This eBook is published by

Fictionwise Publications
www.fictionwise.com

*Excellence in eBooks*

Visit www.fictionwise.com to find more titles by this and other top authors in Science Fiction, Fantasy, Horror, Mystery, and other genres.



---

Renaissance E Books
www.renebooks.com



---

THE RANDALL GARRETT OMNIBUS
By
RANDALL GARRETT
ISBN 978-1-60089-463-3

For information contact:
PageTurnerEditions.com
PageTurner Editions/Futures-Past Science Fiction
A Renaissance E Books publication

CONTENTS

Through Time and Space with Benedict Breadfruit#2
The Bramble Bush
Through Time and Space with Benedict Breadfruit#3
But, I Don't Think
Through Time and Space with Benedict Breadfruit#4
Damned If You Don't
Through Time and Space with Benedict Breadfruit#5
Dead Giveaway
Through Time and Space with Benedict Breadfruit#6
Or Your Money Back
Through Time and Space with Benedict Breadfruit#7
Suite Mentale
Through Time and Space with Benedict Breadfruit#8
Viewpoint
Through Time and Space with Benedict Breadfruit—Special Key to #8
With No Strings Attached

# DESPOILERS OF THE GOLDEN EMPIRE

## CHAPTER I

In the seven centuries that had elapsed since the Second Empire had been founded on the shattered remnants of the First, the nobles of the Imperium had come slowly to realize that the empire was not to be judged by the examples of its predecessor. The First Empire had conquered most of the known universe by political intrigue and sheer military strength; it had fallen because that same propensity for political intrigue had gained over every other strength of the Empire, and the various branches and sectors of the First Empire had begun to use it against one another.

The Second Empire was politically unlike the First; it tried to balance a centralized government against the autonomic governments of the various sectors, and had almost succeeded in doing so.

But, no matter how governed, there are certain essentials which are needed by any governmental organization.

Without power, neither Civilization nor the Empire could hold itself together, and His Universal Majesty, the Emperor Carl, well knew it. And power was linked solidly to one element, one metal, without which Civilization would collapse as surely as if it had been blasted out of existence. Without the power metal, no ship could move or even be built; without it, industry would come to a standstill.

In ancient times, even as far back as the early Greek and Roman civilizations, the metal had been known, but it had been used, for the most part, as decoration and in the manufacture of jewelry. Later, it had been coined as money.

It had always been relatively rare, but now, weight for weight, atom for atom, it was the most valuable element on Earth. Indeed, the most valuable in the known universe.

The metal was Element Number Seventy-nine-gold.

To the collective mind of the Empire, gold was the prime object in any kind of mining exploration. The idea of drilling for petroleum, even if it had been readily available, or of mining coal or uranium would

have been dismissed as impracticable and even worse than useless.

Throughout the Empire, research laboratories worked tirelessly at the problem of transmuting commoner elements into Gold-197, but thus far none of the processes was commercially feasible. There was still, after thousands of years, only one way to get the power metal: extract it from the ground.

So it was that, across the great gulf between the worlds, ship after ship moved in search of the metal that would hold the far-flung colonies of the Empire together. Every adventurer who could manage to get aboard was glad to be cooped up on a ship during the long months it took to cross the empty expanses, was glad to endure the hardships on alien terrain, on the chance that his efforts might pay off a thousand or ten thousand fold.

Of these men, a mere handful were successful, and of these one or two stand well above the rest. And for sheer determination, drive, and courage, for the will to push on toward his goal, no matter what the odds, a certain Commander Frank had them all beat.

## CHAPTER II

Before you can get a picture of the commander-that is, as far as his personality goes-you have to get a picture of the man physically.

He was enough taller than the average man to make him stand out in a crowd, and he had broad shoulders and a narrow waist to match. He wasn't heavy; his was the hard, tough, wirelike strength of a steel cable. The planes of his tanned face showed that he feared neither exposure to the elements nor exposure to violence; it was seamed with fine wrinkles and the thin white lines that betray scar tissue. His mouth was heavy-lipped, but firm, and the lines around it showed that it was unused to smiling. The commander could laugh, and often did-a sort of roaring explosion that burst forth suddenly whenever something struck him as particularly uproarious. But he seldom just smiled; Commander Frank rarely went halfway in anything.

His eyes, like his hair, were a deep brown-almost black, and they were set well back beneath heavy brows that tended to frown most of the time.

Primarily, he was a military man. He had no particular flair for science, and, although he had a firm and deep-seated grasp of the essential philosophy of the Universal Assembly, he had no inclination towards the kind of life necessarily led by those who would become higher officers of the Assembly. It was enough that the Assembly was behind him; it was enough to know that he was a member of the only race in the known universe which had a working knowledge of the essential, basic Truth of the Cosmos. With a weapon like that, even an ordinary soldier had little to fear, and Commander Frank was far from being an ordinary soldier.

He had spent nearly forty of his sixty years of life as an explorer-soldier for the Emperor, and during that time he'd kept his eyes open for opportunity. Every time his ship had landed, he'd watched and listened and collected data. And now he knew.

If his data were correct-and he was certain that they were-he had found his strike. All he needed was the men to take it.

# CHAPTER III

The expedition had been poorly outfitted and undermanned from the beginning. The commander had been short of money at the outset, having spent almost all he could raise on his own, plus nearly everything he could beg or borrow, on his first two probing expeditions, neither of which had shown any real profit.

But they had shown promise; the alien population of the target which the commander had selected as his personal claim wore gold as ornaments, but didn't seem to think it was much above copper in value, and hadn't even progressed to the point of using it as coinage. From the second probing expedition, he had brought back two of the odd-looking aliens and enough gold to show that there must be more where that came from.

The old, hopeful statement, "There's gold in them thar hills," should have brought the commander more backing than he got, considering the Empire's need of it and the commander's evidence that it was available; but people are always more ready to bet on a sure thing than to indulge in speculation. Ten years before, a strike had been made in a sector quite distant from the commander's own find, and most of the richer nobles of the Empire preferred to back an established source of the metal than to sink money into what might turn out to be the pursuit of a wild goose.

Commander Frank, therefore, could only recruit men who were willing to take a chance, who were willing to risk anything, even their lives, against tremendously long odds.

And, even if they succeeded, the Imperial Government would take twenty per cent of the gross without so much as a by-your-leave. There was no other market for the metal except back home, so the tax could not be avoided; gold was no good whatsoever in the uncharted wilds of an alien world.

Because of his lack of funds, the commander's expedition was not only dangerously undermanned, but illegally so. It was only by means of out-and-out trickery that he managed to evade the official inspection and leave port with too few men and too little equipment.

There wasn't a scientist worthy of the name in the whole outfit, unless you call the navigator, Captain Bartholomew, an astronomer, which is certainly begging the question. There was no anthropologist aboard to study the semibarbaric civilization of the natives; there was no biologist to study the alien flora and fauna. The closest thing the commander had to physicists were engineers who could take care of the ship itself-specialist technicians, nothing more.

There was no need for armament specialists; each and every man was a soldier, and, as far as his own weapons went, an ordnance expert. As far as Commander Frank was concerned, that was enough. It had to be.

Mining equipment? He took nothing but the simplest testing apparatus. How, then, did he intend to get the metal that the Empire was screaming for?

The commander had an answer for that, too, and it was as simple as it was economical. The natives would get it for him.

They used gold for ornaments, therefore, they knew where the gold could be found. And, therefore, they would bloody well dig it out for Commander Frank.

# CHAPTER IV

Due to atmospheric disturbances, the ship's landing was several hundred miles from the point the commander had originally picked for the debarkation of his troops. That meant a long, forced march along the coast and then inland, but there was no help for it; the ship simply wasn't built for atmospheric navigation.

That didn't deter the commander any. The orders rang through the ship: “All troops and carriers prepare for landing!"

Half an hour later, they were assembled outside the ship, fully armed and armored, and with full field gear. The sun, a yellow G-O star, hung hotly just above the towering mountains to the east. The alien air smelled odd in the men's nostrils, and the weird foliage seemed to rustle menacingly. In the distance, the shrieks of alien fauna occasionally echoed through the air.

A hundred and eighty-odd men and some thirty carriers stood under the tropic blaze for forty-five minutes while the commander checked over their equipment with minute precision. Nothing faulty or sloppy was going into that jungle with him if he could prevent it.

When his hard eyes had inspected every bit of equipment, when he had either passed or ordered changes in the manner of its carrying or its condition, when he was fully satisfied that every weapon was in order-then, and only then, did he turn his attention to the men themselves.

He climbed atop a little hillock and surveyed them carefully, letting his penetrating gaze pass over each man in turn. He stood there, his fists on his hips, with the sunlight gleaming from his burnished armor, for nearly a full minute before he spoke.

Then his powerful voice rang out over the assembled adventurers.

"My comrades-at-arms! We have before us a world that is ours for the taking! It contains more riches than any man on Earth ever dreamed existed, and those riches, too, are ours for the taking. It isn't going to be a picnic, and we all knew that when we came. There are dangers on every side-from the natives, from the animals and plants, and from the climate.

"But there is not one of these that cannot be overcome by the onslaught of brave, courageous, and determined men!

"Ahead of us, we will find the Four Horsemen of the Apocalypse arrayed against our coming-Famine, Pestilence, War, and Death. Each and all of these we must meet and conquer as brave men should, for at their end we will find wealth and glory!"

A cheer filled the air, startling the animals in the forest into momentary silence.

The commander stilled it instantly with a raised hand.

"Some of you know this country from our previous expeditions together. Most of you will find it utterly strange. And not one of you knows it as well as I do.

"In order to survive, you must-and will-follow my orders to the letter-and beyond.

"First, as to your weapons. We don't have an unlimited supply of charges for them, so there will be no firing of any power weapons unless absolutely necessary. You have your swords and your pikes-use them."

Several of the men unconsciously gripped the hafts of the long steel blades at their sides as he spoke the words, but their eyes never left the commanding figure on the hummock.

"As for food," he continued, "we'll live off the land. You'll find that most of the animals are edible, but stay away from the plants unless I give the O.K.

"We have a long way to go, but, by Heaven, I'm going to get us there alive! Are you with me?"

A hearty cheer rang from the throats of the men. They shouted the commander's name with enthusiasm.

"All right!" he bellowed. "There is one more thing! Anyone who wants to stay with the ship can do so; anyone who feels too ill to make it should consider it his duty to stay behind, because sick men will simply hold us up and weaken us more than if they'd been left behind. Remember, we're not going to turn back as a body, and an individual would never make it alone." He paused.

"Well?"

Not a man moved. The commander grinned-not with humor, but with satisfaction. "All right, then: let's move out."

## CHAPTER V

Of them all, only a handful, including the commander, had any real knowledge of what lay ahead of them, and that knowledge only pertained to the periphery of the area the intrepid band of adventurers were entering. They knew that the aliens possessed a rudimentary civilization-they did not, at that time, realize they were entering the outposts of a powerful barbaric empire-an empire almost as well-organized and well-armed as that of First Century Rome, and, if anything, even more savage and ruthless.

It was an empire ruled by a single family who called themselves the Great Nobles; at their head was the Greatest Noble-the Child of the Sun Himself. It has since been conjectured that the Great Nobles were mutants in the true sense of the word; a race apart from their subjects. It is impossible to be absolutely sure at this late date, and the commander's expedition, lacking any qualified geneticists or genetic engineers, had no way of determining-and, indeed, no real interest in determining-whether this was or was not true. None the less, historical evidence seems to indicate the validity of the hypothesis.

Never before-not even in ancient Egypt-had the historians ever seen a culture like it. It was an absolute monarchy that would have made any Medieval king except the most saintly look upon it in awe and envy. The Russians and the Germans never even approached it. The Japanese tried to approximate it at one time in their history, but they failed.

Secure in the knowledge that theirs was the only civilizing force on the face of the planet, the race of the Great Nobles spread over the length of a great continent, conquering the lesser races as they went.

Physically, the Great Nobles and their lesser subjects were quite similar. They were, like the commander

and his men, human in every sense of the word. That this argues some ancient, prehistoric migration across the empty gulfs that separate the worlds cannot be denied, but when and how that migration took place are data lost in the mists of time. However it may have happened, the fact remains that these people were human. As someone observed in one of the reports written up by one of the officers: “They could pass for Indians, except their skins are of a decidedly redder hue."

The race of the Great Nobles held their conquered subjects in check by the exercise of two powerful forces: religion and physical power of arms. Like the feudal organizations of Medieval Europe, the Nobles had the power of life and death over their subjects, and to a much greater extent than the European nobles had. Each family lived on an allotted parcel of land and did a given job. Travel was restricted to a radius of a few miles. There was no money; there was no necessity for it, since the government of the Great Nobles took all produce and portioned it out again according to need. It was communism on a vast and-incomprehensible as it may seem to the modern mind-workable scale. Their minds were as different from ours as their bodies were similar; the concept “freedom” would have been totally incomprehensible to them.

They were sun-worshipers, and the Greatest Noble was the Child of the Sun, a godling subordinate only to the Sun Himself. Directly under him were the lesser Great Nobles, also Children of the Sun, but to a lesser extent. They exercised absolute power over the conquered peoples, but even they had no concept of freedom, since they were as tied to the people as the people were tied to them. It was a benevolent dictatorship of a kind never seen before or since.

At the periphery of the Empire of the Sun-Child lived still unconquered savage tribes, which the Imperial forces were in the process of slowly taking over. During the centuries, tribe after tribe had fallen before the brilliant leadership of the Great Nobles and the territory of the Empire had slowly expanded until, at the time the invading Earthmen came, it covered almost as much territory as had the Roman Empire at its peak.

The Imperial Army, consisting of upwards of fifty thousand troops, was extremely mobile in spite of the handicap of having no form of transportation except their own legs. They had no cavalry; the only beast of burden known to them-the flame-beasts-were too small to carry more than a hundred pounds, in spite of their endurance. But the wide, smooth roads that ran the length and breadth of the Empire enabled a marching army to make good time, and messages carried by runners in relays could traverse the Empire in a matter of days, not weeks.

And into this tight-knit, well-organized, powerful barbaric world marched Commander Frank with less than two hundred men and thirty carriers.

## CHAPTER VI

It didn't take long for the men to begin to chafe under the constant strain of moving through treacherous and unfamiliar territory. And the first signs of chafing made themselves apparent beneath their armor.

Even the best designed armor cannot be built to be worn for an unlimited length of time, and, at first, the men could see no reason for the order. They soon found out.

One evening, after camp had been made, one young officer decided that he had spent his last night sleeping in full armor. It was bad enough to have to march in it, but sleeping in it was too much. He took it off and stretched, enjoying the freedom from the heavy steel. His tent was a long way from the center

of camp, where a small fire flickered, and the soft light from the planet's single moon filtered only dimly through the jungle foliage overhead. He didn't think anyone would see him from the commander's tent.

The commander's orders had been direct and to the point: “You will wear your armor at all times; you will march in it, you will eat in it, you will sleep in it. During such times as it is necessary to remove a part of it, the man doing so will make sure that he is surrounded by at least two of his companions in full armor. There will be no exceptions to this rule!"

The lieutenant had decided to make himself an exception.

He turned to step into his tent when a voice came out of the nearby darkness.

"Hadn't you better get your steel plates back on before the commander sees you?"

The young officer turned quickly to see who had spoken. It was another of the junior officers.

"Mind your own business,” snapped the lieutenant.

The other grinned sardonically. “And if I don't?"

There had been bad blood between these two for a long time; it was an enmity that went back to a time even before the expedition had begun. The two men stood there for a long moment, the light from the distant fire flickering uncertainly against their bodies.

The young officer who had removed his armor had not been foolish enough to remove his weapons too; no sane man did that in hostile territory. His hand went to the haft of the blade at his side.

"If you say a single word—"

Instinctively, the other dropped his hand to his own sword.

"Stop! Both of you!"

And stop they did; no one could mistake the crackling authority in that voice. The commander, unseen in the moving, dim light, had been circling the periphery of the camp, to make sure that all was well. He strode toward the two younger men, who stood silently, shocked into immobility. The commander's sword was already in his hand.

"I'll spit the first man that draws a blade,” he snapped.

His keen eyes took in the situation at a glance.

"Lieutenant, what are you doing out of armor?"

"It was hot, sir, and I—"

"Shut up!” The commander's eyes were dangerous. “An asinine statement like that isn't even worth listening to! Get that armor back on! Move!"

He was standing approximately between the two men, who had been four or five yards apart. When the cowed young officer took a step or two back toward his tent, the commander turned toward the other

officer. “And as for you, if—"

He was cut off by the yell of the unarmored man, followed by the sound of his blade singing from its sheath.

The commander leaped backwards and spun, his own sword at the ready, his body settling into a swordsman's crouch.

But the young officer was not drawing against his superior. He was hacking at something ropy and writhing that squirmed on the ground as the lieutenant's blade bit into it. Within seconds, the serpentine thing gave a convulsive shudder and died.

The lieutenant stepped back clumsily, his eyes glazing in the flickering light. “Dropped from th’ tree,” he said thickly. “Bit me."

His hand moved to a dark spot on his chest, but it never reached its goal. The lieutenant collapsed, crumpling to the ground.

The commander walked over, slammed the heel of his heavy boot hard down on the head of the snaky thing, crushing it. Then he returned his blade to its sheath, knelt down by the young man, and turned him over on his face.

The commander's own face was grim.

By this time, some of the nearby men, attracted by the yell, had come running. They came to a stop as they saw the tableau before them.

The commander, kneeling beside the corpse, looked up at them. With one hand, he gestured at the body. “Let this be a lesson to all of you,” he said in a tight voice. “This man died because he took off his armor. That"-he pointed at the butchered reptile-"thing is full of as deadly a poison as you'll ever see, and it can move like lightning. But it can't bite through steel!

"Look well at this man and tell the others what you saw. I don't want to lose another man in this idiotic fashion."

He stood up and gestured.

"Bury him."

## CHAPTER VII

They found, as they penetrated deeper into the savage-infested hinterlands of the Empire of the Great Nobles, that the armor fended off more than just snakes. Hardly a day passed but one or more of the men would hear the sharp spang! of a blowgun-driven dart as it slammed ineffectually against his armored back or chest. At first, some of the men wanted to charge into the surrounding forest, whence the darts came, and punish the sniping aliens, but the commander would have none of it.

"Stick together,” he ordered. “They'll do worse to us if we're split up in this jungle. Those blowgun darts aren't going to hurt you as long as they're hitting steel. Ignore them and keep moving."

They kept moving.

Around them, the jungle chattered and muttered, and, occasionally, screamed. Clouds of insects, great and small, hummed and buzzed through the air. They subsided only when the drizzling rains came, and then lifted again from their resting places when the sun came out to raise steamy vapors from the moist ground.

It was not an easy march. Before many days had passed, the men's feet were cracked and blistered from the effects of fungus, dampness, and constant marching. The compact military marching order which had characterized the first few days of march had long since deteriorated into a straggling column, where the weaker were supported by the stronger.

Three more men died. One simply dropped in his tracks. He was dead before anyone could touch him. Insect bite? Disease? No one knew.

Another had been even less fortunate. A lionlike carnivore had leaped on him during the night and clawed him badly before one of his companions blasted the thing with a power weapon. Three days later, the wounded man was begging to be killed; one arm and one leg were gangrenous. But he died while begging, thus sparing any would-be executioner from an unpleasant duty.

The third man simply failed to show up for roll call one morning. He was never seen again.

But the rest of the column, with dauntless courage, followed the lead of their commander.

* * * *

It was hard to read their expressions, those reddened eyes that peered at him from swollen, bearded faces. But he knew his own face looked no different.

"We all knew this wasn't going to be a fancy-dress ball when we came," he said. "Nobody said this was going to be the easiest way in the world to get rich."

The commander was sitting on one of the carriers, his eyes watching the men, who were lined up in front of him. His voice was purposely held low, but it carried well.

"The marching has been difficult, but now we're really going to see what we're made of.

"We all need a rest, and we all deserve one. But when I lie down to rest, I'm going to do it in a halfway decent bed, with some good, solid food in my belly.

"Here's the way the picture looks: An hour's march from here, there's a good-sized village." He swung partially away from them and pointed south. "I think we have earned that town and everything in it."

He swung back, facing them. There was a wolfish grin on his face. "There's gold there, too. Not much, really, compared with what we'll get later on, but enough to whet our appetites."

The men's faces were beginning to change now, in spite of the swelling.

"I don't think we need worry too much about the savages that are living there now. With God on our side, I hardly see how we can fail."

He went on, telling them how they would attack the town, the disposition of men, the use of the carriers, and so forth. By the time he was through, every man there was as eager as he to move in. When he finished speaking, they set up a cheer:

"For the Emperor and the Universal Assembly!"

* * * *

The natives of the small village had heard that some sort of terrible beings were approaching through the jungle. Word had come from the people of the forest that the strange monsters were impervious to darts, and that they had huge dragons with them which were terrifying even to look at. They were clad in metal and made queer noises as they moved.

The village chieftain called his advisers together to ponder the situation. What should they do with these strange things? What were the invaders' intentions?

Obviously, the things must be hostile. Therefore, there were only two courses open-fight or flee. The chieftain and his men decided to fight. It would have been a good thing if there had only been some Imperial troops in the vicinity, but all the troops were farther south, where a civil war was raging over the right of succession of the Greatest Noble.

Nevertheless, there were two thousand fighting men in the village-well, two thousand men at any rate, and they would certainly all fight, although some were rather young and a few were too old for any really hard fighting. On the other hand, it would probably not come to that, since the strangers were outnumbered by at least three to one.

The chieftain gave his orders for the defense of the village.

* * * *

The invading Earthmen approached the small town cautiously from the west. The commander had his men spread out a little, but not so much that they could be separated. He saw the aliens grouped around the square, boxlike buildings, watching and waiting for trouble.

"We'll give them trouble," the commander whispered softly. He waited until his troops were properly deployed, then he gave the signal for the charge.

The carriers went in first, thundering directly into the massed alien warriors. Each carrier-man fired a single shot from his power weapon, and then went to work with his carrier, running down the terrified aliens, and swinging a sword with one hand while he guided with the other. The commander went in with that first charge, aiming his own carrier toward the center of the fray. He had some raw, untrained men with him, and he believed in teaching by example.

The aliens recoiled at the onslaught of what they took to be horrible living monsters that were unlike anything ever seen before.

Then the commander's infantry charged in. The shock effect of the carriers had been enough to disorganize the aliens, but the battle was not over yet by a long shot.

There were yells from other parts of the village as some of the other defenders, hearing the sounds of battle, came running to reinforce the home guard. Better than fifteen hundred men were converging on the spot.

The invading Earthmen moved in rapidly against the armed natives, beating them back by the sheer ferocity of their attack. Weapons of steel clashed against weapons of bronze and wood.

The power weapons were used only sparingly; only when the necessity to save a life was greater than the necessity to conserve weapon charges was a shot fired.

The commander, from the center of the fray, took a glance around the area. One glance was enough.

"They're dropping back!" he bellowed, his voice carrying well above the din of the battle, "Keep 'em moving!" He singled out one of his officers at a distance, and yelled: "Hernan! Get a couple of men to cover that street!" He waved toward one of the narrow streets that ran off to one side. The others were already being attended to.

The commander jerked around swiftly as one of the natives grabbed hold of the carrier and tried to hack at the commander with a bronze sword. The commander spitted him neatly on his blade and withdrew it just in time to parry another attack from the other side.

By this time, the reinforcements from the other parts of the village were beginning to come in from the side streets, but they were a little late. The warriors in the square-what was left of them-had panicked. In an effort to get away from the terrible monsters with their deadly blades and their fire-spitting weapons, they were leaving by the same channels that the reinforcements were coming in by, and the resultant jam-up was disastrous. The panic communicated itself like wildfire, but no one could move fast enough to get away from the sweeping, stabbing, glittering blades of the invading Earthmen.

"All right," the commander yelled, "we've got 'em on the run now! Break up into squads of three and clear those streets! Clear 'em out! Keep 'em moving!"

After that, it was the work of minutes to clear the town.

The commander brought his carrier to a dead stop, reached out with his sword, and snagged a bit of cloth from one of the fallen native warriors. He began to wipe the blade of his weapon as Lieutenant commander Hernan pulled up beside him.

"Casualties?" the commander asked Hernan without looking up from his work.

"Six wounded, no dead," said Hernan. "Or did you want me to count the aliens, too?"

The commander shook his head. "No. Get a detail to clear out the carrion, and then tell Frater Vincent I want to talk to him. We'll have to start teaching these people the Truth."

## CHAPTER VIII

"Have you anything to say in your defense?" the commander asked coldly.

For a moment, the accused looked nothing but hatred at the commander, but there was fear behind that hatred. At last he found his voice. "It was mine. You promised us all a share."

Lieutenant commander Hernan picked up a leather bag that lay on the table behind which he and the commander were sitting. With a sudden gesture, he upended it, dumping its contents on the flat, wooden

surface of the table.

"Do you deny that this was found among your personal possessions?" he asked harshly.

"No," said the accused soldier. "Why should I? It's mine. Rightfully mine. I fought for it. I found it. I kept it. It's mine." He glanced to either side, towards the two guards who flanked him, then looked back at the commander.

The commander ran an idle finger through the pound or so of golden trinkets that Hernan had spilled from the bag. He knew what the trooper was thinking. A man had a right to what he had earned, didn't he?

The commander picked up one of the heavier bits of primitive jewelry and tossed it in his hand. Then he stood up and looked around the town square.

The company had occupied the town for several weeks. The stored grains in the community warehouse, plus the relaxation the men had had, plus the relative security of the town, had put most of the men back into condition. One had died from a skin infection, and another from wounds sustained in the assault on the town, but the remainder were in good health.

And all of them, with the exception of the sentries guarding the town's perimeter, were standing in the square, watching the court-martial. Their eyes didn't seem to blink, and their breathing was soft and measured. They were waiting for the commander's decision.

The commander, still tossing the crude golden earring, stood tall and straight, estimating the feeling of the men surrounding him.

"Gold," he said finally. "Gold. That's what we came here for, and that's what we're going to get. Five hundred pounds of the stuff would make any one of you wealthy for the rest of his life. Do you think I blame any one of you for wanting it? Do you think I blame this man here? Of course not." He laughed-a short, hard bark. "Do I blame myself?"

He tossed the bauble again, caught it. "But wanting it is one thing; getting it, holding it, and taking care of it wisely are something else again.

"I gave orders. I have expected-and still expect-that they will be obeyed. But I didn't give them just to hear myself give orders. There was a reason, and a good one.

"Suppose we let each man take what gold he could find. What would happen? The lucky ones would be wealthy, and the unlucky would still be poor. And then some of the lucky ones would wake up some morning without the gold they'd taken because someone else had relieved them of it while they slept.

"And others wouldn't wake up at all, because they'd be found with their throats cut.

"I told you to bring every bit of the metal to me. When this thing is over, every one of you will get his share. If a man dies, his share will be split among the rest, instead of being stolen by someone else or lost because it was hidden too well."

He looked at the earring in his hand, then, with a convulsive sweep of his arm, he tossed it out into the middle of the square.

"There! Seven ounces of gold! Which of you wants it?"

Some of the men eyed the circle of metal that gleamed brightly on the sunlit ground, but none of them made any motion to pick it up.

"So." The commander's voice was almost gentle. He turned his eyes back toward the accused. "You know the orders. You knew them when you hid this." He gestured negligently toward the small heap of native-wrought metal. "Suppose you'd gotten away with it. You'd have ended up with your own share, plus this, thereby cheating the others out of—" He glanced at the pile. "Hm-m-m-say, twenty-five each. And that's only a little compared with what we'll get from now on."

He looked back at the others. "Unless the shares are taken care of my way, the largest shares will go to the dishonest, the most powerful, and the luckiest. Unless the division is made as we originally agreed, we'll end up trying to cut each other's heart out."

There was hardness in his voice when he spoke to the accused, but there was compassion there, too.

"First: You have forfeited your share in this expedition. All that you have now, and all that you might have expected will be divided among the others according to our original agreement.

"Second: I do not expect any man to work for nothing. Since you will not receive anything from this expedition, there is no point in your assisting the rest of us or working with us in any way whatsoever.

"Third: We can't have anyone with us who does not carry his own weight."

He glanced at the guards. "Hang him." He paused. "Now."

As he was led away, the commander watched the other men. There was approval in their eyes, but there was something else there, too-a wariness, a concealed fear.

The condemned man turned suddenly and began shouting at the commander, but before he could utter more than three syllables, a fist smashed him down. The guards dragged him off.

"All right, men," said the commander carefully, "let's search the village. There might be more gold about; I have a hunch that this isn't all he hid. Let's see if we can find the rest of it." He sensed the relief of tension as he spoke.

The commander was right. It was amazing how much gold one man had been able to stash away.

## CHAPTER IX

They couldn't stay long in any one village; they didn't have the time to sit and relax any more than was necessary. Once they had reached the northern marches of the native empire, it was to the commander's advantage to keep his men moving. He didn't know for sure how good or how rapid communications were among the various native provinces, but he had to assume that they were top notch, allowing for the limitations of a barbaric society.

The worst trouble they ran into on their way was not caused by the native warriors, but by disease.

The route to the south was spotted by great strips of sandy barrenness, torn by winds that swept the grains of sand into the troopers' eyes and crept into the chinks of their armor. Underfoot, the sand made a treacherous pathway; carriers and men alike found it heavy going.

The heat from the sun was intense; the brilliant beams from the primary seemed to penetrate through the men's armor and through the insulation underneath, and made the marching even harder.

Even so, in spite of the discomfort, the men were making good time until the disease struck. And that stopped them in their tracks.

What the disease was or how it was spread is unknown and unknowable at this late date. Virus or bacterium, amoeba or fungus-whatever it was, it struck.

Symptoms: Lassitude, weariness, weakness, and pain.

Signs: Great, ulcerous, wartlike, blood-filled blisters that grew rapidly over the body.

A man might go to sleep at night feeling reasonably tired, but not ill, and wake up in the morning to find himself unable to rise, his muscles too weak to lift him from his bed.

If the blisters broke, or were lanced, it was almost impossible to stop the bleeding, and many died, not from the toxic effect of the disease itself, but from simple loss of blood.

But, like many epidemics, the thing had a fairly short life span. After two weeks, it had burned itself out. Most of those who got it recovered, and a few were evidently immune.

Eighteen men remained behind in shallow graves.

The rest went on.

## CHAPTER X

No man is perfect. Even with four decades of training behind him, Commander Frank couldn't call the turn every time. After the first few villages, there were no further battles. The natives, having seen what the invaders could do, simply showed up missing when the commander and his men arrived. The villages were empty by the time the column reached the outskirts.

Frater Vincent, the agent of the Universal Assembly, complained in no uncertain terms about this state of affairs.

"As you know, commander," he said frowningly one morning, "it's no use trying to indoctrinate a people we can't contact. And you can't subject a people by force of arms alone; the power of the Truth—"

"I know, Frater," the commander interposed quickly. "But we can't deal with these savages in the hinterlands. When we get a little farther into this barbarian empire, we can take the necessary steps to—"

"The Truth," Frater Vincent interrupted somewhat testily, "is for all men. It works, regardless of the state of civilization of the society."

The commander looked out of the unglazed window of the native hut in which he had established his temporary headquarters, in one of the many villages he had taken-or, rather, walked into without a fight because it was empty. “But you'll admit, Frater, that it takes longer with savages."

"True,” said Frater Vincent.

"We simply haven't the time. We've got to keep on the move. And, besides, we haven't even been able to contact any of the natives for quite a while; they get out of our way. And we have taken a few prisoners—” His voice was apologetic, but there was a trace of irritation in it. He didn't want to offend Frater Vincent, of course, but dammit, the Assemblyman didn't understand military tactics at all. Or, he corrected himself hastily, at least only slightly.

"Yes,” admitted Frater Vincent, “and I've had considerable success with the prisoners. But, remember-we're not here just to indoctrinate a few occasional prisoners, but to change the entire moral and philosophical viewpoint of an entire race."

"I realize that, Frater,” the commander admitted. He turned from the window and faced the Assemblyman. “We're getting close to the Great Bay now. That's where our ship landed on the second probing expedition. I expect we'll be more welcome there than we have been, out here in the countryside. We'll take it easy, and I think you'll have a chance to work with the natives on a mass basis."

The Frater smiled. “Excellent, commander. I ... uh ... want you to understand that I'm not trying to tell you your business; you run this campaign as you see fit. But don't lose sight of the ultimate goal of life."

"I won't. How could I? It's just that my methods are not, perhaps, as refined as yours."

Frater Vincent nodded, still smiling. “True. You are a great deal more direct. And-in your own way-just as effective. After all, the Assembly could not function without the military, but there were armies long before the Universal Assembly came into being."

The commander smiled back. “Not any armies like this, Frater."

Frater Vincent nodded. The understanding between the two men-at least on that point-was tacit and mutual. He traced a symbol in the air and left the commander to his thoughts.

Mentally, the commander went through the symbol-patterns that he had learned as a child-the symbol-patterns that brought him into direct contact with the Ultimate Power, the Power that controlled not only the spinning of atoms and the whirling of electrons in their orbits, but the workings of probability itself.

Once indoctrinated into the teachings of the Universal Assembly, any man could tap that Power to a greater or lesser degree, depending on his mental control and ethical attitude. At the top level, a first-class adept could utilize that Power for telepathy, psychokinesis, levitation, teleportation, and other powers that the commander only vaguely understood.

He, himself, had no such depth of mind, such iron control over his will, and he knew he'd never have it. But he could and did tap that Power to the extent that his physical body was under near-perfect control at all times, and not even the fear of death could shake his determination to win or his great courage.

He turned again to the window and looked at the alien sky. There was a great deal yet to be done.

* * * *

The commander needed information-needed it badly. He had to know what the government of the alien empire was doing. Had they been warned of his arrival? Surely they must have, and yet they had taken no steps to impede his progress.

