case of "Case," furthermore, he apparently knows he is wrong, for he attempts to confuse the issue by advancing the date of its original publication by a good six years in order to make his case look better. Many pages later, he cites the correct date, but a different and equally wrong "source of inspiration.") He does not know that there were three deCamp-Pratt "Harold Shea" stories, not two. He assigns the "literary exit" of John W. Campbell, Jr. to 1938, though this not inconsiderable writer continued to publish new work through 1954. He has the wrong date for the "Hugo" award to Fritz Leiber for "The Big Time", and after five long paragraphs of incompetent criticism of the same author's "The Wanderer," fails to mention that it too won a "Hugo" for its year (also unmentioned; it was 1964). And so on, and on, and on.

These silly errors and others like them are not exceptions, but standard performance for a "historian" who in a preceding book (also apparently being reprinted by Ballantine) could not even straighten out the facts about the early career of H. G. Wells, hardly a minor writer either. As for what passes for criticism here, it reaches splendid depths of absurdity; for instance, SaM completely fails to notice the almost slavish reliance (amounting often to direct quotation) upon Oswald Spengler of the early van Vogt, and upon Robert Graves of the latter; and on the other side, he derives a plot element of Clarke's 1948 classic "Against the Fall of Night" from two club-footed 1936 Warner Van lorne stories, and Clarke's "poetic passages" from Clark Ashton Smith "but with a shallower

rhetoical depth." His brief blundering through the life and works of C. M. Kornbluth can only be described bluntly as a libel upon the dead (and upon his living children).

Anybody who can unblushingly let by a trope "shallower depth" can reasonably be suspected of having no ear for the English language to begin with, and Moskowitz does not disappoint this suspicion. Sentences run backward, fail to agree internally in number or tense, and/or are clad grayly in that peculiar voice known as the Pompous Passive ("The entire published science-fiction output . . . was read . . . every science-fiction magazine . . . was collected . . ."). Solecisms abound, and so do outright collapses of vocabulary; Moskowitz, for instance, thinks "bathos" and "pathos" mean the same thing, and that "allegorical" is a synonym for "derivative."

This paperback edition has a new index, but since it faithfully reproduces the errors in the text (for example, "That Only Mother"), and adds some of its own ("Epicac," indexed as being on p. 419, is on p. 420) it is an equal waste of industry.

Some day, let us hope, somebody will do this job right.

—William Atheling, Jr.

DANGEROUS VISIONS. 33 Original Stories, edited by Harlan Ellison. Doubleday & Co., Inc. (New York), 1967. xxix + 520 pp., \$6.95

In one of the introductions to this huge collection, the editor says, "By the very nature of what they write, many authors were excluded because they had said what they had to say years ago. Others found that they had nothing controversial or daring to con-

tribute. Some expressed lack of interest in the project." Still another reason for non-inclusion is suggested by Poul Anderson, who *is* represented but who "insists (his story) is not 'dangerous' and could have sold to any magazine." Ellison ducks this point by invoking now impossible outlets for it (*McCall's* and *Boy's Life*), but the fact remains that Anderson is right—and further more, there is *no* story in this collection that would have been rejected *for thematic reasons* by any of the current science-fiction magazines. At least some unrepresented writers probably doubted, with reason, that anything is inherently unpublishable in these Grove Press days simply because of its subject-matter.

But it should be noted that there is a substantial hole in this argument, and that the truly revolutionary nature of *Dangerous Visions* is concealed in it. While almost any one of these stories *could* have appeared in, say, *IF* or *ANALOG*, it would have been surrounded there by more conventional pieces. This book consists of *nothing but* experiments. As such, it is indeed a monument, and will be a gold mine of new techniques and influences for writers for many years to come. It may also, eventually, drastically change readers' tastes, and perhaps even the whole direction of the field.

It is hard reading on several different counts. One of its problems, which could have been avoided, is that it is overloaded with apparatus: there are three prefaces, and each story is both preceded by an introduction in which the editor explains the author, and followed by an afterword in which the author explains himself. This is too much, and tends to suggest an air of distrust in the

whole project which is heightened by the shrilly aggressive tone of much of the editor's copy. Good wine needs no bush.

Another minor drawback, quite unavoidable, is that in a collection in which all the stories are determinedly peculiar, none of them shines as brightly as it might have, had it been embedded in more conventional work. They tend to pull each other's teeth. Reading this book is like catching up on a back file of the *new* *NEW WORLDS*, running to more issues than that experimental British magazine is at all likely to rack up. However, the reader can remedy this for himself, simply by sampling, and giving each individual story ample time to sink in.