For this purpose, he decided to set up headquarters on an island just offshore in the Great Bay. It was a protected position, easily defended from assault, and the natives, he knew from his previous visit, were friendly.

They even helped him to get his men and equipment and the carriers across on huge rafts.

From that point, he began collecting the information he needed to invade the central domains of the Greatest Noble himself. It seemed an ideal spot-not only protection-wise, but because this was the spot he had originally picked for the landing of the ship. The vessel, which had returned to the base for reinforcements and extra supplies, would be aiming for the Great Bay area when she came back. And there was little likelihood that atmospheric disturbances would throw her off course again; Captain Bartholomew was too good a man to be fooled twice.

But landing on that island was the first-and only-mistake the commander made during the campaign. The rumors of internal bickerings among the Great Nobles of the barbarian empire were not the only rumors he heard. News of more local treachery came to his ears through the agency of natives, now loyal to the commander, who had been indoctrinated into the philosophy of the Assembly.

A group of native chieftains had decided that the invading Earthmen were too dangerous to be allowed to remain on their island, in spite of the fact that the invaders had done them no harm. There were, after all, whisperings from the north, whence the invaders had come, that the armored beings with the terrible weapons had used their power more than once during their march to the south. The chieftains were determined to rid their island of the potential menace.

As soon as the matter was brought to the commander's attention, he acted. He sent out a patrol to the place where the ringleaders were meeting, arrested them, and sentenced them to death. He didn't realize what effect that action would have on the rest of the islanders.

He almost found out too late.

## CHAPTER XI

"There must be three thousand of them out there," said Lieutenant commander Hernan tightly, "and every one of them's crazy."

"Rot!" The commander spat on the ground and then sighted again along the barrel of his weapon. "I'm the one who's crazy. I'm a lousy politician; that's my trouble."

The lieutenant commander shrugged lightly. "Anyone can make a mistake. Just chalk it up to experience."

"I will, when we get out of this mess." He watched the gathering natives through hard, slitted eyes.

The invading Earthmen were in a village at the southern end of the eight-mile-long island, waiting inside

the mud-brick huts while the natives who had surrounded the village worked themselves into a frenzy for an attack. The commander knew there was no sense in charging into them at that point: they would simply scatter and reassemble. The only thing to do was wait until they attacked-and then smash the attack.

"Hernan," he said, his eyes still watching the outside, "you and the others get out there with the carriers after the first volley. Cut them down. They're twenty-to-one against us, so make every blow count. Move."

Hernan nodded wordlessly and slipped away.

The natives were building up their courage with some sort of war dance, whooping and screaming and making threatening gestures toward the embattled invaders. Then the pattern of the dance changed; the islanders whirled to face the mud-brick buildings which housed the invading Earthmen. Suddenly, the dance broke, and the warriors ran in a screaming charge, straight for the trapped soldiers.

The commander waited. His own shot would be the signal, and he didn't want the men to fire too quickly. If the islanders were hit too soon, they might fall back into the woods and set up a siege, which the little company couldn't stand. Better to mop up the natives now, if possible.

Closer. Closer—

Now!

The commander's first shot picked off one of the leaders in the front ranks of the native warriors, and was followed by a raking volley from the other power weapons, firing from the windows of the mud-brick buildings. The warriors in the front rank dropped, and those in the second rank had to move adroitly to keep from stumbling over the bodies of their fallen fellows. The firing from the huts became ragged, but its raking effect was still deadly. A cloud of heavy, stinking smoke rolled across the clearing between the edge of the jungle and the village, as the bright, hard lances of heat leaped from the muzzles of the power weapons toward the bodies of the charging warriors.

The charge was gone from the commander's weapon, and he didn't bother to replace it. As Hernan and his men charged into the melee with their carriers, the commander went with them.

At the same time, the armored infantrymen came pouring out of the mud-brick houses, swinging their swords, straight into the mass of confused native warriors. A picked group of sharpshooters remained behind, in the concealment of the huts to pick off the warriors at the edge of the battle with their sporadic fire.

The commander's lips were moving a little as he formed the symbol-patterns of power almost unconsciously; a lifetime of habit had burned them into his brain so deeply that he could form them automatically while turning the thinking part of his mind to the business at hand.

He soon found himself entirely surrounded by the alien warriors. Their bronze weapons glittered in the sunlight as they tried to fight off the onslaught of the invaders. And those same bronze weapons were sheared, nicked, blunted, bent, and broken as they met the harder steel of the commander's sword.

Then the unexpected happened. One of the warriors, braver than the rest, made a grab for the commander's sword arm. At almost the same moment, a warrior on the other side of the carrier aimed a spear thrust at his side.

Either by itself would have been ineffectual. The spear clanged harmlessly from the commander's armor, and the warrior who had attempted to pull him from the carrier died before he could give much of a tug. But the combination, plus the fact that the heavy armor was a little unwieldy, overbalanced him. He toppled to the ground with a clash of steel as he and the carrier parted company.

Without a human hand at its controls, the carrier automatically moved away from the mass of struggling fighters and came to a halt well away from the battle.

The commander rolled as he hit and leaped to his feet, his sword moving in flickering arcs around him. The natives had no knowledge of effective swordplay. Like any barbarian, they conceived of a sword as a cutting instrument rather than a thrusting one. They chopped with them, using small shields to protect their bodies as they tried to hack the commander to bits.

* * * *

But the commander had no desire to become mincemeat just yet. Five of the barbarians were coming at him, their swords raised for a downward slash. The commander lunged forward with a straight stop-thrust aimed at the groin of the nearest one. It came as a complete surprise to the warrior, who doubled up in pain.

The commander had already withdrawn his blade and was attacking the second as the first fell. He made another feint to the groin and then changed the aim of his point as the warrior tried to cover with his shield. A buckler is fine protection against a man who is trying to hack you to death with a chopper, because a heavy cutting sword and a shield have about the same inertia, and thus the same maneuverability. But the shield isn't worth anything against a light stabbing weapon. The warrior's shield started downward and he was unable to stop it and reverse its direction before the commander's sword pierced his throat.

Two down, three to go. No, four. Another warrior had decided to join the little battle against the leader of the invading Earthmen.

The commander changed his tactics just slightly with the third man. He slashed with the tip of his blade against the descending sword-arm of his opponent-a short, quick flick of his wrist that sheared through the inside of the wrist, severing tendons, muscles, veins and arteries as it cut to the bone. The sword clanged harmlessly off the commander's shoulder. A quick thrust, and the third man died.

The other three slowed their attack and began circling warily, trying to get behind the commander. Instead of waiting, he charged forward, again cutting at the sword arm of his adversary, severing fingers this time. As the warrior turned, the commander's sword pierced his side.

How long it went on, he had no idea. He kept his legs and his sword-arm moving, and his eyes ever alert for new foes as man after man dropped beneath that snake-tonguing blade. Inside his armor, perspiration poured in rivulets down his skin, and his arms and legs began to ache, but not for one second did he let up. He could not see what was going on, could not tell the direction of the battle nor even allow his mind to wonder what was going on more than ten paces from him.

And then, quite suddenly, it seemed, it was all over. Lieutenant commander Hernan and five other men pulled up with their carriers, as if from nowhere, their weapons dealing death, clearing a space around their commander.

"You hurt?" bawled Hernan.

The commander paused to catch his breath. He knew there was a sword-slash across his face, and his right leg felt as though there was a cut on it, but otherwise—

"I'm all right," he said. "How's it going?"

"They're breaking," Hernan told him. "We'll have them scattered within minutes."

Even as he spoke, the surge of battle moved away from them, toward the forest. The charge of the carriers, wreaking havoc on every side, had broken up the battle formation the aliens had had; the flaming death from the horrible weapons of the invaders, the fearless courage of the foot soldiers, and the steel-clad monsters that were running amuck among them shattered the little discipline they had. Panicky, they lost their anger, which had taken them several hours to build up. They scattered, heading for the forest.

Shortly, the village was silent. Not an alien warrior was to be seen, save for the hundreds of mute corpses that testified to the carnage that had been wrought.

Several of the commander's men had been wounded, and three had died. Lieutenant commander Hernan had been severely wounded in the leg by a native javelin, but the injury was a long way from being fatal.

Hernan gritted his teeth while his leg was being bandaged. "The angels were with us on that one," he said between winces.

The commander nodded. "I hope they stick with us. We'll need 'em to get off this island."

## CHAPTER XII

For a while, it looked as though they were trapped on the island. The natives didn't dare to attack again, but no hunting party was safe, and the food supply was dropping. They had gotten on the island only by the help of the natives, who had ferried them over on rafts. But getting off was another thing, now that the natives were hostile. Cutting down trees to build rafts might possibly be managed, but during the loading the little company would be too vulnerable to attack.

The commander was seated bleakly in the hut he had taken as his headquarters, trying to devise a scheme for getting to the mainland, when the deadlock was finally broken.

There was a flurry of footsteps outside, a thump of heavy boots as one of the younger officers burst into the room.

"Commander!" he yelled. "Commander! Come outside!"

The commander leaped to his feet. "Another attack?"

"No, sir! Come look!"

The commander strode quickly to the door. His sight followed the line of the young officer's pointing finger.

There, outlined against the blue of the sky, was a ship!

* * * *

The news from home was encouraging, but it was a long way from being what the commander wanted. Another hundred men and more carriers had been added to the original company of now hardened veterans, and the recruits, plus the protection of the ship's guns, were enough to enable the entire party to leave the island for the mainland.

By this time, the commander had gleaned enough information from the natives to be able to plan the next step in his campaign. The present Greatest Noble, having successfully usurped the throne from his predecessor, was still not in absolute control of the country. He had won a civil war, but his rule was still too shaky to allow him to split up his armies, which accounted for the fact that, thus far, no action had been taken by the Imperial troops against the invading Earthmen.

The commander set up a base on the mainland, near the coast, left a portion of his men there to defend it, and, with the remainder, marched inland to come to grips with the Greatest Noble himself.

As they moved in toward the heart of the barbarian empire, the men noticed a definite change in the degree of civilization of the natives-or, at least, in the degree of technological advancement. There were large towns, not small villages, to be dealt with, and there were highways and bridges that showed a knowledge of engineering equivalent to that of ancient Rome.

The engineers of the Empire of the Great Nobles were a long way above the primitive. They could have, had they had any reason to, erected a pyramid the equal of great Khufu's in size, and probably even more neatly constructed. Militarily speaking, the lack of knowledge of iron hampered them, but it must be kept in mind that a well-disciplined and reasonably large army, armed with bronze-tipped spears, bronze swords, axes, and maces, can make a formidable foe, even against a much better equipped group.

The Imperial armies were much better disciplined and much better armed than any of the natives the commander had thus far dealt with, and there were reputed to be more than ten thousand of them with the Greatest Noble in his mountain stronghold. Such considerations prompted the commander to plan his strategy carefully, but they did not deter him in the least. If he had been able to bring aircraft and perhaps a thermonuclear bomb or two for demonstration purposes, the attack might have been less risky, but neither had been available to a man of his limited means, so he had to work without them.

But now, he avoided fighting if at all possible. Working with Frater Vincent, the commander worked to convince the natives on the fertile farms and in the prosperous villages that he and his company were merely ambassadors of good will-missionaries and traders. He and his men had come in peace, and if they were received in peace, well and good. If not ... well, they still had their weapons.

The commander was depending on the vagueness of the information that may have filtered down from the north. The news had already come that the invaders were fierce and powerful fighters, but the commander gave the impression that the only reason any battles had taken place was because the northern tribes had been truculent in the extreme. He succeeded fairly well; the natives he now met considered their brethren of the northern provinces to be little better than savages, and therefore to be expected to treat strangers inhospitably and bring about their own ruin. The southern citizens of the empire eyed the strangers with apprehension, but they offered very little resistance. The commander and his men were welcomed warily at each town, and, when they left, were bid farewell with great relief.

It took a little time for the commander to locate the exact spot where the Greatest Noble and his retinue

were encamped. The real capital of the empire was located even farther south, but the Greatest Noble was staying, for the nonce, in a city nestled high in the mountains, well inland from the seacoast. The commander headed for the mountains.

The passage into the mountains wasn't easy. The passes were narrow and dangerous, and the weather was cold. The air became thinner at every step. At eight thousand feet, mountain climbing in heavy armor becomes more than just hard work, and at twelve thousand it becomes exhausting torture. But the little company went on, sparked, fueled, and driven by the personal force of their commander, who stayed in the vanguard, his eyes ever alert for treachery from the surrounding mountains.

When the surprise came, it was of an entirely different kind than he had expected. The commander's carrier came over a little rise, and he brought it to an abrupt halt as he saw the valley spread out beneath him. He left the carrier, walked over to a boulder near the edge of the cliff, and looked down at the valley.

It was an elongated oval of verdant green, fifteen miles long by four wide, looking like an emerald set in the rocky granite of the surrounding peaks that thrust upward toward the sky. The valley ran roughly north-and-south, and to his right, at the southern end, the commander could see a city, although it was impossible to see anyone moving in it at this distance.

To his left, he could see great clouds of billowing vapor that rolled across the grassy plain-evidently steam from the volcanic hot springs which he had been told were to be found in this valley.

But, for the moment, it was neither the springs nor the city that interested him most.

In the heart of the valley, spreading over acre after acre, were the tents and pavilions of a mighty army encampment. From the looks of it, the estimate of thirty thousand troops which had been given him by various officials along the way was, if anything, too small.

It was a moment that might have made an ordinary man stop to think, and, having thought, to turn and go. But the commander was no ordinary man, and the sheer remorseless courage that had brought him this far wouldn't allow him to turn back. So far, he had kept the Greatest Noble off balance with his advancing tactics; if he started to retreat, the Greatest Noble would realize that the invaders were not invincible, and would himself advance to crush the small band of strangers.

The Greatest Noble had known the commander and his men were coming; he was simply waiting, to find out what they were up to, confident that he could dispose of them at his leisure. The commander knew that, and he knew he couldn't retreat now. There was no decision to be made, really-only planning to be done.

He turned back from the boulder to face the officers who had come to take a look at the valley.

"We'll go to the city first," he said.

## CHAPTER XIII

The heavy tread of the invaders' boots as they entered the central plaza of the walled city awakened nothing but echoes from the stone walls that surrounded the plaza. Like the small villages they had entered farther north, the city seemed devoid of life.

There is nothing quite so depressing and threatening as a deserted city. The windows in the walls of the buildings seemed like blank, darkened eyes that watched-and waited. Nothing moved, nothing made a sound, except the troopers themselves.

The men kept close to the walls; there was no point in bunching up in the middle of the square to be cut down by arrows from the windows of the upper floors.

The commander ordered four squads of men to search the buildings and smoke out anyone who was there, but they turned up nothing. The entire city was empty. And there were no traps, no ambushes-nothing.

The commander, with Lieutenant commander Hernan and another officer, climbed to the top of the central building of the town. In the distance, several miles away, they could see the encampment of the monarch's troops.

"The only thing we can do," the commander said, his face hard and determined, "is to call their bluff. You two take about three dozen men and go out there with the carriers and give them a show. Go right into camp, as if you owned the place. Throw a scare into them, but don't hurt anyone. Then, very politely, tell the Emperor, or whatever he calls himself, that I would like him to come here for dinner and a little talk."

The two officers looked at each other, then at the commander.

"Just like that?" asked Hernan.

"Just like that," said the commander.

* * * *

The demonstration and exhibition went well-as far as it had gone. The native warriors had evidently been quite impressed by the onslaught of the terrifying monsters that had thundered across the plain toward them, right into the great camp, and come to a dead halt directly in front of the magnificent pavilion of the Greatest Noble himself.

The Greatest Noble put up a good face. He had obviously been expecting the visitors, because he and his lesser nobles were lined up before the pavilion, the Greatest Noble ensconced on a sort of portable throne. He managed to look perfectly calm and somewhat bored by the whole affair, and didn't seem to be particularly effected at all when Lieutenant commander Hernan bowed low before him and requested his presence in the city.

And the Greatest Noble's answer was simple and to the point, although it was delivered by one of his courtiers.

"You may tell your commander," said the noble, "that His Effulgence must attend to certain religious duties tonight, since he is also High Priest of the Sun. However, His Effulgence will most graciously deign to speak to your commander tomorrow. In the meantime, you are requested to enjoy His Effulgence's gracious hospitality in the city, which has been emptied for your convenience. It is yours, for the nonce."

Which left nothing for the two officers and their men to do but go thundering back across the plain to the city.

* * * *

The Greatest Noble did not bring his whole army with him, but the pageant of barbaric splendor that came tootling and drumming its way into the city the next evening was a magnificent sight. His Effulgence himself was dressed in a scarlet robe and a scarlet, turbanlike head covering with scarlet fringes all around it. About his throat was a necklace of emerald-green gems, and his clothing was studded with more of them. Gold gleamed everywhere. He was borne on an ornate, gilded palanquin, carried high above the crowd on the shoulders of a dozen stalwart nobles, only slightly less gorgeously-dressed than the Greatest Noble. The nobility that followed was scarcely less showy in its finery.

When they came into the plaza, however, the members of the procession came to a halt. The singing and music died away.

The plaza was absolutely empty.

No one had come out to greet the Emperor.

There were six thousand natives in the plaza, and not a sign of the invaders.

The commander, hiding well back in the shadows in one of the rooms of the central building, watched through the window and noted the evident consternation of the royal entourage with satisfaction. Frater Vincent, standing beside him, whispered, “Well?"

"All right,” the commander said softly, “they've had a taste of what we got when we came in. I suppose they've had enough. Let's go out and act like hosts."

The commander and a squad of ten men, along with Frater Vincent, strode majestically out of the door of the building and walked toward the Greatest Noble. They had all polished their armor until it shone, which was about all they could do in the way of finery, but they evidently looked quite impressive in the eyes of the natives.

"Greetings, Your Effulgence,” said the commander, giving the Greatest Noble a bow that was hardly five degrees from the perpendicular. “I trust we find you well."

* * * *

In the buildings surrounding the square, hardly daring to move for fear the clank of metal on metal might give the whole plan away, the remaining members of the company watched the conversation between their commander and the Greatest Noble. They couldn't hear what was being said, but that didn't matter; they knew what to do as soon as the commander gave the signal. Every eye was riveted on the commander's right hand.

It seemed an eternity before the commander casually reached up to his helmet and brushed a hand across it-once-twice-three times.

Then all hell broke loose. The air was split by the sound of power weapons throwing their lances of flame into the massed ranks of the native warriors. The gunners, safe behind the walls of the buildings, poured a steady stream of accurately directed fire into the packed mob, while the rest of the men charged in with their blades, thrusting and slashing as they went.

The aliens, panic-stricken by the sudden, terrifying assault, tried to run, but there was nowhere to run to. Every exit had been cut off to bottle up the Imperial cortege. Within minutes, the entrances to the square were choked with the bodies of those who tried to flee.

As soon as the firing began, the commander and his men began to make their way toward the Greatest Noble. They had been forced to stand a good five yards away during the parlay, cut off from direct contact by the Imperial guards. The commander, sword in hand, began cutting his way through to the palanquin.

The palanquin bearers seemed frozen; they couldn't run, they couldn't fight, and they didn't dare drop their precious cargo.

The commander's voice bellowed out over the carnage. “Take him prisoner! I'll personally strangle the idiot who harms him!” And then he was too busy to yell.

Two members of the Greatest Noble's personal guard came for him, swords out, determined to give their lives, if necessary, to preserve the sacred life of their monarch. And give them they did.

The commander's blade lashed out once, sliding between the ribs of the first guard. He toppled and almost took the sword with him, but the commander wrenched it free in time to parry the downward slash of the second guard's bronze sword. It was a narrow thing, because the bronze sword, though of softer stuff than the commander's steel, was also heavier, and thus hard to deflect. As it sang past him, the commander swung a chop at the man's neck, cutting it halfway through. He stepped quickly to one side to avoid the falling body and thrust his blade through a third man, who was aiming a blow at the neck of one of the commander's officers. There were only a dozen feet separating the commander from his objective, the palanquin of the Greatest Noble, but he had to wade through blood to get there.

* * * *

The palanquin itself was no longer steady. Three of the twelve nobles who had been holding it had already fallen, and there were two of the commander's men already close enough to touch the royal person, but they were too busy fighting to make any attempt to grab him. The Greatest Noble, unarmed, could only huddle in his seat, terrified, but it would take more than two men to snatch him from his bodyguard. The commander fought his way in closer.

Two more of the palanquin bearers went down, and the palanquin itself began to topple. The Greatest Noble screamed as he fell toward the commander.

One of the commander's men spun around as he heard the scream so close to him, and, thinking that the Greatest Noble was attacking his commander, lunged out with his blade.

It was almost a disaster. Moving quickly, the commander threw out his left arm to deflect the sword. He succeeded, but he got a bad slash across his hand for his trouble.

He yelled angrily at the surprised soldier, not caring what he said. Meanwhile, the others of the squad, seeing that the Greatest Noble had fallen, hurried to surround him. Two minutes later, the Greatest Noble was a prisoner, being half carried, half led into the central building by four of the men, while the remaining six fought a rear-guard action to hold off the native warriors who were trying to rescue the sacred person of the Child of the Sun.

Once inside, the Greatest Noble was held fast while the doors were swung shut.

Outside, the slaughter went on. All the resistance seemed to go out of the warriors when they saw their sacred monarch dragged away by the invading Earthmen. It was every man for himself and the Devil take the hindmost. And the Devil, in the form of the commander's troops, certainly did.

Within half an hour after it had begun, the butchery was over. More than three thousand of the natives had died, and an unknown number more badly wounded. Those who had managed to get out and get away from the city kept on going. They told the troops who had been left outside what had happened, and a mass exodus from the valley began.

Safely within the fortifications of the central building, the commander allowed himself one of his rare grins of satisfaction. Not a single one of his own men had been killed, and the only wound which had been sustained by anyone in the company was the cut on his own hand. Still smiling, he went into the room where the Greatest Noble, dazed and shaken, was being held by two of the commander's men. The commander bowed-this time, very low.

"I believe, Your Effulgence, that we have an appointment for dinner. Come, the banquet has been laid."

And, as though he were still playing the gracious host, the commander led the half-paralyzed Child of the Sun to the room where the banquet had been put on a table in perfect diplomatic array.

"Your Effulgence may sit at my right hand," said the commander pleasantly.

## CHAPTER XIV

As MacDonald said of Robert Wilson, "This is not an account of how Boosterism came to Arcadia." It's a devil of a long way from it. And once the high point of a story has been reached and passed, it is pointless to prolong it too much. The capture of the Greatest Noble broke the power of the Empire of the Great Nobles forever. The loyal subjects were helpless without a leader, and the disloyal ones, near the periphery of the Empire, didn't care. The crack Imperial troops simply folded up and went home. The Greatest Noble went on issuing orders, and they were obeyed; the people were too used to taking orders from authority to care whether they were really the Greatest Noble's own idea or not.

In a matter of months, two hundred men had conquered an empire, with a loss of thirty-five or forty men. Eventually, they had to execute the old Greatest Noble and put his more tractable nephew on the throne, but that was a mere incident.

Gold? It flowed as though there were an endless supply. The commander shipped enough back on the first load to make them all wealthy.

The commander didn't go back home to spend his wealth amid the luxuries of the Imperial court, even though Emperor Carl appointed him to the nobility. That sort of thing wasn't the commander's meat. There, he would be a fourth-rate noble; here, he was the Imperial Viceroy, responsible only to the distant Emperor. There, he would be nothing; here, he was almost a king.

Two years after the capture of the Greatest Noble, he established a new capital on the coast and named it Kingston. And from Kingston he ruled with an iron hand.

As has been intimated, this was not Arcadia. A year after the founding of Kingston, the old capital was attacked, burned, and almost fell under siege, due to a sudden uprising of the natives under the new Greatest Noble, who had managed to escape. But the uprising collapsed because of the approach of the planting season; the warriors had to go back home and plant their crops or the whole of the agriculture-based country would starve-except the invading Earthmen.

Except in a few instances, the natives were never again any trouble.

But the commander-now the Viceroy-had not seen the end of his troubles.

He had known his limitations, and realized that the governing of a whole planet-or even one continent-was too much for one man when the population consists primarily of barbarians and savages. So he had delegated the rule of a vast area to the south to another-a Lieutenant commander James, known as “One-Eye,” a man who had helped finance the original expedition, and had arrived after the conquest.

One-Eye went south and made very small headway against the more barbaric tribes there. He did not become rich, and he did not achieve anywhere near the success that the Viceroy had. So he came back north with his army and decided to unseat the Viceroy and take his place. That was five years after the capture of the Greatest Noble.

One-Eye took Center City, the old capital, and started to work his way northward, toward Kingston. The Viceroy's forces met him at a place known as Salt Flats and thoroughly trounced him. He was captured, tried for high treason, and executed.

One would think that the execution ended the threat of Lieutenant commander James, but not so. He had a son, and he had had followers.

## CHAPTER XV

Nine years. Nine years since the breaking of a vast empire. It really didn't seem like it. The Viceroy looked at his hands. They were veined and thin, and the callouses were gone. Was he getting soft, or just getting old? A little bit-no, a great deal of both.

He sat in his study, in the Viceregal Palace at Kingston, chewing over the events of the past weeks. Twice, rumors had come that he was to be assassinated. He and two of his councilors had been hanged in effigy in the public square not long back. He had been snubbed publicly by some of the lesser nobles.

Had he ruled harshly, or was it just jealousy? And was it, really, as some said, caused by the Southerners and the followers of Young Jim?

He didn't know. And sometimes, it seemed as if it didn't matter.

Here he was, sitting alone in his study, when he should have gone to a public function. And he had stayed because of fear of assassination.

Was it—

There was a knock at the door.

"Come in."

A servant entered. “Sir Martin is here, my lord."

The Viceroy got to his feet. “Show him in, by all means."

Sir Martin, just behind the servant, stepped in, smiling, and the Viceroy returned his smile. “Well, everything went off well enough without you,” said Sir Martin.

"Any sign of trouble?"

"None, my lord; none whatsoever. The—"

"Damn!” the Viceroy interrupted savagely. “I should have known! What have I done but display my cowardice? I'm getting yellow in my old age!"

Sir Martin shook his head. “Cowardice, my lord? Nothing of the sort. Prudence, I should call it. By the by, the judge and a few others are coming over.” He chuckled softly. “We thought we might talk you out of a meal."

The Viceroy grinned widely. “Nothing easier. I suspected all you hangers-on would come around for your handouts. Come along, my friend; we'll have a drink before the others get here."

* * * *

There were nearly twenty people at dinner, all, presumably, friends of the Viceroy. At least, it is certain that they were friends in so far as they had no part in the assassination plot. It was a gay party; the Viceroy's friends were doing their best to cheer him up, and were succeeding pretty well. One of the nobles, known for his wit, had just essayed a somewhat off-color jest, and the others were roaring with laughter at the punch line when a shout rang out.

There was a sudden silence around the table.

"What was that?” asked someone. “What did—"

"Help!” There was the sound of footsteps pounding up the stairway from the lower floor.

"Help! The Southerners have come to kill the Viceroy!"

From the sounds, there was no doubt in any of the minds of the people seated around the table that the shout was true. For a moment, there was shock. Then panic took over.

There were only a dozen or so men in the attacking party; if the “friends” of the Viceroy had stuck by him, they could have held off the assassins with ease.

But no one ran to lock the doors that stood between the Viceroy and his enemies, and only a few drew their weapons to defend him. The others fled. Getting out of a window from the second floor of a building isn't easy, but fear can lend wings, and, although none of them actually flew down, the retreat went fast enough.

Characteristically, the Viceroy headed, not for the window, but for his own room, where his armor-long unused, except for state functions-hung waiting in the closet. With him went Sir Martin.

But there wasn't even an opportunity to get into the armor. The rebel band charged into the hallway that led to the bedroom, screaming: “Death to the Tyrant! Long live the Emperor!"

It was personal anger, then, not rebellion against the Empire which had appointed the ex-commander to his post as Viceroy.

"Where is the Viceroy? Death to the Tyrant!" The assassins moved in.

Swords in hand, and cloaks wrapped around their left arms, Sir Martin and the Viceroy moved to meet the oncoming attackers.

"Traitors!" bellowed the Viceroy. "Cowards! Have you come to kill me in my own house?"

Parry, thrust! Parry, thrust! Two of the attackers fell before the snake-tongue blade of the fighting Viceroy. Sir Martin accounted for two more before he fell in a flood of his own blood.

The Viceroy was alone, now. His blade flickered as though inspired, and two more died under its tireless onslaught. Even more would have died if the head of the conspiracy, a supporter of Young Jim named Rada, hadn't pulled a trick that not even the Viceroy would have pulled.

Rada grabbed one of his own men and shoved him toward the Viceroy's sword, impaling the hapless man upon that deadly blade.

And, in the moment while the Viceroy's weapon was buried to the hilt in an enemy's body, the others leaped around the dying man and ran their blades through the Viceroy.

He dropped to the floor, blood gushing from half a dozen wounds.

Even so, his fighting heart still had seconds more to beat. As he propped himself up on one arm, the assassins stood back; even they recognized that they had killed something bigger and stronger than they. A better man than any of them lay dying at their feet.

He clawed with one hand at the river of red that flowed from his pierced throat and then fell forward across the stone floor. With his crimson hand, he traced the great symbol of his Faith on the stone-the Sign of the Cross. He bent his head to kiss it, and, with a final cry of "Jesus!" he died. At the age of seventy, it had taken a dozen men to kill him with treachery, something all the hell of nine years of conquest and rule had been unable to do.

And thus died Francisco Pizarro, the Conqueror of Peru.

TO BE READ AFTER YOU HAVE FINISHED "DESPOILERS OF THE GOLDEN EMPIRE."

Dear John,

It has been brought to my attention, by those who have read the story, that "Despoilers of the Golden Empire" might conceivably be charged with being a "reader cheater"-i.e., that it does not play fair with the reader, but leads him astray by means of false statements. Naturally, I feel it me bounden duty to refute such scurrilous and untrue affronts, and thus save meself from opprobrium.

Therefore, I address what follows to the interested reader:

It cannot be denied that you must have been misled when you read the story; indeed, I'd be the last to deny it, since I intended that you should be misled. What I most certainly do deny is any implication that

such misleading was accomplished by the telling of untruths. A fiction writer is, by definition, a professional liar; he makes his living by telling interesting lies on paper and selling the results to the highest bidder for publication. Since fiction writing is my livelihood, I cannot and will not deny that I am an accomplished liar-indeed, almost an habitual one. Therefore, I feel some small pique when, on the one occasion on which I stick strictly to the truth, I am accused of fraud. Pfui! say I; I refute you. “I deny the allegation, and I defy the alligator!"

To prove my case, I shall take several examples from “Despoilers” and show that the statements made are perfectly valid. (Please note that I do not claim any absolute accuracy for such details as quoted dialogue, except that none of the characters lies. I simply contend that the story is as accurate as any other good historical novelette. I also might say here that any resemblance between “Despoilers” and any story picked at random from the late lamented Planet Stories is purely intentional and carefully contrived.)

Take the first sentence:

"In the seven centuries that had elapsed since the Second Empire had been founded on the shattered remnants of the First, the nobles of the Imperium had come slowly to realize that the empire was not to be judged by the examples of its predecessor."

Perfectly true. By the time of the Renaissance, the nobles of the Holy Roman Empire knew that their empire was not just a continuation of the Roman Empire, but a new entity. The old Roman Empire had collapsed in the Sixth Century, and the Holy Roman Empire, which was actually a loose confederation of Germanic states, did not come into being until A. D. 800, when Karl der Grosse (Charlemagne) was crowned emperor by the Pope.

Anyone who wishes to quibble that the date should be postponed for a century and a half, until the time of the German prince, Otto, may do so; I will ignore him.

A few paragraphs later, I said:

"Without power, neither Civilization nor the Empire could hold itself together, and His Universal Majesty, the Emperor Carl, well knew it. And power was linked solidly to one element, one metal..."

The metal, as I said later on, was Gold-197.

By “power,” of course, I meant political and economic power. In the Sixteenth Century, that's what almost anyone would have meant. If you chose to interpret it as meaning “energy per unit time,” why, that's real tough.

Why nail the “power metal” down to an isotope of gold with an atomic weight of 197? Because that's the only naturally occurring isotope of gold.

The “Emperor Carl” was, of course, Charles V, who also happened to be King of Spain, and therefore Pizarro's sovereign. I Germanicized his name, as I did the others-Francisco Pizarro becomes “Frank,” et cetera-but this is perfectly legitimate. After all, the king's name in Latin, which was used in all state papers, was Carolus; the Spanish called him Carlos, and history books in English call him Charles. Either Karl or Carl is just as legitimate as Charles, certainly, and the same applies to the other names in the story.

As to the title “His Universal Majesty,” that's exactly what he was called. It is usually translated as “His Catholic Majesty,” but the word Catholic comes from the Greek katholikos, meaning “universal.” And,

further on in the story, when the term “Universal Assembly” is used, it is a direct translation of the Greek term, Ekklesia Katholikos, and is actually a better translation than “Catholic Church,” since the English word church comes from the Greek kyriakon, meaning “the house of the Lord"-in other words, a church building, not the organization as a whole.

Toward the end of Chapter One, I wrote:

"Throughout the Empire, research laboratories worked tirelessly at the problem of transmuting commoner elements into Gold-197, but thus far none of the processes was commercially feasible."

I think you will admit that the alchemists never found a method of transmuting the elements-certainly none which was commercially feasible.

In Chapter Three, the statement that Pizarro left his home-Spain-with undermanned ships, and had to sneak off illegally before the King's inspectors checked up on him, is historically accurate. And who can argue with the statement that “there wasn't a scientist worthy of the name in the whole outfit"?

At the beginning of Chapter Four, you'll find:

"Due to atmospheric disturbances, the ship's landing was several hundred miles from the point the commander had originally picked...” and “...the ship simply wasn't built for atmospheric navigation."

The adverse winds which drove Pizarro's ships off course were certainly “atmospheric disturbances,” and I defy anyone to prove that a Sixteenth Century Spanish galleon was built for atmospheric navigation.

And I insist that using the term “carrier” instead of “horse,” while misleading, is not inaccurate. However, I would like to know just what sort of picture the term conjured up in the reader's mind. In Chapter Ten, in the battle scene, you'll find the following:

"The combination [of attackers from both sides], plus the fact that the heavy armor was a little unwieldy, overbalanced him [the commander]. He toppled to the ground with a clash of steel as he and the carrier parted company.

"Without a human hand at its controls, the carrier automatically moved away from the mass of struggling fighters and came to a halt well away from the battle."

To be perfectly honest, it's somewhat of a strain on my mind to imagine anyone building a robot-controlled machine as good as all that, and then giving the drive such poor protection that he can fall off of it.

One of the great screams from my critics has been occasioned by the fact that I referred several times to the Spaniards as “Earthmen.” I can't see why. In order not to confuse the reader, I invariably referred to them as the “invading Earthmen,” so as to make a clear distinction between them and the native Earthmen, or Incas, who were native to Peru. If this be treachery, then make the most of it.

In other words, I contend that I simply did what any other good detective story writer tries to do-mislead the reader without lying to him. Agatha Christie's “The Murder of Roger Ackroyd,” for instance, uses the device of telling the story from the murderer's viewpoint, in the first person, without revealing that he is the murderer. Likewise, John Dickson Carr, in his “Nine Wrong Answers” finds himself forced to deny that he has lied to the reader, although he admits that one of his characters certainly lied. Both Carr and Christie told the absolute truth-within the framework of the story-and left it

to the reader to delude himself.

It all depends on the viewpoint. The statement, “We all liked Father Goodheart very much” means one thing when said by a member of his old parish in the United States, which he left to become a missionary. It means something else again when uttered by a member of the tribe of cannibals which the good Father attempted unsuccessfully to convert.

Similarly, such terms as “the gulf between the worlds,” “the new world,” and “the known universe” have one meaning to a science-fictioneer, and another to a historian. Semantics, anyone?

In Chapter Ten, right at the beginning, there is a conversation between Commander Frank and Frater Vincent, and “agent of the Assembly” (read: priest). If the reader will go back over that section, keeping in mind the fact that what they are “actually” talking about are the Catholic Church and the Christian religion as seen from the viewpoint of a couple of fanatically devout Sixteenth Century Spaniards, he will understand the method I used in presenting the whole story.

Let me quote:

"Mentally, the commander went through the symbol-patterns that he had learned as a child-the symbol-patterns that brought him into direct contact with the Ultimate Power, the Power that controlled not only the spinning of atoms and the whirling of electrons in their orbits, but the workings of probability itself."

Obviously, he is reciting the Pater Noster and the Ave Maria. The rest of the sentence is self-explanatory.

So is the following:

"Once indoctrinated into the teachings of the Universal Assembly, any man could tap that power to a greater or lesser degree, depending on his mental control and ethical attitude. At the top level, a first-class adept could utilize that Power for telepathy, psychokinesis, levitation, teleportation, and other powers that the commander only vaguely understood."

It doesn't matter whether you believe in the miracles attributed to many of the Saints; Pizarro certainly did. His faith in that Power was as certain as the modern faith in the power of the atomic bomb.

As a matter of fact, it was very probably that hard, unyielding Faith which made the Sixteenth Century Spaniard the almost superhuman being that he was. Only Spain of the Sixteenth Century could have produced the Conquistadors or such a man as St. Ignatius Loyola, whose learned, devout, and fanatically militant Society of Jesus struck fear into the hearts of Protestant and Catholic Princes alike for the next two centuries.

The regular reader of Astounding may remember that I gave another example of the technique of truthful misdirection in “The Best Policy,” (July, 1957). An Earthman, captured by aliens, finds himself in a position in which he is unable to tell even the smallest lie. But by telling the absolute truth, he convinces the aliens that homo sapiens is a race of super-duper supermen. He does it so well that the aliens surrender without attacking, even before the rest of humanity is aware of their existence.

The facts in “Despoilers of the Golden Empire” remain. They are facts. Francisco Pizarro and his men-an army of less than two hundred-actually did inflict appalling damage on the Inca armies, even if they were outnumbered ten to one, and with astonishingly few losses of their own. They did it with sheer

guts, too; their equipment was not too greatly superior to that of the Peruvians, and by the time they reached the Great Inca himself, none of the Peruvians believed that the invaders were demons or gods. But in the face of the Spaniards' determined onslaught, they were powerless.

The assassination scene at the end is almost an exact description of what happened. It did take a dozen men in full armor to kill the armorless Pizarro, and even then it took trickery and treachery to do it.

Now, just to show how fair I was-to show how I scrupulously refrained from lying-I will show what a sacrifice I made for the sake of truth.

If you'll recall, in the story, the dying Pizarro traces the Sign of the Cross on the floor in his own blood, kisses it, and says "Jesus!" before he dies. This is in strict accord with every history on the subject I could find.

But there is a legend to the effect that his last words were somewhat different. I searched the New York Public Library for days trying to find one single historian who would bear out the legend; I even went so far as to get a librarian who could read Spanish and another whose German is somewhat better than mine to translate articles in foreign historical journals for me. All in vain. But if I could have substantiated the legend, the final scene would have read something like this:

Clawing at his sword-torn throat, the fearless old soldier brought his hand away coated with the crimson of his own blood. Falling forward, he traced the Sign of the Cross on the stone floor in gleaming scarlet, kissed it, and then glared up at the men who surrounded him, his eyes hard with anger and hate.

"I'm going to Heaven," he said, his voice harsh and whispery. "And you, you bastards, can go to Hell!"

It would have made one hell of an ending-but it had to be sacrificed in the interests of Truth.

So I rest my case.

I will even go further than that; I defy anyone to point out a single out-and-out lie in the whole story. G'wan-I dare ya!

(SECRET ASIDE TO THE READER; J. W. C., Jr., PLEASE DO NOT READ!)

Ah, but wait! There is a villain in the piece!

I did not lie to you, no. But you were lied to, all the same.

By whom?

By none less than that conniving arch-fiend, John W. Campbell, Jr., that's who!

Wasn't it he who bought the story?

And wasn't it he who, with malice aforethought, published it in a package which was plainly labeled Science Fiction?

And, therefore, didn't you have every right to think it was science fiction?

Sure you did!

I am guilty of nothing more than weakness; my poor, frail sense of ethics collapsed completely at the sight of the bribe he offered me to become a party to the dark conspiracy that sprang from the depths of his own demoniac mind. Ah, well; none of us is perfect, I suppose.

## INTRODUCTION TO THROUGH TIME AND SPACE WITH BENEDICT BREADFRUITGrendel Briarton

In 2041, Ferdinand Feghoot successfully sponsored the perpetrator of these puns for membership in the exclusive Time Travellers Club, at their opulent rooms in King Charles III Street in London. He brought him in through the )( connecting the club rooms with any number of centuries, and presented him to the Members.

Old Dr. Gropius Volkswagen looked at him dubiously. "Why should we make him a Member?" he grumbled. "He does not even look as if he has genius!"

"I assure you," Feghoot said, "that he has. His puns are even more atrocious than mine. He is a dedicated writer-a veritable pen-addict."

"Maybe it is so," growled the old gentleman, "but how do we know he is a good, solid citizen?"

"I will vouch for him," Feghoot declared. "For generations, his whole family have emphasized their traditions and history. They have all been bred for roots."

"My dear fellow," put in the Club's president, Vice-Admiral Sir Trumpery Buckett, "is all this on the basis of your own intimate knowledge?"

"Absolutely!" said Ferdinand Feghoot. "After all, he was conceived in our garret!"

...Read 'em and weep.

[Editor's Note: The Ferdinand Feghoot stories by Reginald Bretnor, writing as Grendel Briarton (an anagram of the author's name), all ended in outrageous puns. Hence, in the science fiction universe a short-short story ending in an atrocious pun is known as a "Feghoot." Randall Garrett, writing as "Grendel Briarton," wrote a series of eight Feghoot pastiches each of which ended in an atrocious pun on the name of a famous science fiction writer.]

## ANCHORITE

The mountain was spinning.

Not dizzily, not even rapidly, but very perceptibly, the great mass of jagged rock was turning on its axis.

Captain St. Simon scowled at it. "By damn, Jules," he said, "if you can see 'em spinning, it's too damn fast!" He expected no answer, and got none.

He tapped the drive pedal gently with his right foot, his gaze shifting alternately from the instrument board to the looming hulk of stone before him. As the little spacecraft moved in closer, he tapped the reverse pedal with his left foot. He was now ten meters from the surface of the asteroid. It was moving, all right.

“Well, Jules,” he said in his most commanding voice, “we'll see just how fast she's moving. Prepare to fire Torpedo Number One!"

"Yassuh, boss! Yassuh, Cap'n Sain’ Simon, suh! All ready on the firin’ line!"

He touched a button with his right thumb. The ship quivered almost imperceptibly as a jet of liquid leaped from the gun mounted in the nose of the ship. At the same time, he hit the reverse pedal and backed the ship away from the asteroid's surface. No point getting any more gunk on the hull than necessary.

The jet of liquid struck the surface of the rotating mountain and splashed, leaving a big splotch of silvery glitter. Even in the vacuum of space, the silicone-based solvents of the paint vehicle took time to boil off.

"How's that for pinpoint accuracy, Jules?"

"Veddy good, M'lud. Top hole, if I may say so, m'lud."

"You may.” He jockeyed the little spacecraft around until he was reasonably stationary with respect to the great hunk of whirling rock and had the silver-white blotch centered on the crosshairs of the peeper in front of him. Then he punched the button that started the timer and waited for the silver spot to come round again.

The asteroid was roughly spherical-which was unusual, but not remarkable. The radar gave him the distance from the surface of the asteroid, and he measured the diameter and punched it through the calculator. “Observe,” he said in a dry, didactic voice. “The diameter is on the order of five times ten to the fourteenth micromicrons.” He kept punching at the calculator. “If we assume a mean density of two point six six times ten to the minus thirty-sixth metric tons per cubic micromicron, we attain a mean mass of some one point seven four times ten to the eleventh kilograms.” More punching, while he kept his eye on the meteorite, waiting for the spot to show up again. “And that, my dear Jules, gives us a surface gravity of approximately two times ten to the minus sixth standard gees."

"Jawohl, Herr Oberstleutnant."

"Und zo, mine dear Chules, ve haff at least der grave zuspicion dot der zurface gravity iss less dan der zentrifugal force at der eqvator! Nein? Ja! Zo."

"Jawohl, Herr Konzertmeister."

Then there was a long, silent wait, while the asteroid went its leisurely way around its own axis.

"There it comes,” said Captain St. Simon. He kept his eyes on the crosshair of the peeper, one hand over the timer button. When the silver splotch drifted by the crosshair, he punched the stop button and looked at the indicator.

"Sixteen minutes, forty seconds. How handy.” He punched at the calculator again. “Ah! You see, Jules! Just as we suspected! Negative gees at the surface, on the equator, comes to ten to the minus third standard gees-almost exactly one centimeter per second squared. So?"

"Ah, so, honorabu copton! Is somesing rike five hundred times as great as gravitationar attraction, is not so?"

"Sukiyaki, my dear chap, sometimes your brilliance amazes me."

Well, at least it meant that there would be no loose rubble on the surface. It would have been tossed off long ago by the centrifugal force, flying off on a tangent to become more of the tiny rubble of the belt. Perhaps "flying" wasn't exactly the right word, though, when applied to a velocity of less than one centimeter per second. Drifting off, then.

"What do you think, Jules?" said St. Simon.

"Waal, Ah reckon we can do it, cap'n. Ef'n we go to the one o' them thar poles ... well, let's see—" He leaned over and punched more figures into the calculator. "Ain't that purty! 'Cordin' ter this, thar's a spot at each pole, 'bout a meter in diameter, whar the gee-pull is greater than the centry-foogle force!"

Captain St. Simon looked at the figures on the calculator. The forces, in any case, were negligibly small. On Earth, where the surface gravity was ninety-eight per cent of a Standard Gee, St. Simon weighed close to two hundred pounds. Discounting the spin, he would weigh about four ten-thousandths of a pound on the asteroid he was inspecting. The spin at the equator would try to push him off with a force of about two tenths of a pound.

But a man who didn't take those forces into account could get himself killed in the Belt.

"Very well, Jules," he said, "we'll inspect the poles."

"Do you think they vill velcome us in Kraukau, Herr Erzbischof?"

* * * *

The area around the North Pole-defined as that pole from which the body appears to be spinning counterclockwise-looked more suitable for operations than the South Pole. Theoretically, St. Simon could have stopped the spin, but that would have required an energy expenditure of some twenty-three thousand kilowatt-hours in the first place, and it would have required an anchor to be set somewhere on the equator. Since his purpose in landing on the asteroid was to set just such an anchor, stopping the spin would be a waste of time and energy.

Captain St. Simon positioned his little spacecraft a couple of meters above the North Pole. It would take better than six minutes to fall that far, so he had plenty of time. "Perhaps a boarding party, Mr. Christian! On the double!"

"Aye, sir! On the double it is, sir!"

St. Simon pushed himself over to the locker, took out his vacuum suit, and climbed into it. After checking it thoroughly, he said: "Prepare to evacuate main control room, Mr. Christian!"

"Aye, aye, Sir! All prepared and ready. I hope."

Captain St. Simon looked around to make sure he hadn't left a bottle of coffee sitting somewhere. He'd done that once, and the stuff had boiled out all over everywhere when he pulled the air out of the little room. Nope, no coffee. No obstacles to turning on the pump. He thumbed the button, and the pumps started to whine. The whine built up to a crescendo, then began to die away until finally it could only be felt through the walls or floor. The air was gone.

Then he checked the manometer to make sure that most of the air had actually been pumped back into

the reserve tanks. Satisfied, he touched the button that would open the door. There was a faint jar as the remaining wisps of air shot out into the vacuum of space.

St. Simon sat back down at the controls and carefully repositioned the ship. It was now less than a meter from the surface. He pushed himself over to the open door and looked out.

He clipped one end of his safety cable to the steel eye-bolt at the edge of the door. “Fasten on carefully, Jules,” he said. “We don't want to lose anything."

"Like what, mon capitain?"

"Like this spaceship, mon petit tete de mouton."

"Ah, but no, my old and raw; we could not afford to lose the so-dear Nancy Bell, could we?"

The other end of the long cable was connected to the belt of the suit. Then St. Simon launched himself out the open door toward the surface of the planetoid. The ship began to drift-very slowly, but not so slowly as it had been falling-off in the other direction.

He had picked the spot he was aiming for. There was a jagged hunk of rock sticking out that looked as though it would make a good handhold. Right nearby, there was a fairly smooth spot that would do to brake his “fall". He struck it with his palm and took up the slight shock with his elbow while his other hand grasped the outcropping.

He had not pushed himself very hard. There is not much weathering on the surface of an asteroid. Micro-meteorites soften the contours of the rock a little over the millions of millennia, but not much, since the debris in the Belt all has roughly the same velocity. Collisions do occur, but they aren't the violent smashes that make the brilliant meteor displays of Earth. (And there is still a standing argument among the men of the Belt as to whether that sort of action can be called “weathering".) Most of the collisions tend to cause fracturing of the surface, which results in jagged edges. A man in a vacuum suit does not push himself against a surface like that with any great velocity.

* * * *

St. Simon knew to a nicety that he could propel himself against a bed of nails and broken glass at just the right velocity to be able to stop himself without so much as scratching his glove. And he could see that there was no ragged stuff on the spot he had selected. The slanting rays of the sun would have made them stand out in relief.

Now he was clinging to the surface of the mountain of rock like a bug on the side of a cliff. On a nickel-iron asteroid, he could have walked around on the surface, using the magnetic soles of his vacuum suit. But silicate rock is notably lacking in response to that attractive force. No soul, maybe.

But directly and indirectly, that lack of response to magnetic forces was the reason for St. Simon's crawling around on the surface of that asteroid. Directly, because there was no other way he could move about on a nonmetallic asteroid. Indirectly, because there was no way the big space tugs could get a grip on such an asteroid, either.

The nickel-iron brutes were a dead cinch to haul off to the smelters. All a space tug had to do was latch on to one of them with a magnetic grapple and start hauling. There was no such simple answer for the silicate rocks.

The nickel-iron asteroids were necessary. They supplied the building material and the major export of the Belt cities. They averaged around eighty to ninety per cent iron, anywhere from five to twenty per cent nickel, and perhaps half a per cent cobalt, with smatterings of phosphorous, sulfur, carbon, copper, and chromium. Necessary-but not sufficient.

The silicate rocks ran only about twenty-five per cent iron-in the form of nonmagnetic compounds. They averaged eighteen per cent silicon, fourteen per cent magnesium, between one and one point five per cent each of aluminum, nickel, and calcium, and good-sized dollops of sodium, chromium, phosphorous, manganese, cobalt, potassium, and titanium.

But more important than these, as far as the immediate needs of the Belt cities were concerned, was a big, whopping thirty-six per cent oxygen. In the Belt cities, they had soon learned that, physically speaking, the stuff of life was not bread. And no matter how carefully oxygen is conserved, no process is one hundred per cent efficient. There will be leakage into space, and that which is lost must be replaced.

There is plenty of oxygen locked up in those silicates; the problem is towing them to the processing plants where the stuff can be extracted.

Captain St. Simon's job was simple. All he had to do was sink an anchor into the asteroid so that the space tugs could get a grip on it. Once he had done that, the rest of the job was up to the tug crew.

He crawled across the face of the floating mountain. At the spot where the North Pole was, he braced himself and then took a quick look around at the Nancy Bell. She wasn't moving very fast, he had plenty of time. He took a steel piton out of his tool pack, transferred it to his left hand, and took out a hammer. Then, working carefully, he hammered the piton into a narrow cleft in the rock. Three more of the steel spikes were hammered into the surface, forming a rough quadrilateral around the Pole.

"That looks good enough to me, Jules," he said when he had finished. "Now that we have our little anchors, we can put the monster in."

Then he grabbed his safety line, and pulled himself back to the Nancy Bell.

* * * *

The small craft had floated away from the asteroid a little, but not much. He repositioned it after he got the rocket drill out of the storage compartment.

"Make way for the stovepipe!" he said as he pushed the drill ahead of him, out the door. This time, he pulled himself back to his drilling site by means of a cable which he had attached to one of the pitons.

The setting up of the drill didn't take much time, but it was done with a great deal of care. He set the four-foot tube in the center of the quadrilateral formed by the pitons and braced it in position by attaching lines to the eyes on a detachable collar that encircled the drill. Once the drill started working, it wouldn't need bracing, but until it did, it had to be held down.

All the time he worked, he kept his eyes on his lines and on his ship. The planetoid was turning under him, which made the ship appear to be circling slowly around his worksite. He had to make sure that his lines didn't get tangled or twisted while he was working.

As he set up the bracing on the six-inch diameter drill, he sang a song that Kipling might have been startled to recognize:

"To the tables down at Mory's, To the place where Louie dwells, Where it's always double drill and no canteen, Sit the Whiffenpoofs assembled, With their glasses raised on high, And they'll get a swig in Hell from Gunga Din."

When the drill was firmly based on the surface of the planetoid, St. Simon hauled his way back to his ship along his safety line. Inside, he sat down in the control chair and backed well away from the slowly spinning hunk of rock. Now there was only one thin pair of wires stretching between his ship and the drill on the asteroid.

When he was a good fifty meters away, he took one last look to make sure everything was as it should be.

"Stand by for a broadside!"

"Standing by, sir!"

"You may fire when ready, Gridley!"

"Aye, sir! Rockets away!" His forefinger descended on a button which sent a pulse of current through the pair of wires that trailed out the open door to the drill fifty meters away.

A flare of light appeared on the top of the drill. Almost immediately, it developed into a tongue of rocket flame. Then a glow appeared at the base of the drill and flame began to billow out from beneath the tube. The drill began to sink into the surface, and the planetoid began to move ever so slowly.

The drill was essentially a pair of opposed rockets. The upper one, which tried to push the drill into the surface of the planetoid, developed nearly forty per cent more thrust than the lower one. Thus, the lower one, which was trying to push the drill off the rock, was outmatched. It had to back up, if possible. And it was certainly possible; the exhaust flame of the lower rocket easily burrowed a hole that the rocket could back into, while the silicate rock boiled and vaporized in order to get out of the way.

Soon there was no sign of the drill body itself. There was only a small volcano, spewing up gas and liquid from a hole in the rock. On the surface of a good-sized planet, the drill would have built up a little volcanic cone around the lip of the hole, but building a cone like that requires enough gravity to pull the hot matter back to the edge of the hole.

The fireworks didn't last long. The drill wasn't built to go in too deep. A drill of that type could be built which would burrow its way right through a small planetoid, but that was hardly necessary for planting an anchor. Ten meters was quite enough.

Now came the hard work.

On the outside of the Nancy Bell, locked into place, was a specially-treated nickel-steel eye-bolt-thirty feet long and eight inches in diameter. There had been ten of them, just as there had been ten drills in the storage locker. Now the last drill had been used, and there was but one eye-bolt left. The Nancy Bell would have to go back for more supplies after this job.

The anchor bolts had a mass of four metric tons each. Maneuvering them around, even when they were practically weightless, was no easy job.

St. Simon again matched the velocity of the Nancy Bell with that of the planetoid, which had been

accelerated by the drill's action. He positioned the ship above the hole which had been drilled into the huge rock. Not directly above it-rocket drills had been known to show spurts of life after they were supposed to be dead. St. Simon had timed the drill, and it had apparently behaved as it should, but there was no need to take chances.

"Fire brigade, stand by!"

"Fire brigade standing by, sir!"

A nozzle came out of the nose of the Nancy Bell and peeped over the rim of the freshly-drilled hole.

"Ready! Aim! Squirt!"

A jet of kerosene-like fluosilicone oil shot down the shaft. When it had finished its work, there was little possibility that anything could happen at the bottom. Any unburned rocket fuel would have a hard time catching fire with that stuff soaking into it.

"Ready to lower the boom, Mr. Christian!" bellowed St. Simon.

"Aye, sir! Ready, sir!"

"Lower away!"

His fingers played rapidly over the control board.

* * * *

Outside the ship, the lower end of the great eye-bolt was released from its clamp, and a small piston gave it a little shove. In a long, slow, graceful arc, it swung away from the hull, swiveling around the pivot clamp that held the eye. The braking effect of the pivot clamp was precisely set to stop the eye-bolt when it was at right angles to the hull. Moving carefully, St. Simon maneuvered the ship until the far end of the bolt was directly over the shaft. Then he nudged the Nancy Bell sideways, pushing the bolt down into the planetoid. It grated a couple of times, but between the power of the ship and the mass of the planetoid, there was enough pressure to push it past the obstacles. The rocket drill and the eye-bolt had been designed to work together; the hole made by the first was only a trifle larger than the second. The anchor settled firmly into place.

St. Simon released the clamps that held the eye-bolt to the hull of the ship, and backed away again. As he did, a power cord unreeled, for the eye-bolt was still connected to the vessel electrically.

Several meters away, St. Simon pushed another button. There was no sound, but his practiced eye saw the eye of the anchor quiver. A small explosive charge, set in the buried end of the anchor, had detonated, expanding the far end of the bolt, wedging it firmly in the hole. At the same time, a piston had been forced up a small shaft in the center of the bolt, forcing a catalyst to mix with a fast-setting resin, and extruding the mixture out through half a dozen holes in the side of the bolt. When the stuff set, the anchor was locked securely to the sides of the shaft and thus to the planetoid itself.

St. Simon waited for a few minutes to make sure the resin had set completely. Then he clambered outside again and attached a heavy towing cable to the eye of the anchor, which projected above the surface of the asteroid. Back inside the ship again, he slowly applied power. The cable straightened and pulled at the anchor as the Nancy Bell tried to get away from the asteroid.

"Jules, old bunion," he said as he watched the needle of the tension gauge, "we have set her well."

"Yes, m'lud. So it would appear, m'lud."

St. Simon cut the power. "Very good, Jules. Now we shall see if the beeper is functioning as it should." He flipped a switch that turned on the finder pickup, then turned the selector to his own frequency band.

Beep! said the radio importantly. Beep!

The explosion had also triggered on a small but powerful transmitter built into the anchor. The tugs would be able to find the planetoid by following the beeps.

"Ah, Jules! Success!"

"Yes, m'lud. Success. For the tenth time in a row, this trip. And how many trips does this make?"

"Ah, but who's counting? Think of the money!"

"And the monotony, m'lud. To say nothing of molasses, muchness, and other things that begin with an M."

"Quite so, Jules; quite so. Well, let's detach the towing cable and be on our way."

"Whither, m'lud, Vesta?"

"I rather thought Pallas this time, old thimble."

"Still, m'lud, Vesta—"

"Pallas, Jules."

"Vesta?"

"Hum, hi, ho," said Captain St. Simon thoughtfully. "Pallas?"

The argument continued while the tow cable was detached from the freshly-placed anchor, and while the air was being let back into the control chamber, and while St. Simon divested himself of his suit. Actually, although he would like to go to Vesta, it was out of the question. Energywise and timewise, Pallas was much closer.

He settled back in the bucket seat and shot toward Pallas.

* * * *

Mr. Edway Tarnhorst was from San Pedro, Greater Los Angeles, California, Earth. He was a businessman of executive rank, and was fairly rich. In his left lapel was the Magistral Knight's Cross of the Sovereign Hierosolymitan Order of Malta, reproduced in miniature. In his wallet was a card identifying him as a Representative of the Constituency of Southern California to the Supreme Congress of the People of the United Nations of Earth. He was just past his fifty-third birthday, and his lean, ascetic face and graying hair gave him a look of saintly wisdom. Aside from the eight-pointed cross in his lapel, the only ornamentation or jewelry he wore consisted of a small, exquisitely thin gold watch on his left wrist, and, on the ring finger of his left hand, a gold signet ring set with a single, flat, unfaceted

diamond which was delicately engraved with the Tarnhorst coat of arms. His clothing was quietly but impressively expensive, and under Earth gravity would probably have draped impeccably, but it tended to fluff oddly away from his body under a gee-pull only a twentieth of Earth's.

He sat in his chair with both feet planted firmly on the metal floor, and his hands gripping the armrests as though he were afraid he might float off toward the ceiling if he let go. But only his body betrayed his unease; his face was impassive and calm.

The man sitting next to him looked a great deal more comfortable. This was Mr. Peter Danley, who was twenty years younger than Mr. Tarnhorst and looked it. Instead of the Earth-cut clothing that the older man was wearing, he was wearing the close-fitting tights that were the common dress of the Belt cities. His hair was cropped close, and the fine blond strands made a sort of golden halo about his head when the light from the panels overhead shone on them. His eyes were pale blue, and the lashes and eyebrows were so light as to be almost invisible. That effect, combined with his thin-lined, almost lipless mouth, gave his face a rather expressionless expression. He carried himself like a man who was used to low-gravity or null-gravity conditions, but he talked like an Earthman, not a Belt man. The identification card in his belt explained that; he was a pilot on the Earth-Moon shuttle service. In the eyes of anyone from the Belt cities, he was still an Earthman, not a true spaceman. He was looked upon in the same way that the captain of a transatlantic liner might have looked upon the skipper of the Staten Island ferry two centuries before. The very fact that he was seated in a chair gave away his Earth habits.

The third man was standing, leaning at a slight angle, so that his back touched the wall behind him. He was not tall-five nine-and his face and body were thin. His tanned skin seemed to be stretched tightly over this scanty padding, and in places the bones appeared to be trying to poke their way through to the surface. His ears were small and lay nearly flat against his head, and the hair on his skull was so sparse that the tanned scalp could be easily seen beneath it, although there was no actual bald spot anywhere. Only his large, luminous brown eyes showed that Nature had not skimped on everything when he was formed. His name was lettered neatly on the outside of the door to the office: Georges Alhamid. In spite of the French spelling, he pronounced the name “George,” in the English manner.

He had welcomed the two Earthmen into his office, smiling the automatic smile of the diplomat as he welcomed them to Pallas. As soon as they were comfortably seated-though perhaps that word did not exactly apply to Edway Tarnhorst-Georges Alhamid said:

"Now, gentlemen, what can I do for you?"

He asked it as though he were completely unaware of what had brought the two men to Pallas.

Tarnhorst looked as though he were privately astonished that his host could speak grammatically. “Mr. Alhamid,” he began, “I don't know whether you're aware that the industrial death rate here in the Belt has been the subject of a great deal of discussion in both industrial and governmental circles on Earth.” It was a half question, and he let it hang in the air, waiting to see whether he got an answer.

"Certainly my office has received a great deal of correspondence on the subject,” Alhamid said. His voice sounded as though Tarnhorst had mentioned nothing more serious than a commercial deal. Important, but nothing to get into a heavy sweat over.

Tarnhorst nodded and then held his head very still. His actions betrayed the fact that he was not used to the messages his semicircular canals were sending his brain when he moved his head under low gee.

"Exactly,” he said after a moment's pause. “I have ‘stat copies of a part of that correspondence. To be

specific, the correspondence between your office and the Workers' Union Safety Control Board, and between your office and the Workingman's Compensation Insurance Corporation."

"I see. Well, then, you're fully aware of what our trouble is, Mr. Tarnhorst. I'm glad to see that an official of the insurance company is taking an interest in our troubles."

Tarnhorst's head twitched, as though he were going to shake his head and had thought better of it a fraction of a second too late. It didn't matter. The fluid in his inner ears sloshed anyway.

"I am not here in my capacity as an officer of the Workingman's Compensation Insurance Corporation," he said carefully. "I am here as a representative of the People's Congress."

Alhamid's face showed a mild surprise which he did not feel. "I'm honored, of course, Mr. Tarnhorst," he said, "but you must understand that I am not an official of the government of Pallas."

Tarnhorst's ascetic face betrayed nothing. "Since you have no unified government out here," he said, "I cannot, of course, presume to deal with you in a governmental capacity. I have spoken to the Governor of Pallas, however, and he assures me that you are the man to speak to."

"If it's about the industrial death rate," Alhamid agreed, "then he's perfectly correct. But if you're here as a governmental representative of Earth, I don't understand—"

"Please, Mr. Alhamid," Tarnhorst interrupted with a touch of irritation in his voice. "This is not my first trip to the Belt, nor my first attempt to deal with the official workings of the Confederated Cities."

Alhamid nodded gently. It was, as a matter of fact, Mr. Tarnhorst's second trip beyond the Martian orbit, the first having taken place some three years before. But the complaint was common enough; Earth, with its strong centralized government, simply could not understand the functioning of the Belt Confederacy. A man like Tarnhorst apparently couldn't distinguish between government and business. Knowing that, Alhamid could confidently predict what the general sense of Tarnhorst's next sentence would be.

"I am well aware," said Tarnhorst, "that the Belt Companies not only have the various governors under their collective thumb, but have thus far prevented the formation of any kind of centralized government. Let us not quibble, Mr. Alhamid; the Belt Companies run the Belt, and that means that I must deal with officials of those companies-such as yourself."

Alhamid felt it necessary to make a mild speech in rebuttal. "I cannot agree with you, Mr. Tarnhorst. I have nothing to do with the government of Pallas or any of the other asteroids. I am neither an elected nor an appointed official of any government. Nor, for that matter, am I an advisor in either an official or unofficial capacity to any government. I do not make the laws designed to keep the peace, nor do I enforce them, except in so far as I am a registered voter and therefore have some voice in those laws in that respect. Nor, again, do I serve any judiciary function in any Belt government, except inasmuch as I may be called upon for jury duty.

"I am a business executive, Mr. Tarnhorst. Nothing more. If you have governmental problems to discuss, then I can't help you, since I'm not authorized to make any decisions for any government."

Edway Tarnhorst closed his eyes and massaged the bridge of his thin nose between thumb and forefinger. "I understand that. I understand that perfectly. But out here, the Companies have taken over certain functions of government, shall we say?"

"Shall we say, rather, that on Earth the government has usurped certain functions which rightfully belong to private enterprise?" Alhamid said gently. "Historically, I think, that is the correct view."

Tarnhorst opened his eyes and smiled. "You may be quite correct. Historically speaking, perhaps, the Earth government has usurped the functions that rightfully belong to kings, dictators, and warlords. To say nothing of local satraps and petty chieftains. Hm-m-m. Perhaps we should return to that? Perhaps we should return to the human suffering that was endemic in those times?"

"You might try it," said Alhamid with a straight face. "Say, one year out of every ten. It would give the people something to look forward to with anticipation and to look back upon with nostalgia." Then he changed his tone. "If you wish to debate theories of government, Mr. Tarnhorst, possibly we could get up a couple of teams. Make a public affair of it. It could be taped and televised here and on Earth, and we could charge royalties on each—"

Peter Danley's blond, blank face became suddenly animated. He looked as though he were trying to suppress a laugh. He almost succeeded. It came out as a cough.

* * * *

At the same time, Tarnhorst interrupted Alhamid. "You have made your point, Mr. Alhamid," he said in a brittle voice. "Permit me to make mine. I have come to discuss business with you. But, as a member of the Congressional Committee for Industrial Welfare, I am also in search of facts. Proper legislation requires facts, and legislation passed by the Congress will depend to a great extent upon the report on my findings here."

"I understand," said Alhamid. "I'll certainly be happy to provide you with whatever data you want-with the exception of data on industrial processes, of course. That's not mine to give. But anything else—" He gestured with one hand, opening it palm upwards, as though dispensing a gift.

"I'm not interested in industrial secrets," said Tarnhorst, somewhat mollified. "It's a matter of the welfare of your workers. We feel that we should do something to help. As you know, there have been protests from the Worker's Union Safety Control Board and from the Workingman's Compensation Insurance Corporation."