Finally—and again, unavoidably—well more than half of these experimental stories are failures, as any reasonable man would expect of any body of experiments. Some are simply assemblages of typographical tricks; some are wearisomely portentous; some are one-punchers which are not as shocking as they were intended to be, or are even quite predictable; some are incoherent, and a few exhibit a distressingly small acquaintance with the English language, or even a positive distaste for it. The longest story has almost all these faults at once.

Except for the excessive editorial matter (some of which, to be sure, is delightfully witty), these drawbacks are intrinsic to the nature of the project, and nobody should allow himself to be put off by them. There has never been a collection like this before, and both Ellison and Doubleday deserve well of us for it. Buy it by all means—don't just borrow it. It will

(Continued on page 147)

UNTO THE THIRD GENERATION

Editorial by Harry Harrison

In the beginning there was the word, and it was *scientification*. It was coined by the man who founded this magazine as well as the whole concept of modern science fiction; Hugo Gernsback. The stories that appeared in the other magazines that came into existence during the thirties and early forties, can rightly be called first generation science fiction, or SF-1.

There is no sharp cutoff date for SF-1, in fact stories of this period are still being written and occasionally sold. I am attempting a literary comment and not a historical one. Nor am I denigrating the stories of this period. Hugo forbid! I grew up with them and teathed on them and loved every badly printed, purple-prosed word. (I take back that last. There was a tremendous amount of good stuff larded in between the pulp hackery.)

By literary I mean both style and content. The style, for the most part, was pure pulp. And why shouldn't it have been? These were pulp magazines, and the writers who were professional enough to earn a living at writing were pulp writers. All of which is of no importance—in *the period*—because style had nothing to do with the importance of this new field. SF-1 was a literature of ideas, bursting, new vital ideas that widened the horizons of the mind. Imagine, they said, this is a story about a *rocket ship*! Wow! Just building the

thing (in a barn by a millionaire-scientist, usually) was enough. Or taking off in it. It didn't have to go any place since the excitement was the novelty of the idea. Of course it helped that most of the SF readers were young and happily free of any established literary standards. They wanted the meat inside the egg, the idea, the concept, the mind-expansion, so style was just something that got in the way. In which case pulp prose was ideal. It was familiar and simple and fell away easily to disclose the meat. Characters were two-dimensional and could be plugged in where needed and disposed of tidily when their roles were done.

It was content that counted—and on this score real value was given. It is an obviousness but nevertheless still true that we are young only once. Only once can we read a new idea for the first time, and only once can we experience that sharp pleasure. We are like drug addicts, for which each injection of the real stuff our tolerance grows and succeeding shots produce less and less of an effect.

Somewhere along the line everyone grew up. (Or almost everyone. Some readers and a few self-labeled critics remain fixed in this dawn of creation epoch. More power to the readers. If they find pleasure in any form of literary endeavor I am very happy for them. As for the critics: their number is small and their gums, for the most part, toothless. We can suffer them

until senility strikes them low because they add a certain comic element to a field notoriously lacking in humor.) The writers grew uneasy with plowing the same old ground, and the editors certainly desirous of seeing a new idea occasionally. Of much greater importance was the fact that the fans were growing up. The adolescent readers of the thirties were becoming the bright young writers of the forties.

And bright they were. Cyril Kornbluth, as some tender age, was writing almost entire issues of magazines under a dozen different names. Frederik Pohl and Donald A. Wollheim, just as youthful, were editing these new magazines. Excitement was in the air. These newcomers were fans first, writers and editors only second. They had read everything and knew everything about science fiction and they enjoyed it with all the passion of youth. The stories they wrote—and that some are still writing—were and are second generation science fiction, SF-2.

What about content and style? The most important characteristic of SF-2 is the reexamining of old themes. Because SF-1 counted upon novelty of idea to gain most of its impact there had always been an understood feeling among the writers that it wasn't quite fair to turn back to already plowed ground. Heinlein had written *UNIVERSE*, so that took care of starship stories for all times. It did too. It was years before any writer dared set foot aboard a starship again. They did, finally, and we have a major novel in Brian W. Aldiss's *NON-STOP*, Starship in the U.S.A., which would probably never have been written, or at least not in the same manner, if *UNIVERSE* had not been written first. There is of course nothing wrong with two—or more—stories being written around the same theme, despite what the SF-1 fixated might think. Imagine what the western novel would be like without the range war or the showdown in the main street. Or the mainstream novel without sexual and marital troubles.