Alhamid nodded. "I know. The insurance company is complaining about the high rate of claims for deaths. They've threatened to raise our premium rates."

"Considering the expense, don't you, as a businessman, think that a fair thing to do?"

"No," Alhamid said. "I have pointed out to them that the total amount of the claims is far less per capita than, for instance, the Steel Construction Workers' Union of Earth. Granted, there are more death claims, but these are more than compensated for by the fact that the claims for disability and hospitalization are almost negligible."

"That's another thing we don't understand," Tarnhorst said carefully. "It appears that not only are the safety precautions insufficient, but the post-accident care is ... er ... inefficient."

"I assure you that what post-accident care there is," Alhamid said, "is quite efficient. But there is a high mortality rate because of the very nature of the job. Do you know anything about anchor-placing, Mr. Tarnhorst?"

"Very little," Tarnhorst admitted. "That is one of the things I am here to get information on. You used the phrase 'what post-accident care there is'-just how do you mean that?"

"Mr. Tarnhorst, when a man is out in space, completely surrounded by a hard vacuum, any accident is very likely to be fatal. On Earth, if a man sticks his thumb in a punch press, he loses his thumb. Out here, if a man's thumb is crushed off while he's in space, he loses his air and his life long before he can bleed to death. Anything that disables a man in space is deadly ninety-nine times out of a hundred.

"I can give you a parallel case. In the early days of oil drilling, wells occasionally caught fire. One of the ways to put them out was to literally blow them out with a charge of nitroglycerine. Naturally, the nitroglycerine had to be transported from where it was made to where it was to be used. Sensibly enough, it was not transported in tank-car lots; it was carried in small special containers by a single man in an automobile, who used the back roads and avoided traffic and stayed away from thickly populated areas-which was possible in those days. In many places these carriers were required to paint their cars red, and have the words Danger Nitroglycerine painted on the vehicle in yellow.

"Now, the interesting thing about that situation is that, whereas insurance companies in those days were reluctant to give policies to those men, even at astronomical premium rates, disability insurance cost practically nothing-provided the insured would allow the insertion of a clause that restricted the covered period to those times when he was actually engaged in transporting nitroglycerine. You can see why."

"I am not familiar with explosives," Tarnhorst said. "I take it that the substance is ... er ... easily detonated?"

"That's right," said Alhamid. "It's not only sensitive, but it's unreliable. You might actually drop a jar of the stuff and do nothing but shatter the jar. Another jar, apparently exactly similar, might go off because it got jiggled by a seismic wave from a passing truck half a mile away. But the latter was a great deal more likely than the former."

"Very well," said Tarnhorst after a moment, "I accept that analogy. I'd like to know more about the work itself. What does the job entail, exactly? What safety precautions are taken?"

It required the better part of three hours to explain exactly what an anchor setter did and how he did it-and what safety precautions were being taken. Through it all, Peter Danley just sat there, listening, saying nothing.

Finally, Edway Tarnhorst said: "Well, thank you very much for your information, Mr. Alhamid. I'd like to think this over. May I see you in the morning?"

"Certainly, sir. You're welcome at any time."

"Thank you." The two Earthmen rose from their seats-Tarnhorst carefully, Danley with the ease of long practice. "Would nine in the morning be convenient?"

"Quite convenient. I'll expect you."

Danley glided over to the door and held it open for Tarnhorst. He was wearing magnetic glide-shoes, the standard footwear of the Belt, which had three ball-bearings in the forward part of the sole, allowing the foot to move smoothly in any direction, while the rubber heel could be brought down to act as a brake when necessary. He didn't handle them with the adeptness of a Belt man, but he wasn't too awkward. Tarnhorst was wearing plain magnetic-soled boots-the lift-'em-up-and-lay-'em-down type. He had no

intention of having his dignity compromised by shoes that might treacherously scoot out from under him.

* * * *

As soon as the door had closed behind them, Georges Alhamid picked up the telephone on his desk and punched a number.

When a woman's voice answered at the other end, he said: “Miss Lehman, this is Mr. Alhamid. I'd like to speak to the governor.” There was a pause. Then:

"George? Larry here."

Alhamid leaned back comfortably against the wall. “I just saw your guests, Larry. I spent damn near three hours explaining why it was necessary to put anchors in rocks, how it was done, and why it was dangerous."

"Did you convince him? Tarnhorst, I mean."

"I doubt it. Oh, I don't mean he thinks I'm lying or anything like that. He's too sharp for that. But he is convinced that we're negligent, that we're a bunch of barbarians who care nothing about human life."

"You've got to unconvince him, George,” the governor said worriedly. “The Belt still isn't self-sufficient enough to be able to afford an Earth embargo. They can hold out longer than we can."

"I know,” Alhamid said. “Give us another generation, and we can tell the World Welfare State where to head in-but right now, things are touchy, and you and I are in the big fat middle of it.” He paused, rubbing thoughtfully at his lean blade of a nose with a bony forefinger. “Larry, what did you think of that blond nonentity Tarnhorst brought with him?"

"He's not a nonentity,” the governor objected gently. “He just looks it. He's Tarnhorst's ‘expert’ on space industry, if you want my opinion. Did he say much of anything while he was with you?"

"Hardly anything."

"Same here. I have a feeling that his job is to evaluate every word you say and report his evaluation to Tarnhorst. You'll have to be careful."

"I agree,” Alhamid said. “But he complicates things. I have a feeling that if I tell Tarnhorst a straight story he'll believe it. He seems to be a pretty shrewd judge. But Danley just might be the case of the man who is dangerous because of his little learning. He obviously knows a devil of a lot more about operations in space than Tarnhorst does, and he's evidently a hand-picked man, so that Tarnhorst will value his opinion. But it's evident that Danley doesn't know anything about space by our standards. Put him out on a boat as an anchor man, and he'd be lucky if he set a single anchor."

"Well, there's not much chance of that. How do you mean, he's dangerous?"

"I'll give you a f'rinstance. Suppose you've got a complex circuit using alternatic current, and you're crying to explain to a reasonably intelligent man how it works and what it does. If he doesn't know anything about electricity, he mightn't understand the explanation, but he'll believe that you're telling him the truth even if he doesn't understand it. But if he knows the basic theory of direct currents, you're likely to find yourself in trouble because he'll know just enough to see that what you're telling him doesn't jibe with what he already knows. Volts times amperes equal watts, as far as he's concerned, and the term

‘power factor’ does nothing but confuse him. He knows that copper is a conductor, so he can't see how a current could be cut off by a choke coil. He knows that a current can't pass through an insulator, so a condenser obviously can't be what you say it is. Mentally, he tags you as a liar, and he begins to try to dig in to see how your gadget really works."

* * * *

"Hm-m-m. I see what you mean. Bad.” He snorted. “Blast Earthmen, anyway! Have you ever been there?"

"Earth? Nope. By careful self-restraint, I've managed to forego that pleasure so far, Larry. Why?"

"Brrr! It's the feel of the place that I can't stand. I don't mean the constant high-gee; I take my daily exercise spin in the centrifuge just like anyone else, and you soon get used to the steady pull on Earth. I mean the constant, oppressive psychic tension, if you see what I mean. The feeling that everyone hates and distrusts everyone else. The curious impression of fear underneath every word and action.

"I'm older than you are, George, and I've lived with a kind of fear all my life-just as you and everyone else in the Belt has. A single mistake can kill out here, and the fear that it will be some fool who makes a mistake that will kill hundreds is always with us. We've learned to live with that kind of fear; we've learned to take steps to prevent any idiot from throwing the wrong switch that would shut down a power plant or open an air lock at the wrong time.

"But the fear on Earth is different. It's the fear that everyone else is out to get you, the fear that someone will stick a figurative knife in your back and reduce you to the basic subsistence level. And that fear is solidly based, believe me. The only way to climb up from basic subsistence is to climb over everyone else, to knock aside those in your way, to get rid of whoever is occupying the position you want. And once you get there, the only way you can hold your position is to make sure that nobody below you gets too big for his britches. The rule is: Pull down those above you, hold down those below you.

"I've seen it, George. The big cities are packed with people whose sole ambition in life is to badger their local welfare worker out of another check-they need new clothes, they need a new bed, they need a new table, they need more food for the new baby, they need this, they need that. All they ever do is need! But, of course, they're far to aristocratic to work.

"Those who do have ambition have to become politicians-in the worst sense of the word. They have to gain some measure of control over the dispersal of largesse to the mob; they have to get themselves into a position where they can give away other people's money, so that they can get their cut, too.

"And even then, the man who gets to be a big shot doesn't dare show it. Take a look at Tarnhorst. He's probably one of the best of a bad lot. He has his fingers in a lot of business pies which make him money, and he's in a high enough position in the government to enable him to keep some of his money. But his clothing is only a little bit better than the average, just as the man who is on basic subsistence wears clothes that are only a little bit worse than the average. That diamond ring of his is a real diamond, but you can buy imitations that can't be told from the real thing except by an expert, so his diamond doesn't offend anyone by being ostentatious. And it's unfaceted, to eliminate offensive flash.

"All the color has gone out of life on Earth, George. Women held out longer than men did, but now no man or woman would be caught wearing a bright-colored suit. You don't see any reds or yellows or blues or greens or oranges-only grays and browns and black.

"It's not for me, George. I'd much rather live in fear of the few fools who might pull a stupid trick that

would kill me than live in the constant fear of everyone around me, who all want to destroy me deliberately."

"I know what you mean," said Alhamid, "but I think you've put the wrong label on what you're calling 'fear'; there's a difference between fear and having a healthy respect for something that is dangerous but not malignant. That vacuum out there isn't out to 'get' anybody. The only people it kills are the fools who have no respect for it and the neurotics who think that it wants to murder them. You're neither, and I know it."

The governor laughed. "That's the advantage we have over Earthmen, George. We went through the same school of hard knocks together-all of us. And we know how we stack up against each other."

"True," Alhamid said darkly, "but how long will that hold if Tarnhorst closes the school down?"

"That's what you've got to prevent," said the governor flatly. "If you need help, yell."

"I will," Alhamid said. "Very loudly." He hung up, wishing he knew what Tarnhorst-and Danley-had in mind.

* * * *

"The trouble with these people, Danley," said Edway Tarnhorst, "is that they have no respect whatever for human dignity. They have a tendency to overlook the basic rights of the individual."

"They're certainly-different," Peter Danley said.

Tarnhorst juggled himself up and down on the easy-chair in which he was seated, as though he could hardly believe that he had weight again. He hated low gee. It made him feel awkward and undignified. The only thing that reminded him that this was not "real" gravity was the faint, but all-pervasive hum of the huge engines that drove the big centrifuge. The rooms had cost more, but they were well worth it, as far as Tarnhorst was concerned.

"How do you mean, 'different'?" he asked almost absently, settling himself comfortably into the cushions.

"I don't know exactly. There's a hardness, a toughness-I can't quite put my finger on it, but it's in the way they act, the way they talk."

"Surely you'd noticed that before?" Tarnhorst asked in mild surprise. "You've met these Belt men on Luna."

"And their women," Danley said with a nod. "But the impact is somewhat more pronounced on their own home ground-seeing them en masse."

"Their women!" Tarnhorst said, caught by the phrase. "Fah! Bright-colored birds! Giggling children! And no more morals than a common house-cat!"

"Oh, they're not as bad as all that," Danley objected. "Their clothing is a little bright, I'll admit, and they laugh and kid around a lot, but I wouldn't say that their morals were any worse than those of a girl from New York or London."

"Arrogance is the word," said Tarnhorst. "Arrogance. Like the way that Alhamid kept standing all the time we were talking, towering over us that way."

"Just habit," Danley said. "When you don't weigh more than six or seven pounds, there's not much point in sitting down. Besides, it leaves them on their feet in case of emergency."

"He could have sat down out of politeness," Tarnhorst said. "But no. They try to put on an air of superiority that is offensive to human dignity." He leaned back in his chair, stretched out his legs, and crossed his ankles. "However, attitude itself needn't concern us until it translates itself into anti-social behavior. What cannot be tolerated is this callous attitude toward the dignity and well-being of the workers out here. What did you think of Alhamid's explanation of this anchor-setting business?"

Danley hesitated. "It sounded straightforward enough, as far as it went."

"You think he's concealing something, then?"

"I don't know. I don't have all the information." He frowned, putting furrows between his almost invisible blond brows. "I know that neither government business nor insurance business are my specialty, but I would like to know a little more about the background before I render any decision."

"Hm-m-m. Well." Tarnhorst frowned in thought for a moment, then came to a decision. "I can't give you the detailed data, of course; that would be a violation of the People's Mutual Welfare Code. But I can give you the general story."

"I just want to know what sort of thing to look for," Danley said.

"Certainly. Certainly. Well." Tarnhorst paused to collect his thoughts, then launched into his speech. "It has now been over eighty years since the first colonists came out here to the Belt. At first, the ties with Earth were quite strong, naturally. Only a few actually intended to stay out there the rest of their lives; most of them intended to make themselves a nice little nest egg, come back home, and retire. At the same time, the World State was slowly evolving from its original loosely tied group of independent nations toward what it is today.

"The people who came out here were mostly misfits, sociologically speaking." He smiled sardonically. "They haven't changed much.

"At any rate, as I said, they were strongly tied to Earth. There was the matter of food, air, and equipment, all of which had to be shipped out from Earth to begin with. Only the tremendous supply of metal-almost free for the taking-made such a venture commercially possible. Within twenty-five years, however, the various industrial concerns that managed the Belt mining had become self-supporting. The robot scoopers which are used to mine methane and ammonia from Jupiter's atmosphere gave them plenty of organic raw material. Now they grow plants of all kinds and even raise food animals.

"They began, as every misfit does, to complain about the taxes the government put on their incomes. The government, in my opinion, made an error back then. They wanted to keep people out in the Belt, since the mines on Earth were not only rapidly being depleted, but the mining sites were needed for living space. Besides, asteroid metals were cheaper than metals mined on Earth. To induce the colonists to remain in the Belt, no income tax was levied; the income tax was replaced by an eighty per cent tax on the savings accumulated when the colonist returned to Earth to retire.

"They resented even that. It was explained to them that the asteroids were, after all, natural resources, and that they had no moral right to make a large profit and deprive others of their fair share of the income from a natural resource, but they insisted that they had earned it and had a right to keep it.

"In other words, the then government bribed them to stay out here, and the bribe was more effective than they had intended."

"So they stayed out here and kept their money," Danley said.

"Exactly. At that time, if you will recall, there was a great deal of agitation against colonialism-there had been for a long time, as a matter of fact. That agitation was directed against certain industrialist robber-baron nations who had enslaved the populace of parts of Asia and Africa solely to produce wealth, and not for the benefit of the people themselves. But the Belt operators took advantage of the anticolonialism of the times and declared that the Belt cities were, and by right ought to be, free and independent political entities. It was a ridiculous assumption, of course, but since the various Belt cities were, at that time, under the nominal control of three or four of the larger nations, the political picture required that they be allowed to declare themselves independent. It was not anticipated at the time that they would be so resistant toward the World Government."

He smiled slightly. "Of course, by refusing to send representatives to the People's Congress, they have, in effect, cut themselves off from any voice in human government."

Then he shrugged. "At the moment, that is neither here nor there. What interests us at the moment is the death rate curve of the anchor-sinkers or whatever they are. Did you know that it is practically impossible for anyone to get a job out there in the Belt unless he has had experience in the anchor-setting field?"

"No," Danley admitted.

"It's true. For every other job, they want only men with space experience. And by 'space experience' they mean anchor-setting, because that's the only job a man can get without previous space experience. They spend six months in a special school, learning to do the work, according to our friend, Mr. Georges Alhamid. Then they are sent out to set anchors. Small ones, at first, in rocks only a few meters in diameter-then larger ones. After a year or so at that kind of work, they can apply for more lucrative positions.

"I see nothing intrinsically wrong in that, I will admit, but the indications are that the schooling, which should have been getting more efficient over the years, has evidently been getting more lax. The death rate has gone up."

"Just a minute," Danley interrupted. "Do you mean that a man has to have what they call 'space experience' before he can get any kind of job?"

Tarnhorst shook his head and was pleased to find that no nausea resulted. "No, of course not. Clerical jobs, teaching jobs, and the like don't require that sort of training. But there's very little chance for advancement unless you're one of the elite. A physician, for example, wouldn't have many patients unless he had had 'space experience'; he wouldn't be allowed to own or drive a space boat, and he wouldn't be allowed to go anywhere near what are called 'critical areas'-such as air locks, power plants, or heavy industry installations."

"It sounds to me as though they have a very strong union," said Danley.

"If you want to call it that, yes," Tarnhorst said. "Anything that has anything to do with operations in space requires that sort of experience-and there are very few jobs out here that can avoid having

anything to do with space. Space is only a few kilometers away." The expression on his face showed that he didn't much care for the thought.

"I don't see that that's so bad," Danley said. "Going out there isn't something for the unexperienced. A man who doesn't know what he's doing can get himself killed easily, and, what's worse, he's likely to take others with him."

"You speak, of course, from experience," Tarnhorst said with no trace of sarcasm. "I accept that. By not allowing inexperienced persons in critical areas, the Belt Companies are, at least indirectly, looking out for the welfare of the people. But we mustn't delude ourselves into thinking that that is their prime objective. These Belt Companies are no better than the so-called 'industrial giants' of the nineteenth and twentieth centuries. The government here is farcical. The sole job is to prevent crime and to adjudicate small civil cases. Every other function of proper government-the organization of industry, the regulation of standards the subsidizing of research, the control of prices, and so on-are left to the Belt Companies or to the people. The Belt Cities are no more than what used to be called 'company towns'."

"I understand that," Danley said. "But they seem to function fairly smoothly."

Tarnhorst eyed him. "If, by, 'smoothly functioning', you mean the denial of the common rights of human freedom and dignity yes. Oh, they give their sop to such basic human needs as the right of every individual to be respected-but only because Earth has put pressure on them. Otherwise, people who, through no fault of their own, were unable to work or get 'space experience' would be unable to get jobs and would be looked down upon as pariahs."

"You mean there are people here who have no jobs? I wouldn't think that unemployment would be a problem out here."

"It isn't," said Tarnhorst, "yet. But there are always those unfortunates who are psychologically incapable of work, and society must provide for them. The Belt Cities provide for a basic education, of course. As long as a person is going to school, he is given a stipend. But a person who has neither the ability to work nor the ability to study is an outcast, even though he is provided for by the companies. He is forced to do something to earn what should be his by right; he is given menial and degrading tasks to do. We would like to put a stop to that sort of thing, but we ... ah ... have no ... ah ... means of doing so." He paused, as though considering whether he had said too much.

"The problem at hand," he went on hurriedly, "is the death curve. When this technique for taking the rocks to the smelters was being worked out, the death rate was-as you might imagine-quite high. The Belt Companies had already been operating out here for a long time before the stony meteorites were mined commercially. At first, the big thing was nickel-iron. That's what they came here to get in the beginning. That's where most of the money still is. But the stony asteroids provide them with their oxygen.

"This anchor-setting technique was worked out at a time when the Belt Companies were trying to find ways to make the Belt self-sufficient. After they got the technique worked out so that it operated smoothly, the death rate dropped 'way down. It stayed down for a little while, and then began to rise again. It has nearly reached an all-time high. Obviously, something is wrong, and we have to find out what it is."

Danley scratched ruminatively behind his right ear and wished he'd had the opportunity to study history. He had been vaguely aware, of the broad outlines, but the details had never been brought to his attention before. "Suppose Alhamid is trying to hide something," he said after a moment. "What would it be, do you think?"

Tarnhorst shrugged and spread his hands. “What could it be but some sort of money-saving scheme? Inferior materials being used at a critical spot, perhaps. Skimping on quality or quantity. Somewhere, somehow, they are shaving costs at the risk of the workers’ lives. We have to find out what it is."

Peter Danley nodded. You don't mean “we,” Danley thought to himself. I am the one who's going to have to go out there and find it, while you sit here safe. He felt that there was a pretty good chance that these Belt operators might kill him to keep him from finding out what it was they were saving money on.

Aloud, he said: “I'll do what I can, Mr. Tarnhorst."

Tarnhorst smiled. “I'm certain you will. That's why I needed someone who knows more about this business than I."

"And when we do find it-what then?"

"Then? Why, then we will force them to make the proper changes or there will be trouble."

* * * *

Georges Alhamid heard the whole conversation early the next morning. The governor himself brought the recording over to his office.

"Do you think he knew he was being overheard?"

The governor shrugged. “Who knows. He waltzed all around what he was trying to say, but that may have been just native caution. Or he may not want Danley to know what's on his mind."

"How could he bring Danley out here without telling him anything beforehand?” Alhamid asked thoughtfully. “Is Danley really that ignorant, or was the whole conversation for our ears?"

"I'm inclined to think that Danley really didn't know. Remember, George, the best way to hold down the ones below you is to keep them from gaining any knowledge, to keep data out of their hands-except for the carefully doctored data you want them to have."

"I know,” Alhamid said. “History isn't exactly a popular subject on Earth.” He tapped his fingers gently on the case of the playback and looked at it as if he were trying to read the minds of the persons who had spoken the words he had just heard.

"I really think he believed that his nullifying equipment was doing its job,” the governor continued. “He wouldn't have any way of knowing we could counteract it."

Alhamid shrugged. “It doesn't matter much. We still have to assume that he's primarily out to bring the Belt Cities under Earth control. To do that, all he'd have to do is find something that could be built up into a scandal on Earth."

"Not, all, George,” the governor said. “It would take a lot more than that alone. But it would certainly be a start in the right direction."

"One thing we do know,” Alhamid said, “is that nobody on Earth will allow any action against the Belt unless popular sentiment is definitely against us. As long as we are apparently right-thinking people, we're all right. I wonder why Tarnhorst is so anxious to get us under the thumb of the People's Congress? Is it

purely that half-baked idealism of his?"

"Mostly. He has the notion that everybody has a right to be accorded the respect of his fellow man, and that that right is something that every person is automatically given at birth, not something he has to earn. What gave him his particular gripe against us, I don't know, but he's been out to get us ever since his trip here three years ago."

"You know, Larry," Alhamid said slowly, "I'm not quite sure which is harder to understand: How a whole civilization could believe that sort of thing, or how a single intelligent man could."

"It's a positive feedback," the governor said. "That sort of thing has wrecked civilizations before and will do it again. Let's not let it wreck ours. Are you ready for the conference with our friend now?"

Georges Alhamid looked at the clock on the wall. "Ready as I'll ever be. You'd better scram, Larry. We mustn't give Mr. Tarnhorst the impression that there's some sort of collusion between business and government out there in the Belt."

"Heaven forfend! I'll get."

When he left, the governor took the playback with him. The recording would have to be filed in the special secret files.

* * * *

Captain St. Simon eased his spaceboat down to the surface of Pallas and threw on the magnetic anchor which held the little craft solidly to the metal surface of the landing field. The traffic around Pallas was fairly heavy this time of year, since the planetoid was on the same side of the sun as Earth, and the big cargo haulers were moving in and out, loading refined metals and raw materials, unloading manufactured goods from Earth. He'd had to wait several minutes in the traffic pattern before being given clearance for anchoring.

He was already dressed in his vacuum suit, and the cabin of the boat was exhausted of its air. He checked his control board, making sure every switch and dial was in the proper position. Only then did he open the door and step out to the gray surface of the landing field. His suitcase-a spherical, sealed container that the Belt men jokingly referred to as a "bomb"-went with him. He locked the door of his boat and walked down the yellow-painted safety lane toward the nearest air lock leading into the interior of the planetoid.

He lifted his feet and set them down with precision-nobody but a fool wears glide boots on the outside. He kept his eyes moving-up and around, on both sides, above, and behind. The yellow path was supposed to be a safety lane, but there was no need of taking the chance of having an out-of-control ship come sliding in on him. Of course, if it was coming in really fast, he'd have no chance to move; he might not even see it at all. But why get slugged by a slow one?

He waited outside the air-lock door for the green light to come on. There were several other space-suited figures around him, but he didn't recognize any of them. He hummed softly to himself.

The green light came on, and the door of the air lock slid open. The small crowd trooped inside, and, after a minute, the door slid shut again. As the elevator dropped, St. Simon heard the familiar whoosh as the air came rushing in. By the time it had reached the lower level, the elevator was up to pressure.

* * * *

On Earth, there might have been a sign in such an elevator, reading: DO NOT REMOVE VACUUM SUITS IN ELEVATOR. There was no need for it here; every man there knew how to handle himself in an air lock. If he hadn't, he wouldn't have been there.

After he had stepped out of the elevator, along with the others, and the door had closed behind him, St. Simon carefully opened the cracking valve on his helmet. There was a faint hiss of incoming air, adjusting the slight pressure differential. He took off his helmet, tucked it under his arm, and headed for the check-in station.

He was walking down the corridor toward the checker's office when a hand clapped him on the shoulder. “Bless me if it isn't St. Simon the Silent! Long time no, if you'll pardon the cliche, see!"

St. Simon turned, grinning. He had recognized the voice. “Hi, Kerry. Good to see you."

"Good to see me? Forsooth! Od's bodkins! Hast turned liar on top of everything else, Good Saint? Good to see me, indeed! ‘From such a face and form as mine, the noblest sentiments sound like the black utterances of a depraved imagination.’ No, dear old holy pillar-sitter, no indeed! It may be a pleasure to hear my mellifluous voice-a pleasure I often indulge in, myself-but it couldn't possibly be a pleasure to see me!” And all the while, St. Simon was being pummeled heartily on the shoulder, while his hand was pumped as though the other man was expecting to strike oil at any moment.

His assailant was not a handsome man. Years before, a rare, fast-moving meteor had punched its way through his helmet and taken part of his face with it. He had managed to get back to his ship and pump air in before he lost consciousness. He had had to stay conscious, because the only thing that held the air in his helmet had been his hand pressed over the quarter-inch hole. Even so, the drop in pressure had done its damage. The surgeons had done their best to repair the smashed face, but Kerry Brand's face hadn't been much to look at to begin with. And the mottled purple of the distended veins and capillaries did little to improve his looks.

But his ruined face was a badge of honor, and Kerry Brand knew the fact as well as anyone.

Like St. Simon, Captain Brand was a professional anchor-setter. Most of the men who put in the necessary two years went on to better jobs after they had the required space experience. But there were some who liked the job and stuck with it. It was only these men-the real experts among the anchor-setting fraternity-who rated the title of “Captain". They were free-lancers who ran things pretty much their own way.

"Just going to the checker?” St. Simon asked.

Kerry Brand shook his head. “I've already checked in, old sanctus. And I'll give you three and one-seventh guesses who got a blue ticket."

St. Simon said nothing, but he pointed a finger at Brand's chest.

"A mild surmise, but a true one,” said Brand. “You are, indeed, gazing upon Professor Kerry Brand, B.A., M.A., Ph.D.-that is to say, Borer of Asteroids, Master of Anchors, and Planetoid-hauler De-luxe. No, no; don't look sorry for me. Somebody has to teach the tadpoles How To Survive In Space If You're Not Too Stupid To Live-a subject upon which I am an expert."

"On Being Too Stupid To Live?” St. Simon asked gently.

"A touch! A distinct touch! You are developing a certain unexpected vein of pawky humor, Watson, against which I must learn to guard myself." He looked at the watch on his wrist. "Why don't you go ahead and check in, and then we'll go pub-crawling. I have it on good authority that a few thousand gallons of Danish ale were piped aboard Pallas yesterday, and you and I should do our best to reduce the surplus."

"Sounds good to me," said St. Simon agreeably. They started on toward the checker's office.

"Consider, my dear St. Simon," said Brand, "how fortunate we are to be living in an age and a society where the dictum, 'Those who can, do; those who can't, teach,' no longer holds true. It means that we weary, work-hardened experts are called in every so often, handed our little blue ticket, and given six months off-with pay-if we will only do the younger generation the favor of pounding a modicum of knowledge into their heads. During that time, if we are very careful, we can try to prevent our muscles from going to flab and our brains from corroding with ennui, so that when we again debark into the infinite sea of emptiness which surrounds us to pursue our chosen profession, we don't get killed on the first try. Isn't it wonderful?"

"Cheer up," said St. Simon. "Teaching isn't such a bad lot. And, after all, you do get paid for it."

"And at a salary! A Pooh-Bah paid for his services! I a salaried minion! But I do it! It revolts me, but I do it!"

The short, balding man behind the checker's desk looked up as the two men approached. "Hello, captain," he said as St. Simon stepped up to the desk.

"How are you, Mr. Murtaugh?" St. Simon said politely. He handed over his log book. "There's the data on my last ten. I'll be staying here for a few days, so there's no need to rush the refill requisition. Any calls for me?"

The checker put the log book in the duplicator. "I'll see if there are, captain." He went over to the autofile and punched St. Simon's serial number.

Very few people write to an anchor man. Since he is free to check in and reload at any of the major Belt Cities, and since, in his search for asteroids, his erratic orbit is likely to take him anywhere, it might be months or years before a written letter caught up with him. On the other hand, a message could be beamed to every city, and he could pick it up wherever he was. It cost money, but it was sure.

"One call," the checker said. He handed St. Simon a message slip.

It was unimportant. Just a note from a girl on Vesta. He promised himself that he'd make his next break at Vesta, come what may. He stuck the flimsy in his pocket, and waited while the checker went through the routine of recording his log and making out a pay voucher.

There was no small talk between himself and the checker. Mr. Murtaugh had not elected to take the schooling necessary to qualify for other than a small desk job. He had no space experience. Unless and until he did, there would be an invisible, but nonetheless real barrier between himself and any spaceman. It was not that St. Simon looked down on the man, exactly; it was simply that Murtaugh had not proved himself, and, therefore, there was no way of knowing whether he could be trusted or not. And since trust is a positive quality, lack of it can only mean mistrust.

Murtaugh handed Captain St. Simon an envelope. "That's it, captain. Thank you."

St. Simon opened the envelope, took out his check-and a blue ticket.

Kerry Brand broke into a guffaw.

* * * *

When the phone on his desk rang, Georges Alhamid scooped it up and identified himself.

"This is Larry, George," said the governor's voice. "How are things so far?"

"So far, so good," Alhamid said. "For the past week, Mr. Peter Danley has been working his head off, under the tutelage of two of the toughest, smartest anchor men in the business. But you should have seen the looks on their faces when I told them they were going to have an Earthman for a pupil."

The governor laughed. "I'll bet! How's he coming along?"

"He's learning. How are you doing with your pet?"

"I think I'm softening him, George. I found out what it was that got his goat three years ago."

"Yeah?"

"Sure. On Ceres, where he went three years ago, he was treated as if he weren't as good as a Belt man."

Alhamid frowned. "Someone was disrespectful?"

"No-that is, not exactly. But he was treated as if we didn't trust his judgment, as though we were a little bit afraid of him."

"Oh-ho! I see what you mean."

"Sure. We treated him just as we would anyone who hasn't proved himself. And that meant we were treating him the same way we treated our own 'lower classes', as he thought of them. I had Governor Holger get his Ceres detectives to trace down everything that happened. You can read the transcript if you want. There's nothing particularly exciting in it, but you can see the pattern if you know what to look for.

"I'm not even certain it was fully conscious on his part; I'm not sure he knew why he disliked us. All he was convinced of was that we were arrogant and thought we were better than he is. It's kind of hard for us to see that a person would be that deeply hurt by seeing the plain truth that someone else is obviously better at something than he is, but you've got to remember that an Earthman is brought up to believe that every person is just exactly as good as every other-and no better. A man may have a skill that you don't have, but that doesn't make him superior-oh, my, no!

"Anyway, I started out by apologizing for our habit of standing up all the time. I managed to plant the idea in his mind that the only thing that made him think we felt superior was that habit. I've even got him to the point where he's standing up all the time, too. Makes him feel very superior. He's learned the native customs."

"I get you," Alhamid said. "I probably contributed to that inferiority feeling of his myself."

"Didn't we all? Anyway, the next step was to take him around and introduce him to some of the execs in the government and in a couple of the Companies-I briefed 'em beforehand. Friendly chats-that sort of thing. I think we're going to have to learn the ancient art of diplomacy out here if we're going to survive, George.

"The crowning glory came this afternoon. You should have been there."

"I was up to here in work, Larry. I just couldn't take the time off to attend a club luncheon. Did the great man give his speech?"

"Did he? I should hope to crack my helmet he did! We must all pull together, George, did you know that? We must care for the widow and the orphan-and the needy, George, the needy. We must be sure to provide the fools, the idiots, the malingerers, the moral degenerates, and such useful, lovable beings as that with the necessities and the luxuries of life. We must see to it that they are respected and permitted to have their dignity. We must see to it that the dear little things are permitted the rights of a human being to hold his head up and spit in your eye if he wishes. We must see to it that they be fruitful, multiply, and replenish the Earth."

"They've already done that," Alhamid said caustically. "And they can have it. Let's just see that they don't replenish the Belt. So what happened?"

"Why, George, you'll never realize how much we appreciated that speech. We gave him a three-minute rising ovation. I think he was surprised to see that we could stand for three minutes under a one-gee pull in the centrifuge. And you should have seen the smiles on our faces, George."

"I hope nobody broke out laughing."

"We managed to restrain ourselves," the governor said.

"What's next on the agenda?"

"Well, it'll be tricky, but I think I can pull it off. I'm going to take him around and show him that we do take care of the widow and the orphan, and hope that he assumes we are as solicitous toward the rest of his motley crew. Wish me luck."

"Good luck. You may need it."

"Same to you. Take care of Danley."

"Don't worry. He's in good hands. See you, Larry."

"Right."