Continued from page 77

"With that medal on your chest? Why, you're a hero!"

Dimpo fingered the medal Captain Mackey had pinned on him. It should have made him feel brave, but it didn't. All he could think about was the people, the way they'd stare at him.

"I wish I was back on Deimos," he said. His lips began to quiver and the moisture welled up in his eyes.

"I'm afraid, Crag," he wailed.

Ensign Fuller, passing up the aisle, saw him and paused. "What's with you now?" he demanded.

"I'm afraid," Dimpo wept.

"Afraid? Of what?"

Crag shifted the cigar and glared up at him. "Just afraid," he said. "A Weeb is always afraid. So what?"

"Nothing," Fuller said. "So nothing."

He patted Dimpo on the shoulder. "Don't worry about a thing. You'll be all right, Dimpo."

"Mr. Dimpo," Crag said.

"Mr. Dimpo," said Ensign Fuller. He was quite serious.

The End

was there when Raymond said how important they were. He'd never destroy them or lose them. I *know* those papers will prove I'm right. Raymond did not kill all those people."

"It means a lot to you, doesn't it," Paul said. "All right. I guess we need a trip. We've been cooped up a long time. We'll all go look for Raymond's coat." He frowned. "But we'll have to be careful. You're not registered, Randy."

"Registered?" Randy echoed.

"That's why we've been hiding you," Paul explained. "If it were known you were here, a person of unregistered parents, you would be arrested and fixed so you can't have any children."

"But why?" Randy asked. "I thought you said the race-purity fanatics weren't right. You don't believe they're right do you?"

"I also said," Paul said patiently, "that there were sterilization laws for variants. Those laws drove your ancestors into hiding."

"Then I must always stay hidden?" Randy asked.

"We'll cross that bridge when we come to it," Paul said. "There's a lot of pressure to change that law. But let's forget that for now. We've got to get ready for our trip."

They rose from the table. Paul hurried to the forbidden door. Martha took charge of the packing, bringing out travel cases which Randy marveled at.

"We'll take the coptor," Grace explained to Randy. "This isn't far from where I found you in the cave. You see, this place we own is a rural home. There's lots of them scattered through the badland strip. History

says this was once fertile land with lots of things growing in it, but an enemy sprayed a plant hormone that made things grow so fast they died before they could produce seeds. When all the plants died, everything else did, or moved out. Then there wasn't any grass roots or tree roots to keep the soil from being washed away by the rains."

"We were pretty worried about Grace that time," Martha said as she worked at packing clothes into the cases. "She was gone for three days. We went out looking for her but couldn't find her. We'd just about decided she was dead."

"I ran all the way home to get help to you," Grace said. "It's about three miles."

"So you're trying to escape!" a new voice broke with startling suddenness from the doorway.

While Martha and Grace gasped in alarm Randy turned swiftly, having already identified the speaker from his voice. It was the census taker. He stood in the doorway, a gun pointed at him.

"You shouldn't have walked around while I was here," the census taker said to Randy. "I heard your footsteps even while they were denying there was anyone else here."

"Where's Paul?" Martha asked anxiously, stepping forward.

"Get back, lady," the census taker said, waving his gun toward her.

That was the chance Randy had been waiting for. In a movement too swift to follow he scooped up an open, half-filled travel case and threw it at the man in the doorway.

The census taker fired at Randy, but he was already instinctively duck-

ing the bewildering mass coming toward him.

The tigerish unerring swiftness with which he had fought the two packs of wild dogs was with Randy again. He plucked the gun from the man's fist and let it fly across the room.

The man tried to back away. Randy's hands shot out swiftly. His fingers wrapped into the man's hair securely. He pulled him toward him with a downward force that pulled the man off his feet. His face hit the floor with a resounding thud. Randy grinned wolfishly and began pounding the head against the floor.

"No, Randy!" Grace was shouting. "Don't kill him!"

Her hands were pulling at him. He paused and looked at her, surprised.

"Why not?" he asked in surprise. "He'll go back and tell the others, and they'll come after me."

"No!" Grace repeated forcefully.