* * * *

There were three space-suited men on the bleak rocky ground near the north pole of Pallas, a training area of several square miles known as the North Forty. Their helmets gleamed in the bright, hard light from a sun that looked uncomfortably small to an Earthman's eyes. Two of the men were standing, facing each other some fifteen feet apart. The third, attached to them by safety lines, was hanging face down above the surface, rising slowly, like a balloon that has almost more weight than it can lift.

"No, no, no, Mr. Danley! You are not crawling, Mr. Danley, you are climbing! Do you understand that? Climbing! You have to climb an asteroid, just as you would climb a cliff on Earth. You have to hold on every second of the time, or you will fall off!" St. Simon's voice sounded harsh in Danley's earphones, and he felt irritatingly helpless poised floatingly above the ground that way.

His instructors were well anchored by metal eyes set into the rocky surface for just that purpose. Although Pallas was mostly nickel-iron, this end of it was stony, which was why it had been selected as a training ground.

"Well?" snapped St. Simon. "What do you do now? If this were a small rock, you'd be drifting a long ways away by now. Think, Mr. Danley, think."

"Then shut up and let me think!" Danley snarled.

"If small things distract you from thinking about the vital necessity of saving your own life, Mr. Danley, you would not live long in the Belt."

Danley reached out an arm to see if he could touch the ground. When he had pushed himself upwards with a thrust of his knee, he hadn't given himself too hard a shove. He had reached the apex of his slow flight, and was drifting downward again. He grasped a jutting rock and pulled himself back to the surface.

"Very good, Mr. Danley-but that wouldn't work on a small rock. You took too long. What would you have done on a rock with a millionth of a gee of pull?"

Danley was silent.

"Well?" St. Simon barked. "What would you do?"

"I ... I don't know," Danley admitted.

"Ye gods and little fishhooks!" This was Kerry Brand's voice. It was supposed to be St. Simon's turn to give the verbal instructions, but Brand allowed himself an occasional remark when it was appropriate.

St. Simon's voice was bitingly sweet. "What do you think those safety lines are for, Mr. Danley? Do you think they are for decorative purposes?"

"Well ... I thought I was supposed to think of some other way. I mean, that's so obvious—"

"Mr. Danley," St. Simon said with sudden patience, "we are not here to give you riddles to solve. We're here to teach you how to stay alive in the Belt. And one of the first rules you must learn is that you will never leave your boat without a safety line. Never!

"An anchor man, Mr. Danley, is called that for more than one reason. You cannot anchor your boat to a rock unless there is an eye-bolt set in it. And if it already has an eye-bolt, you would have no purpose on that rock. In a way, you will be the anchor of your boat, since you will be tied to it by your safety line. If the boat drifts too far from your rock while you are working, it will pull you off the surface, since it has more mass than you do. That shouldn't be allowed to happen, but, if it does, you are still with your boat, rather than deserted on a rock for the rest of your life-which wouldn't be very long. When the power unit in your suit ran out of energy, it would stop breaking your exhaled carbon dioxide down into carbon and oxygen, and you would suffocate. Even with emergency tanks of oxygen, you would soon find yourself freezing to death. That sun up there isn't very warm, Mr. Danley."

Peter Danley was silent, but it was an effort to remain so. He wanted to remind St. Simon that he, Danley, had been a spaceman for nearly fifteen years. But he was also aware that he was learning things that weren't taught at Earthside schools. Most of his professional life had been spent aboard big, comfortable ships that made the short Earth-Luna hop. He could probably count the total hours he had spent in a spacesuit on the fingers of his two hands.

"All right, Mr. Danley; let's begin again. Climb along the surface. Use toeholds, handholds, and fingerholds. Feel your way along. Find those little crevices that will give you a grip. It doesn't take much. You're a lot better off than a mountain climber on Earth because you don't have to fight your weight. You have only your mass to worry about. That's it. Fine. Very good, Mr. Danley."

* * * *

And, later:

"Now, Mr. Danley," said Captain Brand, "you are at the end of your tether, so to speak."

The three men were in a space boat, several hundred miles from Pallas. Or, rather, two of them were in the boat, standing at the open door. Peter Danley was far out from it, at the end of his safety line.

"How far are you from us, Mr. Danley?" Brand asked.

"Three hundred meters, Captain Brand," Danley said promptly.

"Very good. How do you know?"

"I am at the end of my safety line, which is three hundred meters long when fully extended."

"Your memory is excellent, Mr. Danley. Now, how will you get back to the boat?"

"Pull myself hand over hand along the line."

"Think, Mr. Danley! Think!"

"Uh. Oh. Well, I wouldn't keep pulling. I'd just give myself a tug and then coast in, taking up the line slowly as I went."

"Excellent! What would happen if you, as you put it, pulled yourself in hand over hand, as if you were climbing a rope on Earth?"

"I would accelerate too much," Danley said. "I'd gain too much momentum and probably bash my brains out against the boat. And I'd have no way to stop myself."

"Bully for you, Mr. Danley! Now see if you can put into action that which you have so succinctly put into words. Come back to the boat. Gently the first time. We'll have plenty of practice, so that you can get the feel of the muscle pull that will give you a maximum of velocity with a minimum of impact at this end. Gently, now."

* * * *

Still later:

"Judgment, Mr. Danley!" St. Simon cautioned. "You have to use judgment! A space boat is not an automobile. There is no friction out here to slow it to a stop. Your accelerator is just exactly that-an accelerator. Taking your foot off it won't slow you down a bit; you've got to use your reverse."

Peter Danley was at the controls of the boat. There were tiny beads of perspiration on his forehead. Over a kilometer away was a good-sized hunk of rock; his instructors wouldn't let him get any closer. They wanted to be sure that they could take over before the boat struck the rock, just in case Danley should freeze to the accelerator a little too long.

He wasn't used to this sort of thing. He was used to a taped acceleration-deceleration program which lifted a big ship, aimed it, and went through the trip all automatically. All he had ever had to do was drop it the last few hundred feet to a landing field.

"Keep your eyes moving," St. Simon said. "Your radar can give you data that you need, just remember that it can't think for you."

Your right foot controls your forward acceleration.

Your left foot controls your reverse acceleration.

They can't be pushed down together; when one goes down, the other goes up. Balance one against the other.

Turning your wheel controls the roll of the boat.

Pulling your wheel toward you, or pushing it away, controls the pitch.

Shifting the wheel left, or right, controls the yaw.

The instructions had been pounded into his head until each one seemed to ring like a separate little bell. The problem was coordinating his body to act on those instructions.

One of the radar dials told him how far he was from the rock. Another told him his radial velocity relative to it. A third told him his angular velocity.

"Come to a dead stop exactly one thousand meters from the surface, Mr. Danley," St. Simon ordered.

Danley worked the controls until both his velocity meters read zero, and the distance meter read exactly one kilometer.

"Very good, Mr. Danley. Now assume that the surface of your rock is at nine hundred ninety-five meters. Bring your boat to a dead stop exactly fifty centimeters from that surface."

Danley worked the controls again. He grinned with satisfaction when the distance meter showed nine nine five point five on the nose.

Captain St. Simon sighed deeply. "Mr. Danley, do you feel a little shaken up? Banged around a little? Do you feel as though you'd just gotten a bone-rattling shock?"

"Uh ... no."

"You should. You slammed this boat a good two feet into the surface of that rock before you backed out again." His voice changed tone. "Dammit, Mr. Danley, when I say 'surface at nine nine five', I mean surface!"

* * * *

Edway Tarnhorst had been dictating notes for his reports into his recorder, and was rather tired, so when he asked Peter Danley what he had learned, he was rather irritated when the blond man closed his blue eyes and repeated, parrotlike:

"Due to the lack of a water-oxygen atmosphere, many minerals are found in the asteroids which are unknown on Earth. Among the more important of these are: Oldhamite (CaS); Daubreelite (FECr{2}S{4}); Schreibersite and Rhabdite (Fe{3}Ni{3}P); Lawrencite (FeCl{2}); and Taenite, an alloy of iron containing—"

"That's not precisely the sort of thing I meant," Tarnhorst interrupted testily.

Danley smiled. "I know. I'm sorry. That's my lesson for tomorrow."

"So I gathered. May I sit down?" There were only two chairs in the room. Danley was occupying one, and a pile of books was occupying the other.

Danley quickly got to his feet and began putting the books on his desk. "Certainly, Mr. Tarnhorst. Sit down."

Tarnhorst lowered himself into the newly emptied chair. "I apologize for interrupting your studies," he said. "I realize how important they are. But there are a few points I'd like to discuss with you."

"Certainly." Danley seated himself and looked at the older man expectantly. "The nullifiers are on," he said.

"Of course," Tarnhorst said absently. Then, changing his manner, he said abruptly: "Have you found anything yet?"

Danley shook his head. "No. It looks to me as though they've done everything possible to make sure that these men get the best equipment and the best training. The training instructors have been through the whole affair themselves-they know the ropes. The equipment, as far as I can tell, is top grade stuff. From what I have seen so far, the Company isn't stinting on the equipment or the training."

Tarnhorst nodded. "After nearly three months of investigation, I have come to the same conclusion myself. The records show that expenditures on equipment has been steadily increasing. The equipment they have now, I understand, is almost failure-proof?" He looked questioningly at Danley.

Danley nodded. "Apparently. Certainly no one is killed because of equipment failure. It's the finest stuff I've ever seen."

"And yet," Tarnhorst said, "their books show that they are constantly seeking to improve it."

"I don't suppose there is any chance of juggling the books on you, is there?"

Tarnhorst smiled a superior smile. "Hardly. In the first place, I know bookkeeping. In the second, it would be impossible to whip up a complete set of balancing books-covering a period of nearly eighty

years-overnight.

"I agree," Danley said. "I don't think they set up a special training course just for me overnight, either. I've seen classes on Vesta, Juno, and Eros-and they're all the same. There aren't any fancy false fronts to fool us, Mr. Tarnhorst: I've looked very closely."

"Have you talked to the men?"

"Yes. They have no complaints."

Again Tarnhorst nodded. "I have found the same thing. They all insist that if a man gets killed in space, it's not the fault of anyone but himself. Or, as it may be, an act of God."

"One of my instructors ran into an act of God some years ago," Danley said. "You've met him. Brand-the one with the scarred face." He explained to Tarnhorst what had caused Brand's disfigurement. "But he survived," he finished, "because he kept his wits about him even after he was hit."

"Commendable; very commendable," Tarnhorst said. "If he'd been an excitable fool, he'd have died."

"True. But what I was trying to point out was that it wasn't equipment failure that caused the accident."

"No. You're quite right." Tarnhorst was silent for a moment, then he looked into Danley's eyes. "Do you think you could take on a job as anchor man now?"

"I don't know," said Danley evenly. "But I'm going to find out tomorrow."

* * * *

Peter Danley took his final examination the following day. All by himself, he went through the procedure of positioning his ship, setting up a rocket drill, firing it, and setting in an anchor. It was only a small rock, nine meters through, but the job was almost the same as with the big ones. Not far away, Captain St. Simon watched the Earthman's procedure through a pair of high-powered field glasses. He breathed a deep sigh of relief when the job was done.

"Jules," he said softly, "I am sure glad that man didn't hurt himself any."

"Yes, suh! We'd of sho' been in trouble if he'd of killed hisself!"

"We will have to tell Captain Brand that our pupil has done pretty well for such a small amount of schooling."

"I think that would be proper, m'lud."

"And we will also have to tell Captain Brand that this boy wouldn't last a month. He wouldn't come back from his first trip."

There was no answer to that.

* * * *

Three days later, amid a cloud of generally satisfied feelings, Edway Tarnhorst and Peter Danley took the ship back to Earth.

"I cannot, of course, give you a copy of my report," Tarnhorst had told Georges Alhamid. "That is for the eyes of the Committee only. However, I may say that I do not find the Belt Companies or the governments of the Belt Cities at fault. Do you want to know my personal opinion?"

"I would appreciate it, Mr. Tarnhorst," Georges had said.

"Carelessness. Just plain carelessness on the part of the workers. That is what has caused your rise in death rates. You people out here in the Belt have become too used to being in space. Familiarity breeds contempt, Mr. Alhamid.

"Steps must be taken to curb that carelessness. I suggest a publicity campaign of some kind. The people must be thoroughly indoctrinated in safety procedures and warned against carelessness. Just a few months of schooling isn't enough, Mr. Alhamid. You've got to start pounding it into their heads early.

"If you don't—" He shook his head. (He had grown used to doing so in low gravity by now.) "If the death rate isn't cut down, we shall have to raise the premium rates, and I don't know what will happen on the floor of the People's Congress. However, I think I can guarantee six months to a year before any steps are taken. That will give you time to launch your safety campaign. I'm certain that as soon as this carelessness is curbed, the claims will drop down to their former low point."

"We'll certainly try that," Alhamid had said heartily. "Thank you very much, Mr. Tarnhorst."

When they had finally gone, Alhamid spoke to the governor.

"That's that, Larry. You can bring it up at the next meeting of the Board of Governors. Get some kind of publicity campaign going. Plug safety. Tell 'em carelessness is bad. It can't hurt anything and actually might help, who knows?"

"What are you going to do at your end?"

"What we should have done long ago: finance the insurance ourselves. For the next couple of years, we'll only make death claims to Earth for a part of the total. We'll pay off the rest ourselves. Then we'll tell 'em we've brought the cost down so much that we can afford to do our own insurance financing.

"We let this insurance thing ride too long, and it has damn near got us in a jam. We needed the income from Earth. We still could use it, but we need our independence more."

"I second the motion," the governor said fervently. "Look, suppose you come over to my place tonight, and we'll work out the details of this report. O.K.? Say at nine?"

"Fine, Larry. I'll see you then."

Alhamid went back to his office. He was met at the door by his secretary, who handed him a sealed envelope. "The Earthman left this here for you. He said you'd know what to do with it."

Alhamid took the envelope and looked at the name on the outside. "Which Earthman?" he asked.

"The young one," she said, "the blond one."

"It isn't even addressed to me," Alhamid said with a note of puzzled speculation in his voice.

"No. I noticed that. I told him he could send it straight to the school, but he said you would know how to handle it."

Alhamid looked at the envelope again, and his eyes narrowed a little. “Call Captain St. Simon, will you? Tell him I would like to have him come to my office. Don't mention this letter; I don't want it breezed all over Pallas."

It was nearly twenty minutes before St. Simon showed up. Alhamid handed him the envelope. “You have a message from your star pupil. For some reason, he wanted me to deliver it to you. I have a hunch you'll know what that reason is after you read it.” He grinned. “I'd appreciate it if you'd tell me when you find out. This Mr. Danley has worried me all along."

St. Simon scowled at the envelope, then ripped off one end and took out the typed sheets. He read them carefully, then handed them over to Alhamid. “You'd better read this yourself, George."

Georges Alhamid took the pages and began to read.

Dear Captain St. Simon:

I am addressing this to you rather than anyone else because I think you will understand more than anyone else. Captain Brand is a fine person, but I have never felt very much at ease with him. (I won't go into the psychological reasons that may exist, other than admit that my reasons are purely emotional. I don't honestly know how much they are based on his disfigurement.) Mr. Alhamid is almost a stranger to me. You are the only Belt man I feel I know well.

First, I want to say that I honestly enjoyed our three months together. There were times when I could have cheerfully bashed your head in, I'll admit, but the experience has left me feeling more like a real human being, more like a person in my own right, than I have ever felt before in my life. Believe me, I appreciate it deeply. I know now that I can do things on my own without being dependent on the support of a team or a committee, and for that I am grateful.

Tarnhorst has heard my report and accepted it. His report to the People's Congress will lay the entire blame for the death rate rise on individual carelessness rather than on any fault of management.

I think, in the main, I am justified in making such a report to Tarnhorst, although I am fully aware that it is incomplete. I know that if I had told him the whole truth there would be a ruckus kicked up on Earth that would cause more trouble in the Belt than I'd care to think about. I'm sure you're as aware of the political situation as I am.

You see, I know that anchor-setting could be made a great deal safer. I know that machines could be developed which would make the job so nearly automatic that the operator would never be exposed to any more danger than he would be in a ship on the Earth-Luna run. Perhaps that's a little exaggerated, but not much.

What puzzled me was: Why? Why shouldn't the Companies build these machines if they were more efficient? Why should every Belt man defend the system as it was? Why should men risk their necks when they could demand better equipment? (I don't mean that the equipment presently used is poor; I just mean that full mechanization would do away with the present type of equipment and replace it with a different type.)

Going through your course of instruction gave me the answer to that, even though I didn't take the full

treatment.

All my life, I've belonged to an organization of some kind-the team, the crew, whatever it might be. But the Team was everything, and I was recognized only as a member of the Team. I was a replaceable plug-in unit, not an individual in my own right. I don't know that I can explain the difference exactly, but it seems to me that the Team is something outside of which the individual has no existence, while the men of the Belt can form a team because they know that each member is self-sufficient in his own right.

On Earth, we all depend on the Team, and, in the long run, that means that we are depending on each other-but none of us feels he can depend on himself. Every man hopes that, as a member of the Team, he will be saved from his own errors, his own failures. But he knows that everyone else is doing the same thing, and, deep down inside, he knows that they are not deserving of his reliance. So he puts his reliance in the Team, as if that were some sort of separate entity in itself, and had magical, infallible powers that were greater than the aggregate of the individuals that composed it.

In a way, this is certainly so, since teamwork can accomplish things that mobs cannot do. But the Team is a failure if each member assumes that he, himself, is helpless and can do nothing, but that the Team will do it for him.

Men who have gone through the Belt training program, men who have "space experience," as you so euphemistically put it, are men who can form a real team, one that will get things done because each man knows he can rely on the others, not only as a team, but as individuals. But to mechanize the anchor-setting phase would destroy all that completely.

I don't want to see that destroyed, because I have felt what it is to be a part of the Belt team, even though only a small and unreliable part. Actually, I know I was not and could never be a real member of that team, but I was and am proud to have scrimmaged with the team, and I'm glad to be able to sit on the side-lines and cheer even if I can't carry the ball. (It just occurred to me that those metaphors might be a little cloudy to you, since you don't have football in the Belt, but I think you see what I mean.) I imagine that most of the men who have no "space experience" feel the same way. They know they'd never make a go of it out in space, but they're happy to be water boys.

I wish I could stay in the Belt. I'm enough of a spaceman to appreciate what it really is to be a member of a space society. But I also know that I'd never last. I'm not fitted for it, really. I've had a small taste of it, but I know I couldn't take a full dose. I've worked hard for the influence and security I have in my job, and I couldn't give it up. Maybe this brands me as a coward in your eyes, and maybe I am a coward, but that's the way I'm built. I hope you'll take that into account when you think of me.

At any rate, I have done what I have done. On Earth, there are men who envy you and hate you, and there will be others who will try to destroy you, but I have done what I could to give you a chance to gain the strength you need to resist the encroachment of Earth's sickness.

I have a feeling that Tarnhorst saw your greatness, too, although he'd never admit it, even to himself. Certainly something changed him during the last months, even though he doesn't realize it. He came out wanting to help-and by that, he meant help the common people against the "tyranny" of the Companies. He still wants to help the common people, but now he wants to do it through the Companies. The change is so subtle that he doesn't think he's changed at all, but I can see it.

I don't deserve any thanks for what I have done. All I have done is repay you in the only way I knew how for what you have done for me. I may never see you again, captain, but I will always remember you. Please convey my warmest regards to Captain Brand and to Mr. Alhamid.

Sincerely,

Peter Danley

* * * *

Georges Alhamid handed the letter back to St. Simon. “There's your star pupil,” he said gently.

St. Simon nodded. “The wise fool. The guy who's got sense enough to know that he isn't competent to do the job."

"Did you notice that he waltzed all around the real reason for the anchor-setting program without quite hitting it?"

St. Simon smiled humorlessly. “Sure. Notice the wording of the letter. He still thinks in terms of the Team, even when he's trying not to. He thinks we do this just to train men to have a real good Team Spirit. He can't see that that is only a very useful by-product."

"How could he think otherwise?” Alhamid asked. “To him, or to Tarnhorst, the notion of deliberately tailoring a program so that it would kill off the fools and the incompetents, setting up a program that will deliberately destroy the men who are dangerous to society, would be horrifying. They would accuse us of being soulless butchers who had no respect for the dignity of the human soul."

"We're not butchering anybody,” St. Simon objected. “Nobody is forced to go through two years of anchor setting. Nobody is forced to die. We're not running people into gas chambers or anything like that."

"No; of course not. But would you expect an Earthman like Tarnhorst to see the difference? How could we explain to him that we have no objection to fools other than that we object to putting them in positions where they can harm others by their foolishness? Would you expect him to understand that we must have a method of eliminating those who are neither competent enough to be trusted with the lives of others nor wise enough to see that they are not competent? How would you tell him that the reason we send men out alone is so that if he destroys anyone by his foolishness-after we have taught him everything we know in the best way we know how-he will only destroy himself?"

"I wouldn't even try,” St. Simon said. “There's an old saying that neither money, education, liquor, nor women ever made a fool of a man, they just give a born fool a chance to display his foolishness. Space ought to be added to that list."

"Did you notice something else about that letter?” Alhamid asked. “I mean, the very fact that he wrote a letter instead of telling you personally?"

"Sure. He didn't trust me. He was afraid I, or someone else, would dispose of him if we knew he knew our secret."

"I think that's it,” Alhamid agreed. “He wanted to be safely away first."

"Killing him would have brought down the biggest investigation the Earth Congress has launched since the crack-up of the Earth-Luna ship thirty years ago. Does he think we are fools?"

"You can't blame him. He's been brought up that way, and three months of training isn't going to change

him."

St. Simon frowned. “Suppose he changes his mind? Suppose he tells Tarnhorst what he thinks?"

"He won't. He's told his lie, and now he'll have to stick by it or lose his precious security. If he couldn't trade that for freedom, he sure isn't going to throw it away.” Alhamid grinned. “But can you imagine a guy thinking that anchor setting could be completely mechanized?"

St. Simon grinned back. “I guess I'm not a very good teacher after all. I told him and told him and told him for three solid months that the job required judgment, but it evidently didn't sink in. He's got the heart of a romantic and the soul of an Earthman-a very bad combination."

"He has my sympathy,” Alhamid said with feeling. “Now, about you. Your blue ticket still has three months to run, but I can't give you a class if you're only going to run through the first half of the course with them, and I don't have any more Earthmen for you to give special tutoring to. You have three choices: You can loaf with pay for three months; you can go back to space and get double pay for three months; or you can take a regular six-month class and get double pay for the last three months. Which'll it be?"

St. Simon grinned widely. “I'm going to loaf until I get sick of it, then I'll go back to space and collect double pay for what's left of the three months. First off, I'm going to take a run over to Vesta. After that, who knows?"

"I thought so. Most of you guys would stay out there forever if you didn't have to come back for supplies."

St. Simon shook his head. “Nope. Not true. A man's got to come back every so often and get his feet on the ground. If you stay out there too long, you get to talking to yourself."

* * * *

An hour later, the spaceboat Nancy Bell lifted from the surface of Pallas and shot toward Vesta.

"Jules, old cobblestone, we have just saved civilization."

"Jawohl, Herr Hassenpfefferesser! Und now ve go to find das Maedchen, nicht war?"

"Herr Professor Hassenpfefferesser to you, my boy."

And then, all alone in his spaceboat, Captain Jules St. Simon burst into song:

"Oh, I'm the cook and the captain, too, And the men of the Nancy's brig; The bosun tight, and the midshipmite, And the crew of the captain's gig!"

And the Nancy Bell sped on toward Vesta and a rendevous with Eros.

## THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
## #1

On the ancient planet of Phogiu II, the natives were in a terrible tizzy. Their local god-a huge, intelligent lichen which covered a fifth of the habitable surface of Phogiu II, was dying. Naturally, they sent for

Benedict Breadfruit. He took one look at the lichen and said: “It is obvious that the fungi part of this intelligent symbiotic organism is in good health. The other part, however—"

He gave it a shot of vitamins and a chlorophyll pill. The Great Lichen immediately spruced up and began delivering its deep pronunciamentos with the proper punctilio.

"What was wrong with it?” asked one of the natives.

"Nothing serious,” said Benedict Breadfruit. “All it needed was an algae buttress."

## AFTER A FEW WORDS

He settled himself comfortably in his seat, and carefully put the helmet on, pulling it down firmly until it was properly seated. For a moment, he could see nothing.

Then his hand moved up and, with a flick of the wrist, lifted the visor. Ahead of him, in serried array, with lances erect and pennons flying, was the forward part of the column. Far ahead, he knew, were the Knights Templars, who had taken the advance. Behind the Templars rode the mailed knights of Brittany and Anjou. These were followed by King Guy of Jerusalem and the host of Poitou.

He himself, Sir Robert de Bouain, was riding with the Norman and English troops, just behind the men of Poitou. Sir Robert turned slightly in his saddle. To his right, he could see the brilliant red-and-gold banner of the lion-hearted Richard of England-gules, in pale three lions passant guardant or. Behind the standard-bearer, his great war horse moving with a steady, measured pace, his coronet of gold on his steel helm gleaming in the glaring desert sun, the lions of England on his firm-held shield, was the King himself.

Further behind, the Knights Hospitallers protected the rear, guarding the column of the hosts of Christendom from harassment by the Bedouins.

"By our Lady!” came a voice from his left. “Three days out from Acre, and the accursed Saracens still elude us."

Sir Robert de Bouain twisted again in his saddle to look at the knight riding alongside him. Sir Gaeton de l'Arc-Tombé sat tall and straight in his saddle, his visor up, his blue eyes narrowed against the glare of the sun.

Sir Robert's lips formed a smile. “They are not far off, Sir Gaeton. They have been following us. As we march parallel to the seacoast, so they have been marching with us in those hills to the east."

"Like the jackals they are,” said Sir Gaeton. “They assail us from the rear, and they set up traps in our path ahead. Our spies tell us that the Turks lie ahead of us in countless numbers. And yet, they fear to face us in open battle."

"Is it fear, or are they merely gathering their forces?"

"Both,” said Sir Gaeton flatly. “They fear us, else they would not dally to amass so fearsome a force. If, as our informers tell us, there are uncounted Turks to the fore, and if, as we are aware, our rear is being dogged by the Bedouin and the black horsemen of Egypt, it would seem that Saladin has at hand more than enough to overcome us, were they all truly Christian knights."

"Give them time. We must wait for their attack, sir knight. It were foolhardy to attempt to seek them in their own hills, and yet they must stop us. They will attack before we reach Jerusalem, fear not."

"We of Gascony fear no heathen Musselman," Sir Gaeton growled. "It's this Hellish heat that is driving me mad." He pointed toward the eastern hills. "The sun is yet low, and already the heat is unbearable."

Sir Robert heard his own laugh echo hollowly within his helmet. "Perhaps 'twere better to be mad when the assault comes. Madmen fight better than men of cooler blood." He knew that the others were baking inside their heavy armor, although he himself was not too uncomfortable.

Sir Gaeton looked at him with a smile that held both irony and respect. "In truth, sir knight, it is apparent that you fear neither men nor heat. Nor is your own blood too cool. True, I ride with your Normans and your English and your King Richard of the Lion's Heart, but I am a Gascon, and have sworn no fealty to him. But to side with the Duke of Burgundy against King Richard—" He gave a short, barking laugh. "I fear no man," he went on, "but if I had to fear one, it would be Richard of England."

Sir Robert's voice came like a sword: steely, flat, cold, and sharp. "My lord the King spoke in haste. He has reason to be bitter against Philip of France, as do we all. Philip has deserted the field. He has returned to France in haste, leaving the rest of us to fight the Saracen for the Holy Land leaving only the contingent of his vassal the Duke of Burgundy to remain with us."

"Richard of England has never been on the best of terms with Philip Augustus," said Sir Gaeton.

"No, and with good cause. But he allowed his anger against Philip to color his judgment when he spoke harshly against the Duke of Burgundy. The Duke is no coward, and Richard Plantagenet well knows it. As I said, he spoke in haste."

"And you intervened," said Sir Gaeton.

"It was my duty." Sir Robert's voice was stubborn. "Could we have permitted a quarrel to develop between the two finest knights and warleaders in Christendom at this crucial point? The desertion of Philip of France has cost us dearly. Could we permit the desertion of Burgundy, too?"

"You did what must be done in honor," the Gascon conceded, "but you have not gained the love of Richard by doing so."

Sir Robert felt his jaw set firmly. "My king knows I am loyal."

Sir Gaeton said nothing more, but there was a look in his eyes that showed that he felt that Richard of England might even doubt the loyalty of Sir Robert de Bouain.

* * * *

Sir Robert rode on in silence, feeling the movement of the horse beneath him.

There was a sudden sound to the rear. Like a wash of the tide from the sea came the sound of Saracen war cries and the clash of steel on steel mingled with the sounds of horses in agony and anger.

Sir Robert turned his horse to look.

The Negro troops of Saladin's Egyptian contingent were thundering down upon the rear! They clashed

with the Hospitallers, slamming in like a rain of heavy stones, too close in for the use of bows. There was only the sword against armor, like the sound of a thousand hammers against a thousand anvils.

"Stand fast! Stand fast! Hold them off!" It was the voice of King Richard, sounding like a clarion over the din of battle.

Sir Robert felt his horse move, as though it were urging him on toward the battle, but his hand held to the reins, keeping the great charger in check. The King had said "Stand fast!" and this was no time to disobey the orders of Richard.

The Saracen troops were coming in from the rear, and the Hospitallers were taking the brunt of the charge. They fought like madmen, but they were slowly being forced back.

The Master of the Hospitallers rode to the rear, to the King's standard, which hardly moved in the still desert air, now that the column had stopped moving.

The voice of the Duke of Burgundy came to Sir Robert's ears.

"Stand fast. The King bids you all to stand fast," said the duke, his voice fading as he rode on up the column toward the knights of Poitou and the Knights Templars.

The Master of the Hospitallers was speaking in a low, urgent voice to the King: "My lord, we are pressed on by the enemy and in danger of eternal infamy. We are losing our horses, one after the other!"

"Good Master," said Richard, "it is you who must sustain their attack. No one can be everywhere at once."

The Master of the Hospitallers nodded curtly and charged back into the fray.

The King turned to Sir Baldwin de Carreo, who sat ahorse nearby, and pointed toward the eastern hills. "They will come from there, hitting us in the flank; we cannot afford to amass a rearward charge. To do so would be to fall directly into the hands of the Saracen."

A voice very close to Sir Robert said: "Richard is right. If we go to the aid of the Hospitallers, we will expose the column to a flank attack." It was Sir Gaeton.

"My lord the King," Sir Robert heard his voice say, "is right in all but one thing. If we allow the Egyptians to take us from the rear, there will be no need for Saladin and his Turks to come down on our flank. And the Hospitallers cannot hold for long at this rate. A charge at full gallop would break the Egyptian line and give the Hospitallers breathing time. Are you with me?"

"Against the orders of the King?"

"The King cannot see everything! There are times when a man must use his own judgment! You said you were afraid of no man. Are you with me?"

After a moment's hesitation, Sir Gaeton couched his lance. "I'm with you, sir knight! Live or die, I follow! Strike and strike hard!"

"Forward then!" Sir Robert heard himself shouting. "Forward for St. George and for England!"

"St. George and England!" the Gascon echoed.

* * * *

Two great war horses began to move ponderously forward toward the battle lines, gaining momentum as they went. Moving in unison, the two knights, their horses now at a fast trot, lowered their lances, picking their Saracen targets with care. Larger and larger loomed the Egyptian cavalrymen as the horses changed pace to a thundering gallop.

The Egyptians tried to dodge, as they saw, too late, the approach of the Christian knights.

Sir Robert felt the shock against himself and his horse as the steel tip of the long ash lance struck the Saracen horseman in the chest. Out of the corner of his eye, he saw that Sir Gaeton, too, had scored.

The Saracen, impaled on Sir Robert's lance, shot from the saddle as he died. His lighter armor had hardly impeded the incoming spear-point, and now his body dragged it down as he dropped toward the desert sand. Another Moslem cavalryman was charging in now, swinging his curved saber, taking advantage of Sir Robert's sagging lance.

There was nothing else to do but drop the lance and draw his heavy broadsword. His hand grasped it, and it came singing from its scabbard.

The Egyptian's curved sword clanged against Sir Robert's helm, setting his head ringing. In return, the knight's broadsword came about in a sweeping arc, and the Egyptian's horse rode on with the rider's headless body.

Behind him, Sir Robert heard further cries of "St. George and England!"

The Hospitallers, taking heart at the charge, were going in! Behind them came the Count of Champagne, the Earl of Leister, and the Bishop of Beauvais, who carried a great warhammer in order that he might not break Church Law by shedding blood.

Sir Robert's own sword rose and fell, cutting and hacking at the enemy. He himself felt a dreamlike detachment, as though he were watching the battle rather than participating in it.

But he could see that the Moslems were falling back before the Christian onslaught.

And then, quite suddenly, there seemed to be no foeman to swing at. Breathing heavily, Sir Robert sheathed his broadsword.

Beside him, Sir Gaeton did the same, saying: "It will be a few minutes before they can regroup, sir knight. We may have routed them completely."

"Aye. But King Richard will not approve of my breaking ranks and disobeying orders. I may win the battle and lose my head in the end."

"This is no time to worry about the future," said the Gascon. "Rest for a moment and relax, that you may be the stronger later. Here-have an Old Kings."

He had a pack of cigarettes in his gauntleted hand, which he profferred to Sir Robert. There were three cigarettes protruding from it, one slightly farther than the others. Sir Robert's hand reached out and took that one.

"Thanks. When the going gets rough, I really enjoy an Old Kings."

He put one end of the cigarette in his mouth and lit the other from the lighter in Sir Gaeton's hand.

"Yes, sir," said Sir Gaeton, after lighting his own cigarette, "Old Kings are the greatest. They give a man real, deep-down smoking pleasure."

"There's no doubt about it, Old Kings are a man's cigarette." Sir Robert could feel the soothing smoke in his lungs as he inhaled deeply. "That's great. When I want a cigarette, I don't want just any cigarette."