Randy got up reluctantly. The census taker lay still for a moment, then rolled over with a deep groan. His nose was smashed flat and bleeding profusely. His face was red and bruised.

"You'll regret that," he said woodenly. "I reported where I was before I came back. A ship is already on the way here to take you in as a variant or unregistered person. Now there's a charge of attacking an officer with intent to kill. And there's a charge of harboring against the others."

"I've got to see what's happened to Paul," Martha said anxiously.

Ignoring the census taker she started past him through the doorway. He seized her ankle, which was a mistake. Instantly Randy's foot shot out and caught him full in the mouth

with all the crushing force of the stiff-soled shoe crashing into teeth.

Martha hurried on down the hall. Randy went across the room and retrieved the gun, holding it by the barrel like it was a hammer.

The census taker was shaking his head dazedly and spitting teeth when Martha's scream came from the forbidden room,

Randy brought the butt of the gun down on the census taker's head in one sharp blow. Then Grace and he were running toward the source of the anguished cry.

The door was open. Martha was bending over the unconscious form of Paul who lay in the middle of the mottled blue floor.

"Ohhh," Paul groaned, sitting up and touching the back of his head tenderly. "He blackjacked me when I tried to keep him out."

"I'll go back and kill him," Randy said fiercely.

"No," Paul said. "Get the packing finished. We've got to get out of here before the ship comes to pick you up, Randy. Hurry! All of you."

Moments later Randy saw a coptor for the first time. But there was no time to pause and admire it. There were travel cases to load on board, and Paul to carry and set in a seat.

Grace pressed a button on the wall and the roof of the room the coptor was in slid back with a rumbling noise. Then they were all in the ship, the doors closed, and Martha was at the controls.

Randy looked up and saw the huge blades jerk into movement that quickly became a blur. The ship lifted so smoothly that it seemed to stand still while the walls of the room dropped away.

Abruptly the rock country of the badlands strip appeared. Randy saw the structure he had been living in for the first time. It was of white stone similar to the stone of the road from the east. Concrete.

Then it was gone, and the rock country was moving by below at dizzy speed. Randy watched it with the same feeling of its unreality as he had experienced while watching the television screen.

Paul sat up, feeling better. Martha asked him if he wanted to take the controls.

"You're doing all right," he said. Then after a long silence, "Well, we're off to our new home, wherever it is."

"What do you mean?" Randy asked. "Aren't we coming back?"

"Martha, Grace, and I could come back," Paul said. "But we'd face a heavy fine that would take our home away from us anyway, and have to serve long prison sentences. We'd never see you again. I think we all prefer to stay with you and find a home where we'll be together."

In so short a time that Randy couldn't believe it, the rock country ended. He recognized his own locality as they passed over it. In fifteen minutes the coptor circled the mountain he had taken two days to cross and emerged into the Cour d'Alene country with its large wandering lake.

Now Randy searched the ground closely, trying to catch some sign of movement that would indicate the presence of a man.

"They may hide when they hear the coptor," Martha said, "but we can search more territory in an hour from the air than we can in weeks on foot."

"There they are!" Randy said sud-

denly a few minutes later, pointing.

There was no mistaking the two figures below. Mitch's short squat figure, and Dave's tall frame and heavily bearded face. The two were standing in a clearing looking up at the coptor.

"Is there any way to drop from the coptor without it going down to the ground?" Randy asked.

Paul pointed to a trap door in the floor.

"It'll scare the daylight out of them," Randy said gleefully. "Drop down to about ten feet. I'll lift the trap door and drop in front of them. I hope they recognize me."

While Martha dropped the coptor toward the two on the ground, Randy examined the automatic he had taken from the census taker. Grace worriedly showed him how to work it.

"Be careful, Randy," she said. "They almost killed you!"

"So far as they know they did kill me," Randy grinned.

It was Grace that lifted up the trap door. Randy looked down and got his bearing, then jumped.

He landed hard, but caught himself and stood up. Dave and Mitch were staring at him, their eyes large and round. Randy couldn't be sure whether they were frozen with fear, or holding their ground because of curiosity. There was no recognition on their faces.

The coptor swerved to one side and settled to the ground with a slight bump, its blades whirling idly.

Randy was to remember that scene often during the rest of his life. Dave and Mitch standing motionless, the coptor to one side with Grace's face against the window, a worried expression on her face, and he standing there with the gun in his hand, waiting

for Dave and Mitch to recognize him, the man they thought they had killed.