"Nor I," agreed the Gascon. "Old Kings is the only real cigarette when you're doing a real man's work."

"That's for sure." Sir Robert watched a smoke ring expand in the air.

There was a sudden clash of arms off to their left. Sir Robert dropped his cigarette to the ground. "The trouble is that doing a real he-man's work doesn't always allow you to enjoy the fine, rich tobaccos of Old Kings right down to the very end."

"No, but you can always light another later," said the Gascon knight.

* * * *

King Richard, on seeing his army moving suddenly toward the harassed rear, had realized the danger and had charged through the Hospitallers to get into the thick of the fray. Now the Turks were charging down from the hills, hitting-not the flank as he had expected, but the rear! Saladin had expected him to hold fast!

Sir Robert and Sir Gaeton spurred their chargers toward the flapping banner of England.

The fierce warrior-king of England, his mighty sword in hand, was cutting down Turks as though they were grain-stalks, but still the Saracen horde pressed on. More and more of the terrible Turks came boiling down out of the hills, their glittering scimitars swinging.

Sir Robert lost all track of time. There was nothing to do but keep his own great broadsword moving, swinging like some gigantic metronome as he hacked down the Moslem foes.

And then, suddenly, he found himself surrounded by the Saracens! He was isolated and alone, cut off from the rest of the Christian forces! He glanced quickly around as he slashed another Saracen from pate to breastbone. Where was Sir Gaeton? Where were the others? Where was the red-and-gold banner of Richard?

He caught a glimpse of the fluttering banner far to the rear and started to fall back.

And then he saw another knight nearby, a huge man who swung his sparkling blade with power and force. On his steel helm gleamed a golden coronet! Richard!

And the great king, in spite of his prowess was outnumbered heavily and would, within seconds, be cut down by the Saracen horde!

Without hesitation, Sir Robert plunged his horse toward the surrounded monarch, his great blade cutting a path before him.

He saw Richard go down, falling from the saddle of his charger, but by that time his own sword was cutting into the screaming Saracens and they had no time to attempt any further mischief to the King. They had their hands full with Sir Robert de Bouain.

He did not know how long he fought there, holding his charger motionless over the inert body of the fallen king, hewing down the screaming enemy, but presently he heard the familiar cry of "For St. George and for England" behind him. The Norman and English troops were charging in, bringing with them the banner of England!

And then Richard was on his feet, cleaving the air about him with his own broadsword. Its bright edge, besmeared with Saracen blood, was biting viciously into the foe.

The Turks began to fall back. Within seconds, the Christian knights were boiling around the embattled pair, forcing the Turks into retreat. And for the second time, Sir Robert found himself with no one to fight.

And then a voice was saying: "You have done well this day, sir knight. Richard Plantagenet will not forget."

Sir Robert turned in his saddle to face the smiling king.

"My lord king, be assured that I would never forget my loyalty to my sovereign and liege lord. My sword and my life are yours whenever you call."

King Richard's gauntleted hand grasped his own. "If it please God, I shall never ask your life. An earldom awaits you when we return to England, sir knight."

And then the king mounted his horse and was running full gallop after the retreating Saracens.

* * * *

Robert took off his helmet.

He blinked for a second to adjust his eyes to the relative dimness of the studio. After the brightness of the desert that the televicarion helmet had projected into his eyes, the studio seemed strangely cavelike.

"How'd you like it, Bob?" asked one of the two producers of the show.

Robert Bowen nodded briskly and patted the televike helmet. "It was O.K.," he said. "Good show. A little talky at the beginning, and it needs a better fade-out, but the action scenes were fine. The sponsor ought to like it-for a while, at least."

"What do you mean, 'for a while'?"

Robert Bowen sighed. "If this thing goes on the air the way it is, he'll lose sales."

"Why? Commercial not good enough?"

"Too good! Man, I've smoked Old Kings, and, believe me, the real thing never tasted as good as that cigarette did in the commercial!"

THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
# 2

The accepted method for removing space lice from the hull of a ship was by sandblasting, but the boys around the space docks noticed that Benedict Breadfruit's shiny hull was not pitted either by space lice or by sandblasting. Breadfruit used hydrogen cyanide to remove the pests, but he had never told anyone about it.

"Come, Breadfruit," said one of the spaceport officials, "Tell us how you remove your burden of pediculous pests!"

Breadfruit gestured at his HCN generator. "I gas 'em off."

## THE BRAMBLE BUSH

There was a man in our town,

And he was wond'rous wise;

He jumped into a bramble bush,

And scratch'd out both his eyes.

-Old Nursery Rhyme

Peter de Hooch was dreaming that the moon had blown up when he awakened. The room was dark except for the glowing night-light near the door, and he sat up trying to separate the dream from reality. He focused his eyes on the glow-plate. What had wakened him? Something had, he was sure, but there didn't seem to be anything out of the ordinary now.

The explosion in his dream had seemed extraordinarily realistic. He could still remember vividly the vibration and the cr-r-r-ump! of the noise. But there was no sign of what might have caused the dream sequence.

Maybe something fell, he thought. He swung his legs off his bed and padded barefoot over to the light switch. He was so used to walking under the light lunar gravity that he was no longer conscious of it. He pressed the switch, and the room was suddenly flooded with light. He looked around.

Everything was in place, apparently. There was nothing on the floor that shouldn't be there. The books were all in their places in the bookshelf. The stuff on his desk seemed undisturbed.

The only thing that wasn't as it should be was the picture on the wall. It was a reproduction of a painting by Pieter de Hooch, which he had always liked, aside from the fact that he had been named after the seventeenth-century Dutch artist. The picture was slightly askew on the wall.

He was sleepily trying to figure out the significance of that when the phone sounded. He walked over and picked it up. "Yeah?"

"Guz? Guz? Get over here quick!" Sam Willows' voice came excitedly from the instrument.

"Whatsamatter, Puss?" he asked blearily.

"Number Two just blew! We need help, Guz! Fast!"

"I'm on my way!" de Hooch said.

"Take C corridor," Willows warned. "A and B caved in, and the bulkheads have dropped. Make it snappy!"

"I'm gone already," de Hooch said, dropping the phone back into place.

He grabbed his vacuum suit from its hanger and got into it as though his own room had already sprung an air leak.

Number Two has blown! he thought. That would be the one that Ferguson and Metty were working on. What had they been cooking? He couldn't remember right off the bat. Something touchy, he thought; something pretty hot.

But that wouldn't cause an atomic reactor to blow. It obviously hadn't been a nuclear blow-up of any proportions, or he wouldn't be here now, zipping up the front of his vac suit. Still, it had been powerful enough to shake the lunar crust a little or he wouldn't have been wakened by the blast.

These new reactors could get out a lot more power, and they could do a lot more than the old ones could, but they weren't as safe as the old heavy-metal reactors, by a long shot. None had blown up yet-quite-but there was still the chance. That's why they were built on Luna instead of on Earth. Considering what they could do, de Hooch often felt that it would be safer if they were built out on some nice, safe asteroid-preferably one in the Jovian Trojan sector.

He clamped his fishbowl on tight, opened the door, and sprinted toward Corridor C.

The trouble with the Ditmars-Horst reactor was that it lacked any automatic negative-feedback system. If a D-H decided to go wild, it went wild. Fortunately, that rarely happened. The safe limits for reactions were quite wide-wider, usually, than the reaction limits themselves, so that there was always a margin of safety. And within the limits, a nicety of control existed that made nucleonics almost an esoteric branch of chemistry. Cookbook chemistry, practically.

Want deuterium? Recipe: To 1.00813 gms. purest Hydrogen-1 add, slowly and with care, 1.00896 gms. fine-grade neutrons. Cook until well done in a Ditmars-Horst reactor. Yield: 2.01471 gms. rare old deuterium plus some two million million million ergs of raw energy. Now you are cooking with gas!

All you had to do was keep the reaction going at a slow enough rate so that the energy could be bled off, and there was nothing to worry about. Usually. But control of the feebleizer fields still wasn't perfect, because the fields that enfeebled the reactions and made them easy to control weren't yet too well understood.

* * * *

Peter de Hooch turned into Corridor C and kept on running. There was plenty of air still in this corridor, and there was apparently little likelihood of his needing his vac suit. But on the moon nobody responds to an emergency call without a vac suit.

He was troubled about Corridors A and B. The explosion must have been pretty violent to have sealed off two of the four corridors leading from the living quarters to the reaction labs. Two corridors went directly to one of the reactors, two went directly to the second. Two more connected the reactor labs themselves, putting the labs and the living quarters at the corners of an equilateral triangle. (Peter had never been able to figure out why A and B corridors led to Reactor Two, while C and D led to Reactor One. Logically, he thought, it should have been the other way around. Oh, well.)

Going down C meant that he'd have to get to Reactor Two the long way around.

What had the damage been? he asked himself. Had anyone been hurt? Or killed? He pushed the questions out of his mind. There was no point in speculating. He'd have the information soon enough.

He took the cutoff to the left, at a sixty-degree angle to Corridor C, which led him directly to Corridor E, by-passing Reactor One. He noticed as he went by that the operations lamp was out. Nobody was working with Reactor One.

As he pounded on down the empty corridor, he suddenly realized that he hadn't seen anyone else running with him. There were five other men in the reactor station, and-so far-he had seen no one. He knew where Willows was, but where were Ferguson, Metty, Laynard, and Quillan? He pushed those questions out of his mind, too, for the time being.

A head popped out of the door at the far end of the corridor.

"Guz! Hurry, Guz!"

De Hooch didn't bother to answer Willows. He was short of breath as it was. He knew, besides, that no answer was expected. He had known Willows for years, and knew how he thought. It was Willows who had first tagged de Hooch with that silly nickname, “Guzzle". Not because Peter was such a heavy drinker-although he could hold it like a gentleman-but because he had thought “Guzzle” de Hooch was so uproariously funny. “Nobody likes a guzzle as well as de Hooch,” he'd say, with an idiot grin. As a result, everybody called Peter “Guz” now.

The head had vanished back into the control room of Reactor Two. De Hooch kept on running, his breath rasping loudly in the confines of the fishbowl helmet. Running four hundred yards isn't the easiest thing in the world, even if a man is in good physical condition. There was less weight to contend with, but the mass that had to be pushed along remained the same. The notion that running on Luna was an effortless breeze was one that only Earthhuggers clung to.

He ran into the control room and stopped, panting heavily. “What ... happened?"

Sam Willows’ normally handsome face looked drawn. “Something went wrong. I don't know what. I was finishing up with Reactor One when I heard the explosion. They are both"-he gestured toward the reactor-"both in there."

"Still alive?"

"I think so. One of ‘em, anyway. Take a look."

De Hooch went over to the periscope and put his eyes to the binoculars. He could see two figures in heavy, dull-gray radiation-proof suits. They were lying flat on the floor, and neither was moving. De Hooch said as much.

"The one on the left was moving his arm-just a little," Willows said. "I'll swear he was."

Something in the man's voice made de Hooch turn his head away from the periscope's eyepieces. Willows' face was gray, and a thin film of greasy perspiration reflected the light from the overhead plates. The man was on the verge of panic.

"Calm down, Puss," de Hooch said gently. "Where's Quillan and Laynard?"

"They're in their rooms," Willows said in a tight voice. "Trapped. The bulkheads have closed 'em off in A. No air in the corridor. We'll have to dig 'em out. I called 'em both on the phone. They're all right, but they're trapped."

"Did you call Base?"

"Yes. They haven't got a ship. They sent three moon-cats, though. They ought to be here by morning."

De Hooch looked up at the chronometer on the wall. Oh one twelve, Greenwich time. "Morning" meant any time between eight and noon; the position of the sun up on the surface had nothing to do with Lunar time. As a matter of fact, there was a full Earth shining at the moment, which meant that it wouldn't be dawn on the surface for a week yet.

"If the cats from Base get here by noon, we'll be O.K., won't we?" de Hooch asked.

"Look at the instruments," Willows said.

De Hooch ran a practiced eye over the console and swallowed. "What were they running?"

"Mercury 203," Willows said. "Half-life forty-six point five days. Beta and gamma emitter. Converts to Thallium 203, stable."

"What did they want with a kilogram of the stuff?"

"Special order. Shipment to Earth for some reason."

"Have you checked the end-point? She's building up fast."

"No. No. I haven't." He wet his lips with the tip of his tongue.

"Check it," said de Hooch. "Do any of the controls work?"

"I don't know. I didn't want to fiddle with them."

"You start giving them a rundown. I'm going to get into a suit and go pull those two out of there-if they're still alive." He opened the locker and took his radiation-proof suit out. He checked it over carefully and began shucking his vac suit.

* * * *

A few minutes delay in getting to the men in the reactor's anteroom didn't matter much. If they hadn't been killed outright, and were still alive, they would probably live a good deal longer. The shells of the radiation suits didn't look damaged, and the instruments indicated very little radiation in the room.

Whatever it was that had exploded had done most of its damage at the other end of the reactor. Evidently, a fissure had been opened to the surface, forty feet above-a fissure big enough to let all the air out of A and B corridors, and activate the automatic bulkheads to seal off the airless section.

What troubled him was Willows. If he hadn't known the man so well, de Hooch would have verbally blasted him where he stood.

His reaction to trouble had been typical. De Hooch had already seen Willows in trouble three times, and each time, the reaction had been the same: near panic. Every time, his first thought had been to scream for help rather than to do anything himself. Almost anyone else would have made one call and then climbed into a radiation suit to get Ferguson and Metty out of the anteroom. There was certainly no apparent immediate danger. But all that Willows had done was yell for someone to come and do his thinking and acting for him. He had called Base; he had called de Hooch; he had called Quillan and Laynard. But he hadn't done anything else.

Now he had to be handled with kid gloves. If de Hooch didn't act calm, if he didn't go about things just right, Willows might very likely go over the line into total panic. As long as he had someone to depend on, he'd be all right, and de Hooch didn't want to lose the only help he had right now.

"Fermium 256," said Willows in a tight, flat voice.

"What?" de Hooch asked calmly.

"Fermium 256," Willows repeated. "That's what the stuff is going to start building towards. Spontaneous fission. Half-life of three hours." He took a deep breath. "The reactor won't be able to contain it. We haven't got that kind of bleed-off control."

"No," de Hooch agreed. "I suggest we stop it."

"The freezer control isn't functioning," Willows said. "I guess that's what they went in there to correct."

"I doubt it," de Hooch said carefully. "They wouldn't have needed suits for that. They must have had something else bothering them. I'd be willing to bet they went in to pull a sample and something went wrong."

"Why? What makes you think so?"

"If there'd been trouble, they'd have called for someone to stay here at the console. Both of them wouldn't have gone in if there was any trouble."

"Yeah. Yeah, I guess you're right." He looked visibly relieved. "What do you suppose went wrong?"

"Look at your meters. Four of 'em aren't registering."

Willows looked. "I hadn't noticed. I thought they were just registering low. You're right, though. Yeah. You're right. The surface bleed-off. Hydrogen loss. Blew a valve, is all. Yeah." He grinned a little. "Must've been quite a volcano for a second or two."

De Hooch grinned back at him. "Yeah. Must've. Give me a hand with these clamps."

Willows began fastening the clamps on the heavy suit. "D'you think Ferguson and Metty are O.K.,

Guz?" he asked.

De Hooch noticed it was the first time he had used the names of the two men. Now that there was a chance that they were alive, at least in his own mind, he was willing to admit that they were men he knew. Willows didn't want to think that anyone he knew had done such a terrible thing as die. It hit too close to home.

The man wasn't thinking. He was willing to grasp at anything that offered him a chance-dream straws. The idea was to keep him busy, keep his mind on trivia, keep him from thinking about what was going on inside that reactor.

He should have known automatically that it was building toward Fermium 256. It was the most logical, easiest, and simplest way for a D-H reactor to go off the deep end.

A Ditmars-Horst reactor took advantage of the fact that any number can be expressed as the sum of powers of two-and the number of nucleons in an atomic nucleus was no exception to that mathematical rule.

Building atoms by adding nucleons wasn't as simple as putting marbles in a bag because of the energy differential, but the energy derived from the fusion of the elements lighter than Iron 56 could be compensated for by using it to pack the nuclei heavier than that. The trick was to find a chain of reactions that gave the least necessary energy transfer. The method by which the reactions were carried out might have driven a mid-Twentieth Century physicist a trifle ga-ga, but most of the reactions themselves would have been recognizable.

There were several possible reactions which Ferguson and Metty could have used to produce Hg-203, but de Hooch was fairly sure he knew which one it was. The five-branch, double-alpha-addition scheme was the one that was easiest to use-and it was the only one that started the damnable doubling chain reaction, where the nuclear weights went up exponentially under the influence of the peculiar conditions within the reactor. 2-4-8-16-32-64-128-256 ... Hydrogen 2 and Helium 4 were stable. So were Oxygen 16 and Sulfur 32. The reaction encountered a sticky spot at Beryllium 8, which is highly unstable, with a half life of ten to the minus sixteenth seconds, spontaneously fissioning back into two Helium 4 nuclei. Past Sulfur 32, there was a lot of positron emission as the nuclei fought to increase the number of neutrons to maintain a stable balance. Germanium 64 is not at all stable, and neither is Neodymium 128, but the instability can be corrected by positive beta emission. When two nuclei of the resulting Xenon 128 are forced together, the positron emission begins long before the coalescence is complete, resulting in Fermium 256.

But not even a Ditmars-Horst reactor can stand the next step, because matter itself won't stand it-not even in a D-H reactor. The trouble is that a D-H reactor tries. Mathematically, it was assumed that the resulting nucleus did exist-for an infinitesimal instant of time. Literally, mathematically, infinitesimal-so close to zero that it would be utterly impossible to measure it. Someone had dubbed the hypothetical stuff Instantanium 512.

Whether Instantanium 512 had any real existence is an argument for philosophers only. The results, in any case, were catastrophic. The whole conglomeration came apart in a grand splatter of neutrons, protons, negatrons, positrons, electrons, neutrinos-a whole slew of Greek-lettered mesons of various charges and masses, and a fine collection of strange and ultrastrange particles. Energy? Just oodles and gobs.

Peter de Hooch had heard about the results. He had no desire to experience them first hand.

Fortunately, the reaction that led up to them took time. It could be stopped at any time up to the Fm-256 stage. According to the instruments, that wouldn't be for another six hours yet, so there was nothing at all to worry about. Even after that it could be stopped, provided one had a way to get rid of the violently fissioning fermium.

"Connections O.K.?" Willows asked. His voice came over the earphones inside the ponderous helmet of the radiation suit.

"Fine," said de Hooch. He adjusted the double periscope so that his vision was clear. "Perfect."

He tested the controls, moving his arms and legs to see if the suit responded. The suit was so heavy that, without powered joints, controlled by servomechanisms, he would have been unable to move, even under Lunar gravity. With the power on, though, it was no harder than walking underwater in a diving suit. "All's well, Puss," he said.

"I'll keep an eye on you," said Willows.

"Fine. Well, here goes Colossus de Hooch." He began walking toward the door that led into the corridor which connected the reactor anteroom to the control room.

* * * *

It took time to drag the two inert figures out of the anteroom. All de Hooch could do was grab them under the armpits, apply power, and drag them out. He went out the same way he had come in, traversing the separate chambers in reverse order. First came the decontamination chamber, where the radioactive dust that might have settled on the suits was sluiced off by the detergent sprays. When the radiation detectors registered low enough, de Hooch dragged Ferguson into the outer chamber, then went back and got Metty and put him through the same process. Then he dragged them on into the control room so that Willows could get them out of the heavy suits.

"Can you help me, Guz?" Willows asked. It was obvious that he didn't want to open the suits. He didn't want to see what might be inside. De Hooch helped him.

They were both alive, but unconscious. Bones had been broken, and Metty appeared to be suffering from concussion. They were badly damaged, but they'd live.

De Hooch and Willows made two trips down E and C corridors, carrying the men on a stretcher, to get them in bed. De Hooch splinted the broken bones as best he could and gave each of them a shot of narcodyne. He had to do the medical work because Quillan, the medic, was trapped in Corridor A. He called Quillan on the phone to tell him what had happened. He described the signs and symptoms of the victims as best he could, and then did what Quillan told him to do.

"They ought to be all right," Quillan said. "With that dope in them, they'll be out cold for the next twelve hours, and by that time, the boys from Base will be here. Just leave 'em alone and don't move 'em any more."

"Right. I'll call you back later. Right now, Puss and I are going to see what's wrong with the control linkages on Number Two."

"Right. By-o."

De Hooch and Willows walked back to the control room of Number Two Reactor in silence.

Once inside the control room, de Hooch said: “How are those control circuits?” Willows was supposed to have been checking them while he had been dragging Ferguson and Metty out of the antechamber.

"Well, I ... I'm not sure. I'll show you what I've found so far, Guz. You ought to take a look at them. I ... I'd like you to take a look-see. I think"-he gestured toward the console-"I think they're all right except for the freezer vernier and the pressure release control."

He doesn't trust his own work, de Hooch thought. Well, that's all right. Neither do I.

Painstakingly, the two of them went over the checking circuits. Willows was right. The freezer and pressure controls were inoperable.

"Damn,” said de Hooch. “Double damn."

"They're probably both stuck at the firewall,” Willows said.

"Sure. Where else? I'll have to go in there and unstick ‘em. Help me get back into that two-legged tank again.” He wished he knew more about what Ferguson and Metty had been doing. He wished he knew why the two men had gone into the anteroom in the first place. He wished a lot of things, but wishing was a useless pastime at this stage of the game.

If only one of the two men had been in a condition to talk!

He got back into his radiation-proof suit again, took one last look at the instruments on the console, and headed for the reactor.

* * * *

Through the first radiation trap-left turn, right turn, right turn, left turn-through the “cold” room, through the second radiation trap, through the decontamination chamber, and through the third radiation trap into the anteroom. Now that Ferguson and Metty were safely out of the way, he could give his attention to the damage that had been done.

Had Ferguson and Metty actually come in to tap off a sample, as he had suggested to Willows? He looked around at the wreckage in the antechamber. Quite obviously, the heavy door of the sample chamber was wide open, and it certainly appeared that the wreckage was scattered from that point. Cautiously, he went over to look at the open sample chamber. It looked all right, except that the bottom was covered with a bright, metallic dust. He rubbed his finger over it and looked at the fingertip. A very fine dust. And yet it hadn't been scattered very much by the explosion. Heavy. Very likely osmium. Osmium 187 was stable, but it wasn't a normally used step toward Mercury 203. Four successive alpha captures would give Polonium 203, not mercury. Ditto for an oxygen fusion. It could be iridium or platinum, of course. Whatever it was, the instruments in his helmet told him it wasn't hot.

He had a hunch that Ferguson and Metty had been building Mercury 203 from Hafnium 179 by the process of successive fusions with Hydrogen 3 and that something had gone wrong with the H-3 production. It appeared that the explosion had been a simple chemical blast caused by the air oxidation of H-2. But the bleeder vent at the other end of the reactor had apparently kicked at the same time. An enormous amount of unused energy had been released, blowing the entire emergency bleeder system out.

Something didn't seem right. Something stuck in his craw, and he couldn't figure out what it was.

He opened up the conduit boxes that led through the antechamber from the control console to the reactor beyond the firewall. Everything looked fine. That meant that whatever it was that had fouled up the controls was on the other side of the firewall.

"How does it look?" Willows' voice came worriedly over the earphones.

"Have I already said 'damn'?" de Hooch asked.

"You have," Willows said with forced lightness. "You even said 'double damn'."

"Factorial damn, then!" said de Hooch.

"What's the matter?"

"Apparently the foul-up is on the other side of the firewall."

"Are you going in?"

"I'll have to."

"All right. Watch yourself."

"I will." He went over to the periscope that surveyed the part of the reactor beyond the firewall. Everything looked normal enough. He carefully checked the pressure gauge. Normal.

"Check the spectro for me, will you?" he asked. "Make sure that's just the normal helium atmosphere in there."

"Sure." A pause. "Nothing but helium, Guz. What were you expecting?"

"I don't think I'd care to walk into a hydrogen atmosphere at three hundred Centigrade."

"Neither would I, but how could there be hydrogen in there?"

"There shouldn't be. But there's something screwy going on here, and I can't put my finger on it."

"Well, whatever it is, it isn't hydrogen in the reactor room."

"O.K. Stand by. I'm going in."

He walked over to the firewall door. On the other side of it was a small chamber where the oxygen and nitrogen of normal air would be swept out before he opened the inner door to go into the inner chamber itself. There was no need for an air lock, since small amounts of impurities in the He-4 didn't bother anything.

It was just as he turned the lever that undogged the firewall door that he realized his mistake.

But it was too late.

The door jerked outward, and a hot wind picked him up and slammed him against the far wall.

There was a moment of pain.

Then-nothing.

* * * *

There was something familiar about the man who was turning the wheel, but de Hooch couldn't place it. The man was wearing a black hood, as befitted a torturer and executioner.

"Idiot," said the hooded man, giving the wheel of the rack a little more pressure, "explain the following: If a half plus a half is equal to a whole, why is halfnium plus halfnium not equal to wholmium?"

Stretched as he was on the rack, de Hooch could not think straight because of the excruciating pain.

"Because a half is eight point two eight per cent heavier than a hole," said de Hooch.

"You are an idiot, none the less," said the torturer. He gave the wheel another twist. De Hooch wanted to scream, but he couldn't.

"Try again," said the torturer. "What is a half plus four plus four plus four plus four plus—"

"Stop!" screamed de Hooch. "Stop! Stop at the osmium!"

"Ah! But it didn't stop at the osmium," said the hooded man. "It went on and on and on. Plus four plus four plus four plus four plus four-until there were so many plus fours in there that the place looked like an old-fashioned golf course."

"My legs hurt," said de Hooch. The man was no longer wearing a hood, but de Hooch couldn't tell if it was Willows or himself.

"We will all go together when we go," said the man.

De Hooch turned his head away and looked at the ceiling.

And he realized that it was the ceiling of the antechamber.

"My legs hurt," he repeated. And he could hear the hoarse whisper inside the helmet. He realized that he was lying flat on his back. He had been jarred around quite a bit in the suit.

He wondered if he could sit up. He managed to get both arms behind him and push himself into a sitting position. He wiggled his feet. The servos responded. He hurt all over, but a little experiment told him that he was only bruised. Nothing was broken. He hadn't been hit as hard as Ferguson and Metty had been.

"Willows?" he said. "Willows?"

There was no answer from the earphones.

He looked at the chronometer dial inside his helmet. Oh two forty-nine. He had been unconscious less than ten minutes.

The same glance brought his eyes to two other dials. The internal radiation of the suit was a little high, but nothing to worry about. But the dial registering the external radiation was plenty high. Without the

protection of the suit, he wouldn't have lived through those ten minutes.

Where was Willows?

And then he knew, and he pushed any thought of further help from that quarter out of his mind. What had to be done would have to be done by Peter de Hooch alone. He climbed to his feet.

His head hurt, and he swayed with nausea and pain. Only the massive weight of the suit's shoes kept him upright. Then it passed, and he blinked his eyes and shook his head to clear it. He found he was holding his breath, and he let it out.

The trouble had been so simple, and yet he hadn't seen it. Oh, yes, he had! He must have, subconsciously. Otherwise, how would he have guessed that the stuff in the sampling chamber was Osmium 187? Ferguson and Metty had been trying to make Mercury 203 by adding eight successive tritium nuclei to Hafnium 179, progressing through Tantalum 182, Tungsten 185, Rhenium 188, Osmium 191, Iridium 194, Platinum 197, and Gold 200, all of which were unstable.

But the Hydrogen 3 reaction had gone wrong. The doubling had set in, producing Helium 4. Successive additions of the alpha particles to Hafnium 179 had produced, first, Tungsten 183, and then Osmium 187, both of which were stable.

Ferguson and Metty, seeing that something was wrong, drew off a sample and then reset the reaction to produce the Hg-203 they wanted. Then they had come down to pick up the sample.

They hadn't realized that the helium production had gone wild. Much more helium than necessary was being produced, and the bleeder valve had failed. When they opened the sample chamber, they got a blast of high-pressure helium right in the face. The shock of that sudden release had jarred the whole atmosphere inside the reaction chamber, and the bleeder valve had let go. But the violence of the pressure release had caused a fault to the surface to open up and had closed the valve again-jammed it, probably. There had been enough pressure left in there to blow de Hooch up against the nearest wall when he opened the door. Since the pressure indicator system was connected to the release system, when one had failed, the other had failed. That's why the pressure gauge had indicated normal.

And, of course, it had been the pressure differential that had caused the controls to stick. Well, they ought to be all right now, then. He decided he'd better take a look.

* * * *

The firewall door was still open. He walked over to it and stepped into the small chamber that led to the inner reactor room. The inside door, much weaker than the outer firewall door, had been blown off its hinges. He stepped past it and went on in.

What he saw made him jerk his glance away from the periscope in his helmet and check his radiation detectors again. Not much change. Relief swept over him as he looked back at the reactor itself. The normally dead black walls were glowing a dull red. It was pure thermal heat, but it shouldn't be doing that.

Moving quickly, he went over to the place where the control cables came in through the firewall. It took him several minutes to assure himself that they would function from the control room now. There was nothing more to do but get out of here and get that reaction damped.

He went out again, closing the firewall door behind him and dogging it tight. There would be no more

helium production now.

He went through the radiation trap to the decontamination chamber to wash off whatever it was he had picked up.

The decontamination room was a mess.

De Hooch stared at the twisted pipes and the stream of water that gushed out of a cracked valve. The blast had jarred everything loose. Well, he could still scrub himself off.

Except that the scrubbers weren't working.

He swore under his breath and twisted the valve that was supposed to dispense detergent. It did, thank Heaven. He doused himself good with it and then got under the flowing water.

The radiation level remained exactly where it was.

He walked over and pulled one of the brushes off the defunct scrubber and sudsed it up. It wasn't until he started to use it that he got a good look at his arms. He hadn't paid any attention before.

He walked over to the mirror to get a good look.

"You look magnificent," he told his reflection acidly.

The radiation-proof armor looked as though it had been chrome plated.

But de Hooch knew better than that. He knew exactly what had happened. He was nicely plated all over with a film of mercury, which had amalgamated itself with the metallic surface of the suit. He was thoroughly wet with the stuff and no amount of water and detergent would take it off.

There was something wrong with Number Two Reactor, all right. It had leaked out some of the Mercury 203 that Ferguson and Metty had been making.

He thought a minute. It hadn't been leaking out just before he opened the door in the firewall, because Willows would certainly have noticed the bright mercury line when he checked with the spectroscope. The stuff must have been released when the pressure dropped.

He walked back to the anteroom and looked at the sampling chamber. There were a few droplets of mercury around the inlet.

Thus far, the three pressure explosions had wrecked about everything that was wreckable, he thought. No, not quite. There was still the chance that the whole station would go if he didn't get back into the control room and stop that "powers of two" chain. The detonation of Instantanium 512 would finish the job by doing what high-pressure helium could never do.

He glanced at the thermometer. The temperature behind the firewall had risen to two-forty Centigrade. It wasn't supposed to be above two hundred. It wasn't too serious, really, because a little heat like that wouldn't bother a Ditmars-Horst reactor, but it indicated that things back there weren't working properly.

He turned away and walked back to the decontamination chamber. There must be some way he could get the mercury off the suit-because he couldn't take the suit off until the mercury was gone.

* * * *

First, he tried scrubbing. That was what showed him how upset he really was. He had actually scrubbed the armor on his left arm free of mercury when he realized what he was doing and threw the brush down in disgust.

"Use your head, de Hooch!" he told himself. What good would it do to scrub the stuff off of the few places he could reach? In the bulky armor, he was worse than muscle-bound. He couldn't touch any part of his back; he couldn't bend far enough to touch his legs. His shoulders were inaccessible, even. Scrubbing was worse than useless-it was time-wasting.

He picked up the brush again and began scrubbing at the other arm. It gave him something to do while he thought. While he was thinking, he wasn't wasting time.

What would dissolve mercury? Nitric acid. Good old HNO{3}. Fine. Except that the hot lab was at the other end of the reactor, where the fissure had let all the air out. The bulkheads had dropped, and he couldn't get in. And, naturally, the nitric acid would be in the lab.

For the first time, he found himself hating Willows' guts. If he were around, he could get some acid from the cold lab, or even from the other hot lab at Number One. If Willows—

He stood up and dropped the brush. "Dolt! Boob! Moron! Idiot!" Not Willows. Himself. There was no reason on earth-or Luna-why he couldn't walk over to Number One hot lab and get the stuff himself. The habit of never leaving the lab without thorough decontamination was so thoroughly ingrained in him that he had simply never thought about it until that moment. But what did a little contamination with radioactive mercury mean at a time like this? He could take F corridor to Number One, use the decontamination chamber and the acid from the lab, shuck off his armor there, and come back through E corridor. F could be cleaned up later.

So simple.

He went through the light trap to the next chamber and turned the handle on the sliding door. The door wouldn't budge. It had been warped by the force of the helium blast, and it was stuck in its grooves.

Well, there were tools. The thing could be unstuck.

Peter de Hooch was a determined man, a strong man, and a smart man. But the door was more determined and stronger than he was, and his intelligence didn't give him much of an edge right then. After an hour's hard work, he managed to get the door open about eighteen inches. Then it froze fast and refused to move again. All the power and leverage he could bring to bear was useless. The door had opened all it was going to open. Beyond it, he could see the next radiation trap-and freedom.

Eighteen inches would have been plenty of space for him to get through if he had not been wearing the radiation-proof suit. But he didn't dare take that suit off. By the time he got out of the suit, the intensely radioactive mercury on its surface would have made his death only a matter of time. And not much time at that.