Into that scene suddenly appeared something unexpected. It was a composite of events too swift to interpret. A loud shrill whine from the coptor, dirt jumping up strangely in little spurts like water splashing up when a pebble is dropped in it, a flash of memory of seeing the same type of thing on the television screen, the sight of Dave and Mitch being picked up by invisible hands and flung backwards, and himself falling to the ground as he had seen men do in the television. Then there was a blast of deafening sound followed by a dwindling roar as his eyes followed the shape hurtling upward at a steep angle.

It was a jet plane with red wings and a blue body, the symbol of the police. The plane was circling to return. Randy glanced at Dave and Mitch. They were obviously dead.

He thought of and rejected the idea of getting up and running. The plane had completed its turn and was a slowly growing circle of blue on a red line, with bright flashes appearing from spots on the red line.

Randy ducked his head and held his breath. He could feel the ground around him jump from the impact of bullets. Then the roar came again, dwindling rapidly.

He lifted his head. The plane was heading toward the east. In a few seconds it was gone.

He got up shakily. It was the impact on his mind of the reality of what he had just gone through that affected him. It was something he had seen on the television screen many times, without ever really believing it could happen.

He ran to the coptor which was

perforated with holes. The lift blades were motionless, one of them bent and punctured.

He pulled open the door and looked inside at the shambles, then exclaimed in relief. Paul, Martha, and Grace were huddled in as compact a space as they could get, and unharmed.

"Is he gone?" Paul asked anxiously.

"Yes," Randy said. "But let's get into the woods quick. He may decide to come back and land."

An hour later they crept back to the coptor and the bodies of Dave and Mitch.

"I don't think they recognized me," Randy said, disappointed.

Paul was ruefully inspecting the damage to the coptor. "It looks like we're stuck here for good," he said.

Randy wasn't listening. He was bending over Dave, searching in the pockets of the tattered coat. His hand came out with some dirty, torn papers.

He unfolded them anxiously, his fingers trembling with excitement.

"These are the papers," he said, glancing over his shoulder triumphantly at Paul.

"Put them away," Paul said. "We can look at them later. Right now we've got to salvage all we can from the coptor and find out where we're going to spend the night."

"Wait," Randy said. "I can read them now. They make sense."

Grace had joined him and was reading over his shoulder. Paul joined them, studying the faded writing.

"Hmm," he said. "So Raymond was a geneticist. I see what he was doing. He was studying families, typing their variant factors and the way they were distributed in the offspring. This is a report."

"Then I was right," Randy said. "He didn't kill people by spreading the virus."

"I didn't say that," Paul said. "I think when you have time to study this more you'll see that he did spread the virus. These figures seem to indicate he was classifying the variant factors according to their dominant and recessive properties to show that they are permanent mutations. What does this say here on the last sheet?"

He took the paper from Randy and studied the almost obliterated script.

"These figures weren't data from this locality," he said after reading a few lines. "Wait a minute. I think I'm coming to something definite. Here it is."

"The above data," he read, "proves conclusively that every living human now has some variant factor. The program of extermination will never produce a pure strain again. D'Vorac's conclusions were correct."

Paul folded the paper.

"These figures were gathered from the files of hospitals," he said. "They show that one out of every five babies born to normal parents is a variant."

Suddenly, angrily, he tore up the papers and threw them away.

"What did you do that for?" Randy asked.

"If I hadn't you'd want to take them on what you call the road from the east," Paul said. "We're going to

make our home right here someplace. You and Grace are going to have your children without some doctor killing the variants. I'm through with this stupid slaughtering of innocent victims of mankind's past crimes."

"But if we could take Raymond's papers to the Illusion Seekers and prove to them —" Randy said.

"They already know," Paul said. "Raymond copied these figures from some other report and was merely doing his own checking. I understand him. I've felt the same way. Every normal person feels that way, or the Illusion Seekers couldn't exist. It's a horrible thing. Martha and I had three children before Grace came. They were variants —"

He turned away abruptly and picked up two of the travel cases, striding toward the edge of the woods without looking back.

"What's the matter with him?" Randy asked with an embarrassed laugh. "Why doesn't he look back to see if we're coming with him?"

"It isn't the time to look back," Martha said quietly. "The time to look back was long ago."

She picked up one of the smaller cases and followed her husband.

Grace crept close to Randy. Randy put his arm around her absently, his troubled eyes following Martha's straight back and lifted head.