He told himself that if it were simply a matter of running to the control room to shut off the D-H reactor, he'd do it. That could have been done before he lost consciousness. But it wasn't that easy. Damping the reaction took time and control. The stuff had to be eased back slowly. Shutting off the Ditmars-Horst would simply blow a hole in the crust of Luna and kill everyone if he did it now. There were four or five

men out there who would die if he pulled anything foolish like that. The explosion wouldn't be as powerful as the Instantanium 512 reaction would be, but it would be none the less deadly for all that.

There had to be either a way to scrape the mercury off the suit or a way to open the door another six inches.

Or, he added suddenly, a way to get safely out of the suit.

* * * *

At the end of another twenty minutes, he had still thought of nothing. He wandered around the decontamination room, looking at everything, hoping he might see something that would give him a clue. He didn't.

He went into the antechamber of the reactor and glared at the door in the firewall. The instruments said that things were getting pretty fierce on the other side of that wall. Temperature: Two ninety-five and still rising. Pressure? He carefully cracked the inlet of the sampling chamber and got a soft hiss. The helium was expanding from the heat, that was all. Part of the trouble with the reactor, he thought, was the high percentage of oxygen and nitrogen that had mixed in during the ten minutes or so that the door was open. All hell was fixing to bust loose in there, and he, Peter de Hooch, was right next to it.

He walked back into the decontamination chamber.

What would dissolve mercury?

Mercury would dissolve gold. Would gold dissolve mercury?

Very funny.

He was like a turtle, de Hooch thought. Perfectly safe as long as he was in his shell, but take him out of it and he would die.

Hell of a way to spend the night, he thought. A night in shining armor.

That struck him as funny. He began to laugh. And laugh.

He almost laughed himself sick before he realized that it was fear and despair that were driving him into hysteria, not a sense of humor. He forced himself to calmness.

He must be calm.

He must think.

Yes.

How do you go about getting rid of a radioactive metal that is in effect welded to the outside of your suit?

The trouble was, he was a nucleonics engineer, not a chemist. He remembered quite a bit of his chemistry, of course, but not as much as he would have liked.

Could the stuff be neutralized?

Sure, he told himself. Very simple. All he had to do was go climb into the reactor, and let the reactor do the job. Mercury 203 plus an alpha particle gives nice, stable Lead 207. Just go climb right into the Ditmars-Horst and let the Helium 4 do the job.

But the thought stuck in his mind.

He kept telling himself not to panic as Willows had done.

And several minutes later, chuckling to himself in a half demented fashion, he opened the firewall door and went in to let the helium do the job.

* * * *

It was nearly eight in the morning, Greenwich time, when the three surface vehicles, with their wide Caterpillar treads lumbered to a halt near the kiosk that marked the entrance to the underground site of the laboratories.

"O.K.," said one of the men in the first machine, holding a microphone to his lips, "let's go in. If what Willows said is true, the whole place may blow any minute now, but I'm not asking for volunteers. Nobody will be any safer up here than they will down there, and we have to do a job. Besides, Willows wasn't completely rational. Nobody would put on a vac suit and run away like that if he was in his right mind. So we can discount a lot of what he said when we picked him up on the road.

"The five of us in this car are going straight to Number One Reactor to see what can be done to stop whatever is going on. The rest of you start trying to see if you can get those trapped men out of A and B corridors. All right, let's move in."

Less than five minutes later, five men went into the control room of Number One Reactor. They found Peter de Hooch sound asleep in the control chair, and the instruments showed that the Ditmars-Horst reactor was inactive.

One of the men shook de Hooch gently, awakening him in the middle of a snore.

"What?" he said groggily.

"We're here, Guz. Everything's O.K."

"Sure everything's O.K. Nothing to it. All I did was wait until the temperature got above three fifty-seven Centigrade-above the boiling point of mercury. Then I went in and let the hot helium boil the stuff off me. Nothing to it. Near boiled myself alive, but it did the trick."

"What," asked the man in a puzzled voice, "are you talking about?"

"I am a knight in dull armor," said Peter de Hooch, dozing off again.

Then he roused himself a little, and said, without opening his eyes: "Hi yo, Quicksilver, away." And he was sound asleep again.

And when he saw what he had done, With all his might and main, He jumped back in that bramble bush And scratch'd them in again!...

THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
# 3

"Father," said Benedict Breadfruit's son, Benedict II, "look at that robot over there! How can a machine in such horribly battered condition move about?"

Benedict Breadfruit looked sorrowfully at his offspring. "Haven't you ever seen junk amble, Junior?"

BUT, I DON'T THINK

"But, gentlemen," said the Physician, "I really don't think we can consider any religion which has human sacrifice as an integral part as a humane religion."

"At least," added the Painter with a chuckle, "not as far as the victim is concerned."

The Philosopher looked irritated. "Bosh! What if the victim likes it that way?"

-THE IDLE WORSHIPERS, R. Phillip Dachboden

The great merchantship Naipor settled her tens of thousands of tons of mass into her landing cradle on Viornis as gently as an egg being settled into an egg crate, and almost as silently. Then, as the antigravs were cut off, there was a vast, metallic sighing as the gigantic structure of the cradle itself took over the load of holding the ship in her hydraulic bath.

At that point, the ship was officially groundside, and the Naipor was in the hands of the ground officers. Space Captain Humbolt Reed sighed, leaned back in his desk chair, reached out a hand, and casually touched a trio of sensitized spots on the surface of his desk.

"Have High Lieutenant Blyke bring The Guesser to my office immediately," he said, in a voice that was obviously accustomed to giving orders that would be obeyed.

Then he took his fingers off the spots without waiting for an answer.

In another part of the ship, in his quarters near the Fire Control Section, sat the man known as The Guesser. He had a name, of course, a regular name, like everyone else; it was down on the ship's books and in the Main Registry. But he almost never used it; he hardly ever even thought of it. For twenty of his thirty-five years of life, he had been a trained Guesser, and for fifteen of them he'd been The Guesser of Naipor.

He was fairly imposing-looking for a Guesser; he had the tall, wide-shouldered build and the blocky face of an Executive, and his father had been worried that he wouldn't show the capabilities of a Guesser, while his mother had secretly hoped that he might actually become an Executive. Fortunately for The Guesser, they had both been wrong.

He was not only a Guesser, but a first-class predictor, and he showed impatience with those of his underlings who failed to use their ability in any particular. At the moment of the ship's landing, he was engaged in verbally burning the ears off Kraybo, the young man who would presumably take over The

Guesser's job one day-if he ever learned how to handle it.

"You're either a liar or an idiot," said The Guesser harshly, "and I wish to eternity I knew which!"

Kraybo, standing at attention, merely swallowed and said nothing. He had felt the back of The Guesser's hand too often before to expose himself intentionally to its swing again.

The Guesser narrowed his eyes and tried to see what was going on in Kraybo's mind.

"Look here, Kraybo," he said after a moment, "that one single Misfit ship got close enough to do us some damage. It has endangered the life of the Naipor and the lives of her crewmen. You were on the board in that quadrant of the ship, and you let it get in too close. The records show that you mis-aimed one of your blasts. Now, what I want to know is this: were you really guessing or were you following the computer too closely?"

"I was following the computer," said Kraybo, in a slightly wavering voice. "I'm sorry for the error, sir; it won't happen again."

The Guesser's voice almost became a snarl. "It hadn't better! You know that a computer is only to feed you data and estimate probabilities on the courses of attacking ships; you're not supposed to think they can predict!"

"I know, sir; I just—"

"You just near came getting us all killed!" snapped The Guesser. "You claim that you actually guessed where that ship was going to be, but you followed the computer's extrapolation instead?"

"Yes, sir," said the tense-faced Kraybo. "I admit my error, and I'm willing to take my punishment."

The Guesser grinned wolfishly. "Well, isn't that big-hearted of you? I'm very glad you're willing, because I just don't know what I'd do if you refused."

Kraybo's face burned crimson, but he said nothing.

The Guesser's voice was sarcastically soft. "But I guess about the only thing I could do in that case would be to"-The Guesser's voice suddenly became a bellow-"kick your thick head in!"

Kraybo's face drained of color suddenly.

The Guesser became suddenly brusque. "Never mind. We'll let it go for now. Report to the Discipline Master in Intensity Five for ten minutes total application time. Dismissed."

Kraybo, whose face had become even whiter, paused for a moment, as though he were going to plead with The Guesser. But he saw the look in his superior's eyes and thought better of it.

"Yes, sir," he said in a weak voice. He saluted and left.

* * * *

And The Guesser just sat there, waiting for what he knew would come.

It did. High Lieutenant Blyke showed up within two minutes after Kraybo had left. He stood at the door

of The Guesser's cubicle, accompanied by a sergeant-at-arms.

"Master Guesser, you will come with us." His manner was bored and somewhat flat.

The Guesser bowed his head as he saluted. "As you command, great sir." And he followed the lieutenant into the corridor, the sergeant tagging along behind.

The Guesser wasn't thinking of his own forthcoming session with the captain; he was thinking of Kraybo.

Kraybo was twenty-one, and had been in training as a Guesser ever since he was old enough to speak and understand. He showed occasional flashes of tremendous ability, but most of the time he seemed-well, lazy. And then, there was always the question of his actual ability.

A battle in the weirdly distorted space of ultralight velocities requires more than machines and more than merely ordinary human abilities. No computer, however built, can possibly estimate the flight of a dodging spaceship with a canny human being at the controls. Even the superfast beams from a megadyne force gun require a finite time to reach their target, and it is necessary to fire at the place where the attacking ship will be, not at the position it is occupying at the time of firing. That was a bit of knowledge as old as human warfare: you must lead a moving target.

For a target moving at a constant velocity, or a constant acceleration, or in any other kind of orbit which is mathematically predictable, a computer was not only necessary, but sufficient. In such a case, the accuracy was perfect, the hits one hundred per cent.

But the evasive action taken by a human pilot, aided by a randomity selector, is not logical and therefore cannot be handled by a computer. Like the path of a microscopic particle in Brownian motion, its position can only be predicted statistically; estimating its probable location is the best that can be done. And, in space warfare, probability of that order is simply not good enough.

To compute such an orbit required a special type of human mind, and therefore a special type of human. It required a Guesser.

The way a Guesser's mind operated could only be explained to a Guesser by another Guesser. But, as far as anyone else was concerned, only the objective results were important. A Guesser could "guess" the route of a moving ship, and that was all anyone cared about. And a Master Guesser prided himself on his ability to guess accurately 99.999% of the time. The ancient sport of baseball was merely a test of muscular co-ordination for a Guesser; as soon as a Guesser child learned to control a bat, his batting average shot up to 1.000 and stayed there until he got too old to swing the bat. A Master Guesser could make the same score blindfolded.

Hitting a ship in space at ultralight velocities was something else again. Young Kraybo could play baseball blindfolded, but he wasn't yet capable of making the master guesses that would protect a merchantship like the Naipor.

But what was the matter with him? He had, of course, a fire-control computer to help him swing and aim his guns, but he didn't seem to be able to depend on his guesswork. He had more than once fired at a spot where the computer said the ship would be instead of firing at the spot where it actually arrived a fraction of a second later.

There were only two things that could be troubling him. Either he was doing exactly as he said-ignoring his guesses and following the computer-or else he was inherently incapable of controlling his guesswork

and was hoping that the computer would do the work for him.

If the first were true, then Kraybo was a fool; if the second, then he was a liar, and was no more capable of handling the fire control of the Naipor than the captain was.

The Guesser hated to have Kraybo punished, really, but that was the only way to make a youngster keep his mind on his business.

After all, thought The Guesser, that's the way I learned; Kraybo can learn the same way. A little nerve-burning never hurt anyone.

But that last thought was more to bolster himself than it was to justify his own actions toward Kraybo. The lieutenant was at the door of the captain's office, with The Guesser right behind him.

* * * *

The door dilated to receive the three-the lieutenant, The Guesser, and the sergeant-at-arms-and they marched across the room to the captain's desk.

The captain didn't even bother to look up until High Lieutenant Blyke saluted and said: “The Guesser, sir."

And the captain gave the lieutenant a quick nod and then looked coldly at The Guesser. “The ship has been badly damaged. Since there are no repair docks here on Viornis, we will have to unload our cargo and then go-empty-all the way to D'Graski's Planet for repairs. All during that time, we will be more vulnerable than ever to Misfit raids."

His ice-chill voice stopped, and he simply looked at The Guesser with glacier-blue, unblinking eyes for ten long seconds.

The Guesser said nothing. There was nothing he could say. Nothing that would do him any good.

The Guesser disliked Grand Captain Reed-and more, feared him. Reed had been captain of the Naipor for only three years, having replaced the old captain on his retirement. He was a strict disciplinarian, and had a tendency to punish heavily for very minor infractions of the rules. Not, of course, that he didn't have every right to do so; he was, after all, the captain.

But the old captain hadn't given The Guesser a nerve-burning in all the years since he had accepted The Guesser as The Guesser. And Captain Reed—

The captain's cold voice interrupted his thoughts.

"Well? What was it? If it was a mechano-electronic misfunction of the computer, say so; we'll speak to the engineer."

The Guesser knew that the captain was giving him what looked like an out-but The Guesser also knew it was a test, a trap.

The Guesser bowed his head very low and saluted. “No, great sir; the fault was mine."

Grand Captain Reed nodded his head in satisfaction. “Very well. Intensity Five, two minutes. Dismissed."

The Guesser bowed his head and saluted, then he turned and walked out the door. The sergeant-at-arms didn't need to follow him; he had been let off very lightly.

He marched off toward the Disciplinary Room with his head at the proper angle-ready to lift it if he met a lesser crewman, ready to lower it if he met an executive officer.

He could already feel the terrible pain of the nerve-burner coursing through his body-a jolt every ten seconds for two minutes, like a whip lashing all over his body at once. His only satisfaction was the knowledge that he had sentenced Kraybo to ten minutes of the same thing.

* * * *

The Guesser lay on his bed, face down, his grasping fingers clutching spasmodically at the covering as his nerves twitched with remembered pain. Thirteen jolts. Thirteen searing jolts of excruciating torture. It was over now, but his synapses were still crackling with the memories of those burning lashes of energy.

He was thirty-five. He had to keep that in mind. He was thirty-five now, and his nerves should be under better control than they had been at twenty. He wondered if there were tears streaming from his eyes, and then decided it didn't matter. At least he wasn't crying aloud.

Of course, he had screamed in the nerve-burner; he had screamed thirteen times. Any man who didn't scream when those blinding stabs of pain came was either unconscious or dead-it was no disgrace to scream in the burner. But he wasn't screaming now.

He lay there for ten minutes, his jaw clamped, while the twitching subsided and his nervous system regained its usual co-ordination.

The burner did no actual physical damage; it wasn't good economics for an Executive to allow his men to be hurt in any physical manner. It took a very little actual amount of energy applied to the nerve endings to make them undergo the complex electrochemical reaction that made them send those screaming messages to the brain and spine. There was less total damage done to the nerves than a good all-night binge would do to a normal human being. But the effect on the mind was something else again.

It was a very effective method of making a man learn almost any lesson you wanted to teach him.

After a while, The Guesser shuddered once more, took a deep breath, held it for fifteen seconds, and then released it. A little later, he lifted himself up and swung his legs over the edge of his bed. He sat on the edge of the bed for a few minutes, then got up and got dressed in his best uniform.

After all, the captain hadn't said anything about restricting him to the ship, and he had never been to Viornis before. Besides, a couple of drinks might make him feel better.

There were better planets in the galaxy, he decided two hours later. Thousands of them.

For one thing, it was a small, but dense world, with a surface gravity of one point two standard gees-not enough to be disabling, but enough to make a man feel sluggish. For another, its main export was farm products: there were very few large towns on Viornis, and no center of population that could really be called a city. Even here, at the spaceport, the busiest and largest town on the planet, the population was less than a million. It was a “new” world, with a history that didn't stretch back more than two centuries. With the careful population control exercised by the ruling Execs, it would probably remain small and provincial for another half millennium.

The Guesser moseyed down one of the streets of Bellinberg probably named after the first Prime Executive of the planet-looking for a decent place for a spaceman to have a drink. It was evening, and the sinking of the yellow primary below the western horizon had left behind it a clear, star-filled sky that filled the air with a soft, white radiance. The streets of the town itself were well-lit by bright glow-plates imbedded in the walls of the buildings, but above the street level, the buildings themselves loomed darkly. Occasionally, an Exec's aircar would drift rapidly overhead with a soft rush of air, and, in the distance, he could see the shimmering towers of the Executive section rising high above the eight- or ten-storyed buildings that made up the majority of Bellinberg.

The streets were fairly crowded with strollers-most of them Class Four or Five citizens who stepped deferentially aside as soon as they saw his uniform, and kept their eyes averted from him. Now and then, the power car of a Class Three rolled swiftly by, and The Guesser felt a slight twinge of envy. Technically, his own rank was the equivalent of Class Three, but he had never owned a groundcar. What need had a spaceman of a groundcar? Still, it would be nice to drive one just once, he thought; it would be a new experience, certainly.

Right now, though, he was looking for a Class Three bar; just a place to have a small, quiet drink and a bite to eat. He had a perfect right to go into a lower class bar, of course, but he had never felt quite comfortable associating with his inferiors in such a manner, and certainly they would feel nervous in his presence because of the sidearm at his hip.

No one below Class Three was allowed to carry a beamgun, and only Ones and Twos were allowed to wear the screening fields that protected them from the nerve-searing effects of the weapon. And they, being Execs, were in no danger from each other.

Finally, after much walking, he decided that he was in the wrong part of town. There were no Class Three bars anywhere along these streets. Perhaps, he thought, he should have gone to the Spacemen's Club at the spaceport itself. On the other hand, he hadn't particularly wanted to see any of the other minor officers of his own class after the near-fiasco which had damaged the Naipor. Being a Guesser set him apart, even from other Threes.

He thought for a moment of asking a policeman, but he dismissed it. Cops, as always, were a breed apart. Besides, they weren't on the streets to give directions, but to preserve order.

At last, he went into a nearby Class Four bar and snapped his fingers for the bartender, ignoring the sudden silence that had followed his entrance.

The barman set down a glass quickly and hurried over, bobbing his head obsequiously. “Yes, sir; yes, sir. What can I do for you, sir? It's an honor to have you here, sir. How may I serve you?"

The man himself was wearing the distinctive clothing of a Five, so his customers outranked him, but the brassard on his arm showed that his master was a Two, which afforded him enough authority to keep reasonable order in the place.

"Where's the nearest Class Three bar?” The Guesser snapped.

The barman looked faintly disappointed, but he didn't lose his obsequiousness. “Oh, that's quite a way from here, sir-about the closest would be Mallard's, over on Fourteenth Street and Upper Drive. A mile, at least."

The Guesser scowled. He was in the wrong section of town, all right.

"But I'd be honored to serve you, sir," the barman hurried on. "Private booth, best of everything, perfect privacy—"

The Guesser shook his head quickly. "No. Just tell me how to get to Mallard's."

The barman looked at him for a moment, rubbing a fingertip across his chin, then he said: "You're not driving, I suppose, sir? No? Well, then, you can either take the tubeway or walk, sir.... "He let the sentence hang, waiting for The Guesser's decision.

The Guesser thought rapidly. Tubeways were for Fours and Fives. Threes had groundcars; Ones and Twos had aircars; Sixes and below walked. And spacemen walked.

Trouble is, spacemen aren't used to walking, especially on a planet where they weigh twenty per cent more than they're used to. The Guesser decided he'd take the tubeway; at the Class Three bar, he might be able to talk someone into driving him to the spaceport later.

But five minutes later, he was walking in the direction the bartender had told him to take for finding Mallard's on foot. To get to the tubeway was a four-block walk, and then there would be another long walk after he got off. Hoofing it straight there would be only a matter of five blocks difference, and it would at least spare him the embarrassment of taking the tube.

* * * *

It was a foolish thing to do, perhaps, but once The Guesser had set his mind on something, it took a lot more than a long walk to dissuade him from his purpose. He saw he was not the only spaceman out on the town; one of the Class Five taverns he passed was filled with boisterous singing, and he could see a crowd of men standing around three crewmen who were leading them in a distinctly off-color ballad. The Guesser smiled a little to himself. Let them have their fun while they were on-planet; their lives weren't exactly bright aboard ship.

Of course, they got as much as was good for them in the way of entertainment, but a little binge gave them something to look forward to, and a good nerve-burning would sober them up fast enough if they made the mistake of coming back drunk.

Nerve-burning didn't really bother a Five much, after all; they were big, tough, work-hardened clods, whose minds and brains simply didn't have the sensitivity to be hurt by that sort of treatment. Oh, they screamed as loud as anyone when they were in the burner, but it really didn't have much effect on them. They were just too thick-skulled to have it make much difference to them one way or the other.

On the other hand, an Exec would probably go all to pieces in a burner. If it didn't kill him outright, he'd at least be sick for days. They were too soft to take even a touch of it. No Class One, so far as The Guesser knew, had ever been subjected to that sort of treatment, and a Two only got it rarely. They just weren't used to it; they wouldn't have the stamina to take it.

His thoughts were interrupted suddenly by the familiar warning that rang in his mind like a bell. He realized suddenly, as he became blazingly aware of his surroundings, that he had somehow wandered into a definitely low-class neighborhood. Around him were the stark, plain housing groups of Class Six families. The streets were more dimly lit, and there was almost no one on the street, since it was after curfew time for Sixes. The nearest pedestrian was a block off and moving away.

All that took him but a fraction of a second to notice, and he knew that it was not his surroundings which had sparked the warning in his mind. There was something behind him-moving.

What had told him? Almost nothing. The merest touch of a foot on the soft pavement-the faintest rustle of clothing-the whisper of something moving through the air.

Almost nothing-but enough. To a man who had played blindfold baseball, it was plenty. He knew that someone not ten paces behind him had thrown something heavy, and he knew its exact trajectory to within a thousandth of a millimeter, and he knew exactly how to move his head to avoid the missile.

He moved it, at the same time jerking his body to one side. It had only been a guess-but what more did a Guesser need?

From the first hint of warning to the beginning of the dodging motion, less than half a second had passed.

He started to spin around as the heavy object went by him, but another warning yelped in his mind. He twisted a little, but it was too late.

Something burned horribly through his body, like a thousand million acid-tipped, white-hot needles jabbing through skin and flesh and sinking into the bone. He couldn't even scream.

He blacked out as if he'd been a computer suddenly deprived of power.

## II

Of course, came the thought, a very good way to put out a fire is to pour cold water on it. That's a very good idea.

At least, it had put out the fire.

Fire? What fire? The fire in his body, the scalding heat that had been quenched by the cold water.

Slowly, as though it were being turned on through a sluggishly turning rheostat, consciousness came back to The Guesser.

He began to recognize the sensations in his body. There was a general, all-over dull ache, punctuated here and there by sharper aches. There was the dampness and the chill. And there was the queer, gnawing feeling in the pit of his stomach.

At first, he did not think of how he had gotten where he was, nor did he even wonder about his surroundings. There seemed merely to be an absolute urgency to get out of wherever he was and, at the same time, an utter inability to do so. He tried to move, to shift position, but his muscles seemed so terribly tired that flexing them was a high-magnitude effort.

After several tries, he got his arms under his chest, and only then did he realize that he had been lying prone, his right cheek pressed against cold, slimy stone. He lifted himself a little, but the effort was too much, and he collapsed again, his body making a faint splash as he did so.

He lay there for a while, trying to puzzle out his odd and uncomfortable environment. He seemed to be lying on a sloping surface with his head higher than his feet. The lower part of his body was immersed in chill, gently-moving water. And there was something else—

The smell.

It was an incredible stench, an almost overpowering miasma of decay.

He moved his head then, and forced his eyes open. There was a dim, feeble glow from somewhere overhead and to his right, but it was enough to show him a vaulted ceiling a few feet above him. He was lying in some sort of tube which—

And then the sudden realization came.

He was in a sewer.

The shock of it cleared his mind a little, and gave added strength to his muscles. He pushed himself to his hands and knees and began crawling toward the dim light. It wasn't more than eight or ten feet, but it seemed to take an eternity for him to get there. Above him was a grating, partially covered with a soggy-looking sheet of paper. The light evidently came from a glow-plate several yards away.

He lay there, exhausted and aching, trying to force his brain into action, trying to decide what to do next.

He'd have to lift the grating, of course; that much was obvious. And he'd have to stand up to do that. Did he have the strength?

Only one way to find out. Again he pushed himself to his hands and knees, and it seemed easier this time. Then, bracing himself against the curving wall of the sewer, he got to his feet. His knees were weak and wobbly, but they'd hold. They had to hold.

The top of the sewer duct was not as far off as it had seemed; he had to stoop to keep from banging his head against the grating. He paused in that position to catch his breath, and then reached up, first with one hand and then with the other, to grasp the grating.

Then, with all the strength he could gather, he pushed upwards. The hinged grate moved upwards and banged loudly on the pavement.

There remained the problem of climbing out of the hole. The Guesser never knew how he solved it. Somehow, he managed to find himself out of the sewer and lying exhausted on the pavement.

He knew that there was some reason why he couldn't just lie there forever, some reason why he had to hide where he couldn't be seen.

It was not until that moment that he realized that he was completely naked. He had been stripped of everything, including the chronometer on his wrist.

With an effort, he heaved himself to his feet again and began running, stumbling drunkenly, yet managing somehow to keep on his feet. He had to find shelter, find help.

Somewhere in there, his mind blanked out again.

* * * *

He awoke feeling very tired and weak, yet oddly refreshed, as though he had slept for a long time. When his eyes opened, he simply stared at the unfamiliar room for a long time without thinking-without really

caring to think. He only knew that he was warm and comfortable and somehow safe, and it was such a pleasant feeling after the nightmare of cold and terror that he only wanted to enjoy it without analyzing it.

But the memory of the nightmare came again, and he couldn't repress it. And he knew it hadn't been a nightmare, but reality.

Full recollection flooded over him.

Someone had shot him with a beamgun, that nasty little handweapon that delivered in one powerful, short jolt the same energy that was doled out in measured doses over a period of minutes in a standard nerve-burner. He remembered jerking aside at the last second, just before the weapon was fired, and it was evidently that which had saved his life. If the beam had hit him in the head or spine, he'd be dead now.

Then what? Guessing about something that had happened in the past was futile, and, anyway, guessing didn't apply to situations like that. But he thought he could pretty well figure out what had happened.

After he'd been shot down, his assailant had probably dragged him off somewhere and stripped him, and then dumped him bodily into the sewer. The criminal had undoubtedly thought that The Guesser was dead; if the body had been found, days or weeks later, it would be unidentifiable, and probably dismissed as simply another unsolved murder. They were rather common in low-class districts such as this.

Which brought him back again to the room.

He sat up in bed and looked around. Class Six Standard Housing. Hard, gray, cast polymer walls-very plain. Ditto floor and ceiling. Single glow-plate overhead. Rough, gray bedclothing.

Someone had found him after that careening flight from the terror of the sewer and had brought him here. Who?

Who?

The sense of well-being he had felt upon awakening had long since deserted him. What he felt now was a queer mixture of disgust and fear. He had never known a Class Six. Even the lowest crewman on the Naipor was a Five.

Uneasily, The Guesser climbed out of the bed. He was wearing a sack-like gray dress that fell almost to his knees, and nothing else. He walked on silent bare feet to the door. He could hear nothing beyond it, so he twisted the handle carefully and eased it open a crack.

And immediately he heard low voices. The first was a man's.

"...Like you pick up dogs, hey." He sounded angry. "He bring trouble on high, that'n. Look, you, at the face he got. He no Sixer, no, nor even Fiver. Exec, that's what. Trouble."

Then a woman's voice. "Exec, he?" A sharp laugh. "Naked, dirty-wet, sick, he fall on my door. Since when Execs ask help from Sixer chippie like I? And since when Execs talk like Sixer when they out of they head? No fancy Exec talk, he, no."

The Guesser didn't understand that. If the woman was talking about him-and she must be-then surely he

had not spoken the illiterate patois of the Class Six people when he was delirious.

The woman went on. “No, Lebby; you mind you business; me, I mind mine. Here, you take you this and get some food. Now, go, now. Come back at dark."

The man grumbled something The Guesser didn't understand, but there seemed to be a certain amount of resignation in his voice. Then a door opened and closed, and there was a moment of silence.

* * * *

Then he heard the woman's footsteps approaching the partially opened door. And her voice said: “You lucky Lebby have he back to you when you open the door. If he even see it move, he know you wake."

The Guesser backed away from the door as she came in.

She was a drab woman, with a colorlessness of face that seemed to match the colorlessness of her clothing. Her hair was cropped short, and she seemed to sag all over, as though her body were trying to conform to the shapelessness of the dress instead of the reverse. When she forced a smile to her face, it didn't seem to fit, as though her mouth were unused to such treatment from the muscles.

"How you feel?” she asked, stopping just inside the room.

"I ... uh—” The Guesser hardly knew what to say. He was in a totally alien environment, a completely unknown situation. “I'm fine,” he said at last.

She nodded. “You get plenty sleep, all right. Like dead, except when you talk to yourself."

Then he had spoken in delirium. “How ... how long was I out?"

"Three days,” she said flatly. “Almost four.” She paused. “You ship leave."

"Leave?” The Guesser said blankly. “The Naipor? Gone?” It seemed as if the world had dropped away from his feet, leaving him to fall endlessly through nothingness. It was true, of course. It didn't take more than twenty-four hours to unload the ship's holds, and, since there had been no intention of reloading, there was no need to stay. He had long overstayed the scheduled take-off time.

It created a vacuum in his mind, a hole in his very being that could never be filled by anything else. The ship was his whole life-his home, his work, his security.

"How did you know about the ship?” he asked in a dazed voice.

"A notice,” she said. She fished around in one of the big pockets of the gray dress and her hand came out with a crumpled sheet of glossy paper. She handed it to him silently. It was a Breach of Contract notice.

WANTED for BREACH OF CONTRACT

JAIM JAKOM DIEGO

AGE: 35 HEIGHT: 185 cm WEIGHT: 96 kg HAIR: black EYES: blue COMPLXN: fair

Jaim Jakom Diego, Spacetech 3rd Guesser, broke contract with Interstellar Trade Corporation on

3/37/119 by failing to report for duty aboard home merchantship Naipor on that date. All citizens are notified hereby that said Jaim Jakom Diego is unemployable except by the ITC, and that he has no housing, clothing, nor subsistance rights on any planet, nor any right to transportation of any kind.

STANDARD REWARD PLUS BONUS FOR INFORMATION LEADING TO THE ARREST OF THIS MAN

The Guesser looked at the picture that accompanied the notice. It was an old one, taken nearly fifteen years before. It didn't look much like him any more. But that didn't matter; even if he was never caught, he still had no place to go. A runaway had almost no chance of remaining a runaway for long. How would he eat? Where would he live?

He looked up from the sheet, into the woman's face. She looked back with a flat, unwavering gaze. He knew now why she had been addressing him as an equal, even though she knew he was Class Three.

"Why haven't you tried to collect the reward?" he asked. He felt suddenly weak, and sat down again on the edge of the bed.

"Me, I need you." Then her eyes widened a trifle. "Pale you look, you do. I get you something solid inside you. Nothing but soup I get down you so far, all three days. Soup. You sit, I be back."

He nodded. He was feeling sickish.

She went into the other room, leaving the door open, and he could hear noises from the small kitchen. The woman began to talk, raising her voice a little so he could hear her.

"You like eggs?" she asked.

"Some kinds," said The Guesser. "But it doesn't matter. I'm hungry." He hadn't realized how hungry he was.

"Some kinds?" The woman's voice was puzzled. "They more than one kind of egg?" The kitchen was suddenly silent as she waited intently for the answer.

"Yes," said The Guesser. "On other planets. What kind of eggs are these?"

"Just ... just eggs."

"I mean, what kind of animal do they come from?"

"Chicken. What else lay eggs?"

"Other birds." He wished vaguely that he knew more about the fauna of Viornis. Chickens were well-nigh universal; they could live off almost anything. But other fowl fared pretty well, too. He shrugged it off; none of his business; leave that to the ecologists.

"Birds?" the woman asked. It was an unfamiliar word to her.

"Different kinds of chickens," he said tiredly. "Some bigger, some smaller, some different colors." He hoped the answer would satisfy her.

Evidently it did. She said, “Oh,” and went on with what she was doing.

The silence, after only a minute or two, became unbearable. The Guesser had wanted to yell at the woman to shut up, to leave him alone and not bother him with her ignorant questions that he could not answer because she was inherently too stupid to understand. He had wondered why he hadn't yelled; surely it was not incumbent on a Three to answer the questions of a Six.

But he had answered, and after she stopped talking, he began to know why. He wanted to talk and to be talked to. Anything to fill up the void in his mind; anything to take the place of a world that had suddenly vanished.

What would he be doing now, if this had not happened? Involuntarily, he glanced at his wrist, but the chronometer was gone.

He would have awakened, as always, at precisely 0600 ship time. He would have dressed, and at 0630 he would have been at table, eating his meal in silence with the others of his class. At 0640, the meal would be over, and conversation would be allowed until 0645. Then, the inspection of the fire control system from 0650 until 0750. Then—

He forced his mind away from it, tried not to think of the pleasant, regular orderly routine by which he had lived his life for a quarter of a century and more.

When the woman's voice came again, it was a relief.

"What's a Guesser?"

He told her as best he could, trying to couch his explanation in terms that would be understood by a woman of her limited vocabulary and intelligence. He was not too sure he succeeded, but it was a relief to talk about it. He could almost feel himself dropping into the routine that he used in the orientation courses for young Guessers who had been assigned to him for protection and instruction.

"Accurate predicting of this type is not capable of being taught to all men; unless a man has within him the innate ability to be a Guesser, he is as incapable of learning Guessing as a blind man is incapable of being taught to read.” (It occurred to him at that moment to wonder how the Class Six woman had managed to read the Breach of Contract notice. He would have to ask her later.) “On the other hand, just as the mere possession of functioning eyes does not automatically give one the ability to read, neither does the genetic inheritance of Guesser potentialities enable one to make accurate, useful Guesses. To make this potentiality into an ability requires years of hard work and practice.