He was bewildered. He didn't understand. The End

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Continued from page 134

daylight predator, between the times at dawn and dusk when the big cats and jackal packs hunted game. Man's prehuman ancestors, the ape-men, exploited this opening. Tools compensated for the loss of the big, ripping canine teeth that got reduced in the course of complex body adjustments to erect posture.

Tools complicated early man's environment; they constituted, in fact, an added part of it that had to be sorted out by the brain. Indeed, it might be said that the adaptive demands on man's primate facility for intelligence required its further development in order to sort meaningful knowledge out of the static increasingly filling his environment. Knowledge is the fuel which intelligence burns. Man's capacity for symbolic thought, language and culture may very well be a by product of handling an overload on the sensory input channels

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MISCELLANEOUS

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prompted by tool using. But whatever the case, there can be no question that man's intelligence, as a method of handling knowledge of the external world, owes its human excellence to a primate brain exercised by manual dexterity and visual coordination with it.

Now to dispose of talking dolphins.

Without hands to bring loose parts of the environment to the attention of the eyes, the dolphin simply has no means to acquire enough knowledge of its world to burn at the white heat of symbolic thought. The dolphin may be taught to respond to a large repertoire of signals like a trained dog. Perhaps the dolphin brain is adequate enough to handle even more signals than a trained dog. But the outcome is the same: a closed system of calls, not language.

The End

Continued from page 128

it was merely a vague ideal. Five years ago I started working on some instrument that would transfer and reproduce sight and sound. It became my life—more than life. Had it not been for Doctor Wentworth, I would have died with this uncompleted—that would have been Hell, a more damnable Hell than fiends could invent. Dr. Wentworth has saved me from that torture—to him I owe my all. It is now eight minutes after ten; in five minutes my assistant at the Hippodrome in New York will broadcast, word for word and act for act, the show now playing there. The pictures I will throw on the screen, the words you will hear.”

Jim spent the next five minutes setting up the machine. When it was together he connected the “A” batteries, the “B” batteries—the “C” batteries—they were not there! Frantically, he searched the case again and again. The searched the case again and again. The “C” batteries were missing. His watch pointed eight-fifteen. Six volts of electric for thirty minutes—he had to have it. Was he doomed to failure on the very eve of success? Vainly, his mind raced; the light current; wouldn’t work, it was alternating current; no radio batteries around; would take too long to disconnect one from an automobile.

Tick, tick, tick, tick. The strong,

even beating of his mechanical heart forced itself into his consciousness—the flashlight batteries in his vest! They would run it for awhile.

Quickly he grabbed the “C” battery wires from the telephoto, fastened them with the other wires to the batteries in his vest—threw out a switch. The room plunged into sudden darkness. A picture flashed on the screen—it was Henry—he spoke. Other pictures shown—voices sounded as if coming from the platform.

Jim’s heart beat furiously and he felt a strange vibration in the impulse watch. He realized there was too much strain on it and it was running wild.

But the pictures must go on.

Picture after picture showed; figures moved, spoke with the lifelike realism. A faint, vibrating rattle filled the room. Smoke could be smelled. Pictures faded, disappeared. Voices stopped. The rattle grew louder.

“Lights!” shouted a voice in the gloom.

The room was flooded with light. A still figure lay on the platform. Dr. Wentworth rushed to it—bent over it. He straightened. Tears sprang to his eyes.

“Gentlemen,” he announced quietly, “the purpose of Jim Bard’s life had been fulfilled.”

The End

Continued from page 137

entertain, infuriate, and reward you for years.

—William Atheling, Jr.

INDEX TO THE S-F MAGAZINES, 1951-1965, compiled by Erwin S. Strauss, 1966, iii + 207 pp., \$8.00. THE INDEX TO THE S-F MAGAZINES 1966, compiled by Erwin S. Strauss, 1967. 56 pp., \$1.00. Both available from Erwin S. Strauss, 116 Broadway, Cambridge, Mass. 02142.

Both indices—and hopefully their annual successors for years to come—

are an absolute must for the collector or interested reader. This index picks up where Day index, 1926-1950, left off. This is surely one of the better things to come out of science fiction fandom, since it was put together by the MIT Science Fiction Society who fed all the gathered information into a computer. Surely the perfect touch for a book of this type! I have been using these volumes for some weeks now and have found them complete, easy to use and error free. Highly recommended. —HH

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