"You must learn to concentrate, to focus your every attention on the job at hand, to—"

He broke off suddenly. The woman was standing in the doorway, holding a plate and a steaming mug. Her eyes were wide with puzzlement and astonishment. “You mean me?"

"No ... no.” He shook his head. “I ... was thinking of something else."

She came on in, carrying the food. “You got tears in your eyes. You hurt?"

He wanted to say yes. He wanted to tell her how he was hurt and why. But the words wouldn't-or couldn't-come. “No,” he said. “My eyes are just a little blurry, that's all. From sleep."

She nodded, accepting his statements. “Here. You eat you this. Put some stuffing in you belly."

He ate, not caring what the food tasted like. He didn't speak, and neither did she, for which he was thankful. Conversation during a meal would have been both meaningless and painful to him.

It was odd to think that, in a way, a Class Six had more freedom than he did. Presumably, she could talk, if she wanted, even during a meal.

And he was glad that she had not tried to eat at the same time. To have his food cooked and served by a Six didn't bother him, nor was he bothered by her hovering nearby. But if she had sat down with him to eat—

But she hadn't, so he dropped the thought from his mind.

Afterwards, he felt much better. He actually hadn't realized how hungry he had been.

She took the dishes out and returned almost immediately.

"You thought what you going to do?” she asked.

He shook his head. He hadn't thought. He hadn't even wanted to think. It was as though, somewhere in the back of his mind, something kept whispering that this was all nothing but a very bad dream and that he'd wake up in his cubicle aboard the Naipor at any moment. Intellectually, he knew it wasn't true, but his emotional needs, coupled with wishful thinking, had hamstrung his intellect.

However, he knew he couldn't stay here. The thought of living in a Class Six environment all the rest of his life was utterly repellent to him. And there was nowhere else he could go, either. Even though he had not been tried as yet, he had effectively been Declassified.

"I suppose I'll just give myself over to the Corporation,” he said. “I'll tell them I was waylaid-maybe they'll believe it."

"Maybe? Just only maybe?"

He shrugged a little. “I don't know. I've never been in trouble like this before. I just don't know."

"What they going to do to you, you give up to them?"

"I don't know that, either."

Her eyes suddenly looked far off. “Me, I got an idea. Maybe get both of us some place."

He looked at her quickly. “What do you mean?"

Her gaze came back from the distance, and her eyes focused squarely on his. “The Misfits,” she said in her flat voice. “We could go to the Misfits."

## III

The Guesser had been fighting the Misfits for twenty years, and hating them for as long as he could remember. The idea that he could ever become one of them had simply never occurred to him. Even the

idea of going to one of the Misfit Worlds was so alien that the very suggestion of it was shocking to his mind.

And yet, the suggestion that the Sixer woman had made did require a little thinking over before he accepted or rejected it.

The Misfits. What did he really know about them, anyway?

They didn't call themselves Misfits, of course; that was a derogatory name used by the Aristarchy. But the Guesser couldn't remember off hand just what they did call themselves. Their form of government was a near-anarchic form of ochlocracy, he knew-mob rule of some sort, as might be expected among such people. They were the outgrowth of an ancient policy that had been used centuries ago for populating the planets of the galaxy.

There are some people who simply do not, will not, and can not fit in with any kind of social organization-except the very flimsiest, perhaps. Depending on the society in which they exist and the extent of their own antisocial activities, they have been called, over the centuries, everything from "criminals" to "pioneers." It was a matter of whether they fought the unwelcome control of the society in power or fled from it.

The Guesser's knowledge of history was close to nonexistent, but he had heard that the expansion to the stars from Earth-a planet he had never been within a thousand parsecs of-had been accomplished by the expedient of combining volunteers with condemned criminals and shipping them off to newly-found Earth-type planets. After a generation had passed, others came in-the civilizing types-and settled the planets, making them part of the Aristarchy proper.

(Or was the Aristarchy that old? The Guesser had a feeling that the government at that time had been of a different sort, but he couldn't for the life of him remember what it was. Perhaps it had been the prototype of the Aristarchy, for certainly the present system of society had existed for four or five centuries-perhaps more. The Guesser realized that his knowledge of ancient history was as confused as anyone's; after all, it wasn't his specialty. He remembered that when he was a boy, he'd heard a Teacher Exec talk about the Geological Ages of Earth and the Teacher had said that "cave men were not contemporary with the dinosaur." He hadn't known what it meant at the time, since he wasn't supposed to be listening, anyway, to an Exec class, but he had realized that the histories of times past often became mixed up with each other.)

At any rate, the process had gone along smoothly, even as the present process of using Class Sevens and Declassified citizens did. But in the early days there had not been the organization that existed in the prescent Aristarchy; planets had become lost for generations at a time. (The Guesser vaguely remembered that there had been wars of some kind during that time, and that the wars had contributed to those losses.) Some planets had civilized themselves without the intervention of the Earth government, and, when the Earth government had come along, they had fought integration with everything they could summon to help them.

Most of the recalcitrant planets had eventually been subdued, but there were still many "hidden planets" which were organized as separate governments under a loose confederation. These were the Misfits.

Because of the numerical superiority of the Aristarchy, and because it operated in the open instead of skulking in the darkness of space, the Misfits knew where Aristarchy planets were located, while the Aristarchy was unable to search out every planet in the multimyriads of star systems that formed the galaxy.

Thus the Misfits had become pirates, preying on the merchantships of the Aristarchy. Why? No one knew. (Or, at least, The Guesser corrected himself, he didn't know.) Such a non-sane culture would have non-sane reasons.

The Aristarchy occupied nearly all the planets of the galaxy that could be inhabited by Man; that much The Guesser had been told. Just why Earth-type planets should occur only within five thousand light-years of the Galactic Center was a mystery to him, but, then, he was no astrophysicist.

But the Sixer woman said she had heard that the Aristarchy was holding back facts; that there were planets clear out to the Periphery, all occupied by Misfits; that the legendary Earth was one of those planets; that—

A thousand things. All wrong, as The Guesser knew. But she was firmly convinced that if anyone could get to a Misfit planet, they would be welcomed. There were no Classes among the Misfits, she said. (The Guesser dismissed that completely; a Classless society was ridiculous on the face of it.)

The Guesser had asked the woman why-if her statements were true-the Misfits had not conquered the Aristarchy long ago. After all, if they held the galaxy clear out to the Periphery, they had the Aristarchy surrounded, didn't they?

She had had no answer.

And it had only been later that The Guesser realized that he had an answer. Indeed, that he himself, was a small, but significant part of that answer.

The Misfits had no Guessers. That was a fact that The Guesser knew from personal experience. He had been in space battles with Misfit fleets, and he had brought the Naipor through those battles unscathed while wreaking havoc and destruction among the massed ships of the Misfits. They had no Guessers. (Or no trained Guessers, he amended. The potential might be there, but certainly the actuality was not.)

And it occurred to him that the Misfits might have another kind of trained talent. They seemed to be able to search out and find a single Aristarchy ship, while it was impossible to even detect a Misfit fleet until it came within attacking distance. Well, that, again, was not his business.

* * * *

But none of these considerations were important in the long run; none of them were more than minor. The thing that made up The Guesser's mind, that spurred him into action, was the woman's admission that she had a plan for actually reaching Misfit planets.

It was quite simple, really; they were to be taken prisoners.

"They spaceships got no people inside, see you," she said, just as though she knew what she were talking about. "They just want to catch our ships, not kill 'em. So they send out a bunch of little ships on they own, just to ... uh ... cripple our ships. It don't matter, they little ships get hit, because they no one in them, see you. They trying to get our ships in good shape, and people in them and stuff, that's all."

"Yes, yes," The Guesser had said impatiently, "but what's that to do with us?"

She waved a hand, as though she were a little flustered by his peremptory tone. She wasn't, after all, used to talking with Class Threes as equals, even though she knew that in this case the Three was

helpless.

"I tell you! I tell you!" She paused to reorganize her thoughts. "But I ask you: if we get on a ship, you can keep it from shooting the Misfit ships?"

The Guesser saw what she was driving at. It didn't make much sense yet, but there was a glimmer of something there.

"You mean," he said, "that you want to know whether it would be possible for me to partially disable the fire-control system of a spaceship enough to allow it to be captured by Misfit ships?"

She nodded rapidly. "Yes ... I think, yes. Can you?"

"Ye-e-es," The Guesser said, slowly and cautiously. "I could. But not by just walking in and doing it. I mean, it would be almost impossible to get aboard a ship in the first place, and without an official position I couldn't do anything anyway."

But she didn't look disappointed. Instead, she'd smiled a little. "I get us on the ship," she said. "And you have official position. We do it."

When she had gone on to explain, The Guesser's mind had boggled at her audacity-at first. And then he'd begun to see how it might be possible.

For it was not until then that the woman had given The Guesser information which he hadn't thought to ask about before. The first was her name: Deyla. The second was her job.

She was a cleaning woman in Executive territory.

And, as she outlined her plan for reaching the Misfits, The Guesser began to feel despair slipping from his mind, to be replaced by hope.

* * * *

The Guesser plodded solemnly along the street toward the tall, glittering building which was near the center of Executive territory, his feet moving carefully, his eyes focused firmly on the soft, textured surface of the pavement. He was clad in the rough gray of a Class Six laborer, and his manner was carefully tailored to match. As he was approached by Fours and Fives, he stepped carefully to one side, keeping his face blank, hiding the anger that seethed just beneath the surface.

Around his arm was a golden brassard indicating that he was contracted to a Class One, and in his pocket was a carefully forged card indicating the same thing. No one noticed him; he was just another Sixer going to his menial job.

The front of the building bore a large glowing plaque which said:

VIORNIS EXPORT CORPORATION

But the front entrance was no place for a Sixer. He went on past it, stepping aside regularly for citizens of higher class than his own assumed Six. He made his way around to the narrow alley that ran past the rear of the building.

There was a Class Five guard armed with a heavy truncheon, standing by the door that led into the

workers entrance. The Guesser, as he had been instructed by Deyla, had his card out as he neared the doorway. The guard hardly even glanced at it before wagging a finger indicating that The Guesser was to pass. He didn't bother to speak.

The Guesser was trembling as he walked on in-partly in anger, partly in fear. It seemed ridiculous that one glance had not told the guard that he was not a Class Six. The Guesser was quite certain that he didn't look like a Sixer. But then, Fives were not very perceptive people, anyway.

The Guesser went on walking into the complex corridors of the lower part of the building, following directions that had been given him by Deyla. There was no hesitation on his part; his memory for things like that was as near perfect as any record of the past can be. He knew her instructions well enough to have navigated the building in the dark.

Again, The Guesser found himself vaguely perturbed by the relative freedom of Sixers. As long as they got their jobs done there was almost no checking as to how they spent their time. Well, actually, the jobs to which they were suited were rather trivial-some of them were actually "made work." After all, in a well-run society, it was axiomatic that everyone have basic job security; that's what kept everyone happy.

Of course, there were plenty of Sixers working in construction and on farms who were kept on their toes by overseers, but cleaning jobs and such didn't need such supervision. A thing can only be so clean; there's no quota to fill and exceed.

After several minutes of walking and climbing stairs-Sixers did not use lift chutes or drop chutes-he found the room where Deyla had told him to meet her. It was a small storeroom containing cleaning tools and supplies. She was waiting for him.

And, now that the time had actually come for them to act on her plan, fear showed on her face. The Guesser knew then that he had been right in his decision. But he said nothing about that yet.

"Now are you certain about the destination?" he asked before she could speak.

She nodded nervously. "Yes, yes. D'Graski's Planet. That's what he say."

"Good." The Guesser had waited for three weeks for this day, but he had known it would come eventually. D'Graski's Planet was the nearest repair base; sooner or later, another ship had to make that as a port of call from Viornis. He had told Deyla that the route to D'Graski's was the one most likely to be attacked by Misfit ships, that she would have to wait until a ship bound for there landed at the spaceport before the two of them could carry out their plan. And now the ship was here.

"What's the name of the ship?" he asked.

"Th-the Trobwell."

"What's the matter with you?" he asked, suddenly and harshly.

She shivered. "Scared. Awful scared."

"I thought so. Have you got the clothing?"

"Y-yes." Then she broke down completely. "You got to help me! You got to show me how to act like

Exec lady! Show me how to talk! Otherwise, we both get caught!"

He shook her to quiet her. “Shut up!” When she had quieted, he said: “You are right, of course; we'd both be caught if you were to slip up. But I'm afraid it's too late to teach you now. It's always been too late."

"Wha-what ... what you mean?"

"Never mind. Where's the traveling case?"

She pointed silently towards a shelf, one of many that lined the room.

The Guesser went over and pulled out a box of cleaning dust-filters. Behind it was a gold-and-blue traveling case. The girl had spent months stealing the little things inside it, bit by bit, long before The Guesser had come into her life, dreaming of the day when she would become an Exec lady. Not until he had come had she tried to project that dream into reality.

The Guesser thumbed the opener, and the traveling case split into halves. The sight of the golden uniform of a Class One Executive gleamed among the women's clothing. And she had forgotten no detail; the expensive beamgun and holster lay beneath the uniform.

He picked it up carefully, almost reverently. It was the first time he'd held one since he'd been beamed down himself, so long ago. He turned the intensity knob down to the “stun” position.

"We going to put them on here?” she asked in a hushed voice. “Just walk out? Me, I scared!"

He stood up, the stun gun in his hand, its muzzle pointed toward the floor. “Let me tell you something,” he said, keeping his voice as kindly as he could. “Maybe it will keep you out of further trouble. You could never pass as an Exec. Never. It wouldn't matter how long you tried to practice, you simply couldn't do it. Your mind is incapable of it. Your every word, your every mannerism, would be a dead giveaway."

There was shock slowly coming over her face. “You not going to take me,” she said, in her soft, flat voice.

"No."

"How I ever going to get to Misfits? How?” There were tears in her eyes, just beginning to fill the lower lids.

"I'm sorry,” he said, “but I'm afraid your idealized Misfits just don't exist. The whole idea is ridiculous. Their insane attacks on us show that they have unstable, warped minds-and don't tell me about machine-operated or robot-controlled ships. You don't build a machine to do a job when a human being is cheaper. Your fanciful Misfit nation would have dissolved long ago if it had tried to operate on the principle that a lower-class human is worth more than a machine.

"You'll be better off here, doing your job; there are no such havens as Classless Misfit societies."

She was shaking her head as he spoke, trying to fight away the words that were shattering her cherished dream. And the words were having their effect because she believed him, because he believed himself.

"No," she was saying softly. "No, no, no."

The Guesser brought up the gun muzzle and shot her where she stood.

* * * *

Half an hour later, The Guesser was fighting down his own fear. He was hard put to do it, but he managed to stride purposefully across the great spacefield toward the towering bulk of the Trobwell without betraying that fear.

If they caught him now—

He closed his mind against the thought and kept on walking.

At the base of the landing cradle, a Class Four guard was standing stolidly. He bowed his head and saluted as The Guesser walked by.

It's so easy! The Guesser thought. So incredibly easy!

Even the captain of the ship would only be a Class Two Exec. No one would question him-no one would dare to.

A lieutenant looked up, startled as he entered the ship itself, and saluted hurriedly.

"It's an honor to have you aboard, great sir," he said apologetically, "but you realize, of course, that we are taking off in a very few minutes."

Words choked suddenly in the Guesser's throat, and he had to swallow hard before he could speak. "I know that. I'm ... I'm going with you."

The lieutenant's eyes widened a trifle. "No orders have been taped to that effect, great sir."

This is it! thought The Guesser. He would either put it over now or he'd be lost-completely.

He scowled. "Then tape them! I will apologize to the captain about this last-minute change, but I want no delay in take-off. It is absolutely vital that I reach D'Graski's Planet quickly!"

The lieutenant blanched a little. "Sorry, great sir! I'll see that the orders are taped. You wish a cabin?"

"Certainly. I presume you have an adequate one?"

"I'm sure we do, great sir; I'll have the Quarters Officer set one up for you immediately."

"Excellent," said The Guesser. "Excellent."

Fifteen minutes later, the Trobwell lifted from the planet exactly on schedule. The Guesser, in his assigned room, breathed a deep sigh of relief. He was on his way to D'Graski's Planet at last!

* * * *

"Tell me, great sir," said the captain, "what do you think the final decision on this case should be?" He shoved the sheaf of papers across the desk to The Guesser.

The Guesser looked at them unseeingly, his mind in a whirl. For five days now, the captain of the Trobwell had been handing him papers and asking him questions of that sort. And, since he was the ranking Exec, he was expected to give some sort of answer.

This one seemed even more complex than the others, and none of them had been simple. He forced his eyes to read the print, forced his mind to absorb the facts.

These were not clear-cut problems of the kind he had been dealing with all his life. Computing an orbit mentally was utterly simple compared with these fantastic problems.

It was a question of a choice of three different types of cargoes, to be carried to three different destinations. Which would be the best choice? The most profitable from an energy standpoint, as far as the ship was concerned, considering the relative values of the cargoes? What about relative spoilage rates as compared with fluctuating markets?

The figures were all there, right before him in plain type. But they meant nothing. Often, he had been unable to see how there was any difference between one alternative and another.

Once, he had been handed the transcripts of a trial on ship, during which two conflicting stories of an incident had been told by witnesses, and a third by the defendant. How could one judge on something like that? And yet he had been asked to.

He bit his lower lip in nervousness, and then stopped immediately as he realized that this was no time to display nerves.

"I should say that Plan B was the best choice," he said at last. It was a wild stab at nothing, he realized, and yet he could do no better. Had he made a mistake?

The captain nodded gravely. "Thank you, great sir. You've been most helpful. The making of decisions is too important to permit of its being considered lightly."

The Guesser could take it no longer. "It was a pleasure to be of assistance," he said as he stood up, "but there are certain of my own papers to be gone over before we reach D'Graski's Planet. I trust I shall be able to finish them."

The captain stood up quickly. "Oh, certainly, great sir. I hope I haven't troubled you with my rather minor problems. I shan't disturb you again during the remainder of the trip."

The Guesser thanked him and headed for his cabin. He lay on his bed for hours with a splitting headache. If it weren't for the fact that he had been forced to go about it this way, he would never have tried to impersonate an Executive. Never!

He wasn't even sure he could carry it off for the rest of the trip.

Somehow, he managed to do it. He kept to himself and pretended that the blue traveling bag held important papers for him to work on, but he dreaded mealtimes, when he was forced to sit with the captain and two lieutenants, chattering like monkeys as they ate. And he'd had to talk, too; being silent might ruin the impression he had made.

He hated it. A mouth was built for talking and eating, granted-but not at the same time. Of course, the Execs had it down to a fine art; they had a great deal more time for their meals than a Class Three, and

they managed to eat a few bites while someone else was talking, then talk while the other ate. It was disconcerting and The Guesser never completely got the hang of co-ordinating the two.

Evidently, however, none of the three officers noticed it.

By the time the Trobwell reached D'Graski's Planet, he was actually physically ill from the strain. One of the worst times had come during an attack by Misfit ships. He had remained prone on his bed, his mind tensing at each change of acceleration in the ship. Without the screens and computer to give him data, he couldn't Guess, and yet he kept trying; he couldn't stop himself. What made it worse was the knowledge that his Guesses were coming out wrong almost every time.

When the ship finally settled into the repair cradle, The Guesser could hardly keep his hands from shaking. He left the ship feeling broken and old. But as his feet touched the ground, he thought to himself: I made it! In spite of everything, I made it!

And then two men walked toward him-two men wearing blue uniforms of a ship's Disciplinary Corps. He not only recognized their faces, but he saw the neat embroidery on the lapels.

It said: Naipor.

## IV

Space Captain Humbolt Reed, commander of the Naipor, looked at his Master Guesser and shook his head. “I ought to have you shot. Declassification is too good for you by far. Impersonating an Executive! How did you ever think you'd get away with it?” He paused, then barked: “Come on! Explain!"

"It was the only way I could think of to get back to the Naipor, great sir,” said The Guesser weakly.

The captain leaned back slowly in his seat. “Well, there's one extenuating circumstance. The officers of the Trobwell reported that you were a fine source of amusement during the trip. They enjoyed your clownish performance very much.

"Now, tell me exactly why you didn't show up for take-off on Viornis."

The Guesser explained what had happened, his voice low. He told about having something thrown at him, about the beamgun being fired at him. He told about the girl, Deyla. He told everything in a monotonous undertone.

The captain nodded when he was through. “That tallies. It fits with the confession we got."

"Confession, sir?” The Guesser looked blank.

Captain Reed sighed. “You're supposed to be a Guesser. Tell me, do you think I personally, could beam you from behind?"

"You're the captain, sir."

"I don't mean for disciplinary purposes,” the captain growled. “I mean from ambush."

"Well ... no, sir. As soon as I knew you were there, I'd be able to Guess where you'd fire. And I wouldn't be there."

"Then what kind of person would be able to throw something at you so that you'd Guess, so that you'd dodge, and be so preoccupied with that first dodging that you'd miss the Guess on the aiming of the beamgun because of sheer physical inertia? What kind of person would know exactly where you'd be when you dodged? What kind of person would know exactly where to aim that beamgun?"

The Guesser had seen what was coming long before the captain finished his wordy interrogation.

"Another Guesser, sir," he said. His eyes narrowed.

"Exactly," said Captain Reed. "Your apprentice, Kraybo. He broke down during a Misfit attack on the way here; he was never cut out to be a Master Guesser, and even though he tried to kill you to get the job, he couldn't handle it. He cracked completely as soon as he tried to co-ordinate alone. We've actually missed you, Master Guesser."

"May I see to the disciplining of Kraybo, sir?" The Guesser asked coldly.

"You're too late. He's been declassified." The captain looked down at the papers on his desk. "You may consider yourself reinstated, Master Guesser, since the fault was not yours.

"However, masquerading as an Exec, no matter how worthy your motives, cannot be allowed to go unpunished. You will report to the Discipline Master for a three-and-three every day for the next five days. And you will not be allowed to leave the ship during the time we remain in repair dock. Dismissed."

"Thank you, great sir." The Guesser turned on his heel and marched out, heading for the Discipline Master.

It was good to be home again.

THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
# 4

"But what will they do with the robot when it becomes too decrepit to move?" persisted the boy.

Breadfruit pointed to a large vat of bubbling acid in the public square. "They'll throw him in the pool, yonder, son."

DAMNED IF YOU DON'T

You can and you can't;

You will and you won't.

You'll be damn'd if you do;

You'll be damn'd if you don't.

-LORENZO DOW; "Definition of Calvinism"

The workshop-laboratory was a mess.

Sam Bending looked it over silently; his jaw muscles were hard and tense, and his eyes were the same.

To repeat what Sam Bending thought when he saw the junk that had been made of thousands of dollars worth of equipment would not be inadmissible in a family magazine, because Bending was not particularly addicted to four-letter vulgarities. But he was a religious man-in a lax sort of way-so repeating what ran through his mind that gray Monday in February of 1981 would be unfair to the memory of Samson Francis Bending.

Sam Bending folded his hands over his chest. It was not an attitude of prayer; it was an attempt to keep those big, gorillalike hands from smashing something. The fingers intertwined, and the hands tried to crush each other, which was a good way to keep them from actually crushing anything else.

He stood there at the door for a full minute-just looking.

The lab-as has been said-was a mess. It would have looked better if someone had simply tossed a grenade in it and had done with it. At least the results would have been random and more evenly dispersed.

But whoever had gone about the wrecking of the lab had gone about it in a workmanlike way. Whoever had done the job was no amateur. The vandal had known his way about in a laboratory, that was obvious. Leads had been cut carefully; equipment had been shoved aside without care as to what happened to it, but with great care that the shover should not be damaged by the shoving; the invader had known exactly what he was after, and exactly how to get to it.

And he-whoever he was-had gotten his hands on what he wanted.

The Converter was gone.

* * * *

Sam Bending took his time in regaining his temper. He had to. A man who stands six feet three, weighs three hundred pounds, and wears a forty-eight size jacket can't afford to lose his temper very often or he'll end up on the wrong end of a homicide charge. That three hundred pounds was composed of too much muscle and too little fat for Sam Bending to allow it to run amok.

At last, he took a deep breath, closed his eyes, and let his tense nerves, muscles, and tendons sag-he pretended someone had struck him with a dose of curare. He let his breath out slowly and opened his eyes again.

The lab still looked the same, but it no longer irritated him. It was something to be accepted as done. It was something to investigate, and-if possible-avenge. But it was no longer something to worry about or lose his temper over.

I should have expected it, he thought wryly. They'd have to do something about it, wouldn't they?

But the funny thing was that he hadn't expected it-not in modern, law-abiding America.

He reached over to the wall switch to turn on the lights, but before his hand touched it, he stopped the motion and grinned to himself. No point in turning on the switch when he knew perfectly well that there was no power behind it. Still—

His fingers touched the switch anyway. And nothing happened.

He shrugged and went over to the phone.

He let his eyes wander over the wreckage as his right index finger spun the dial. Actually, the room wasn't as much of a shambles as it had looked on first sight. The-burglar?-hadn't tried to get at anything but the Converter. He hadn't known exactly where it was, but he'd been able to follow the leads to its hiding place. That meant that he knew his beans about power lines, anyway.

It also meant that he hadn't been an ordinary burglar. There were plenty of other things around for a burglar to make money out of. Unless he knew what it was, he wouldn't have gone to the trouble of stealing the Converter.

On the other hand, if he had—

"Police Department," said a laconic voice from the speaker. At the same time, the blue-clad image of a police officer appeared on the screen. He looked polite, but he also looked as though he expected nothing more than a routine call.

Bending gave the cop's sleeve a quick glance and said: "Sergeant, my name is Samson Bending. Bending Consultants, 3991 Marden-you'll find it in the phone book. Someone broke into my place over the weekend, and I'd appreciate it if you'd send someone around."

The sergeant's face showed that he still thought it was routine. "Anything missing, sir?"

"I'm not sure," said Bending carefully. "I'll have to make a check. I haven't touched anything. I thought I'd leave that for the detectives. But you can see for yourself what's happened."

He stepped back from the screen and the Leinster cameras automatically adjusted for the greater distance to the background.

"Looks like you had a visitor, all right," said the police officer. "What is that? A lab of some kind you've got there?"

"That's right," Bending said. "You can check it with the Register."

"Will do, Mr. Bending," agreed the sergeant. "We'll send the Technical Squad around in any case." He paused, and Sam could see that he'd pressed an alarm button. There was more interest in his manner, too. "Any signs that it might be kids?" he asked.

Sam shrugged. "Hard to tell. Might be. Might not." He knew good and well that it wasn't a JD gang that had invaded his lab. He grinned ingratiatingly. "I figure you guys can tell me more about that than I could tell you."

The sergeant nodded. "Sure. O.K., Mr. Bending; you just hold on. Don't touch anything; we'll have a copter out there as soon as we can. O.K.?"

"O.K.," Sam agreed. He cut off as the cop's image began to collapse.

* * * *

Sam Bending didn't obey the cop's order to touch nothing. He couldn't afford to-not at this stage of the game. He looked over everything-the smashed oscilloscopes, the overturned computer, the ripped-out meters-everything. He lifted a couple of instruments that had been toppled to the floor, raising them carefully with a big screwdriver, used as a lever. When he was through, he was convinced that he knew exactly who the culprit was.

Oh, he didn't know the name of the man, or men, who had actually committed the crime. Those things were, for the moment, relatively unimportant. The police might find them, but that could wait. The thing that was important was that Bending was certain within his own mind who had paid to have the lab robbed.

Not that he could make any accusations to the police, of course. That wouldn't do at all. But he knew. He was quite certain.

He left the lab itself and went into the outer rooms, the three rooms that constituted the clients' waiting room, his own office, and the smaller office of Nita Walder, the girl who took care of his files and correspondence.

A quick look told him that nothing in the offices had been disturbed. He shrugged his huge shoulders and sat down on the long couch in the waiting room.

Much good it may do them, he thought pleasantly. The Converter won't be worth the stuff it's made of if they try to open it.

He looked at the clock on the wall and frowned. It was off by five hours. Then he grinned and looked at his wrist watch. Of course the wall clock was Off. It had stopped when the power had been cut off. When the burglars had cut the leads to the Converter, everything in the lab had stopped.

It was eight seventeen. Sam Bending lit a cigarette and leaned back to wait for the cops. United States Power Utilities, Monopolated, had overstepped themselves this time.

* * * *

Bending Consultants, as a title for a business, was a little misleading because of the plural ending of the last word. There was only one consultant, and that was Samson Francis Bending. His speciality was the engineering design of atomic power plants-both the old fashioned heavy-metal kind and the newer, more elegant, stellarators, which produced power by hydrogen-to-helium conversion.

Bending made good money at it. He wasn't a millionaire by any means, but he had enough money to live comfortably on and enough extra to experiment around on his own. And, primarily, it had always been the experimentation that had been the purpose of Bending Consultants; the consulting end of the business had always been a monetary prop for the lab itself. His employees-mostly junior engineers and engineering draftsmen-worked in the two-story building next door to the lab. Their job was to make money for the company under Bending's direction while Bending himself spent as much time as he could fussing around with things that interested him.

The word "genius" has several connotations, depending on how one defines a genius. Leaving aside the Greek, Roman and Arabic definitions, a careful observer will find that there are two general classes of genius: the "partial" genius, and the "general" genius. Actually, such a narrow definition doesn't do either kind justice, but defining a human being is an almost impossible job, anyway, so we'll have to do the best we can with the tools we have to work with.

The “partial” genius follows the classic definition. “A genius is a man with a one-track mind; an idiot has one track less.” He's a real wowser at one class of knowledge, and doesn't know spit about the others.

The “general” genius doesn't specialize. He's capable of original thought in any field he works in.

The trouble is that, because of the greater concentration involved, the partial genius usually gets more recognition than the general-that is, if he gets any recognition at all. Thus, the mathematical and optical work of Sir Isaac Newton show true genius; his theological and political ideas weren't worth the paper he wrote them on. Similar accusations might be leveled against Albert Einstein-and many others.

The general genius isn't so well known because he spreads his abilities over a broad area. Some-like Leonardo da Vinci-have made a name for themselves, but, in general, they have remained in the background.

Someone once defined a specialist as “a man who learns more and more about less and less until he finally knows everything about nothing.” And there is the converse, the general practitioner, who knows “less and less about more and more until he finally knows nothing about everything."

Both types can produce geniuses, and there is, of course, a broad spectrum in between. Da Vinci, for instance, became famous for his paintings; he concentrated on that field because he knew perfectly well that his designs for such things as airplanes were impracticable at the time, whereas the Church would pay for art.

Samson Bending was a genius, granted; but he was more toward the “special” than the “general” side of the spectrum. His grasp of nuclear physics was far and away beyond that of any other scientist of his day; his ability to handle political and economic relationships was rather feeble.

As he sat in his waiting room on that chill day of February, 1981, his mind was centered on nuclear physics, not general economics. Not that Bending was oblivious to the power of the Great God Ammon; Bending was very fond of money and appreciated the things it could achieve. He simply didn't appreciate the over-all power of Ammon. At the moment, he was brooding darkly over the very fact of existence of Power Utilities, and trying to figure out a suitable rejoinder to their coup de demon.

And then he heard the whir of helicopter blades over the building. The police had come.

He opened the door of the lab building as they came up the steps. There were two plainclothes men-the Technical Squad, Bending knew-and four uniformed officers.

* * * *

The plainclothesman in the lead, a tall, rather thin man, with dark straight hair and a small mustache, said: “Mr. Bending? I'm Sergeant Ketzel. Mind if the boys take a look at the scene? And I'd like to ask a few questions?"

"Fine,” said Sam Bending. “Come on in."

He showed the officers to the lab, and telling them nothing, left them to their work. Then he went into his office, followed by Sergeant Ketzel. The detective took down all the pertinent data that Bending chose to give him, and then asked Bending to go with him to the lab.

The other plainclothesman came up to Sergeant Ketzel and Bending as they entered. “Pretty easy to see what happened,” he said. “Come on over and take a look.” He led them over to the wall where the

Converter had been hidden.

"See," he said, "here's your main power line coming in here. It's been burned off. They shut off the power to cut off the burglar alarm to that safe over there."

Ketzel shook his head slowly, but said nothing for the moment. He looked at Bending. "Has the safe been robbed?"

"I don't know," Bending admitted. "I didn't touch it after I saw all this wreckage."

Ketzel told a couple of the uniformed men to go over the safe for evidence. While they waited, Bending looked again at the hole in the wall where the Converter had been. And it suddenly struck him that, even if he had reported the loss of the Converter to the police, it would be hard to prove. The thief had taken care to burn off the ends of the old leads that had originally come into the building. Bending himself had cut them a week before to install the Converter. Had they been left as they were, Bending could have proved by the oxidation of the surface that they had been cut a long time before the leads on this side of the Converter. But both had been carefully fused by a torch.

"Nothing on the safe," said one of the officers. "No prints, at any rate. Micros might show glove or cloth traces, but—" He shrugged.

"Would you mind opening the safe, Mr. Bending?" Sergeant Ketzel asked.

"Certainly," Bending said. He wondered if the safe had been robbed. In the certainty that it was only the Converter that the burglars had been after, he hadn't even thought about the safe.

Bending touched the handle, turned it a trifle, and the door swung open easily in his hand. "It wasn't even locked," Bending said, almost to himself.

He looked inside. The safe had been thoroughly gone through, but as far as Bending could see, there were no papers missing.

"Don't touch anything in there, Mr. Bending," said Ketzel, "Just tell us as much as you can by looking at it."

"The papers have been disturbed," Bending said carefully, "but I don't think anything is missing, except the petty cash box."

"Uh-huh," Ketzel grunted significantly. "Petty cash box. About how much was in it, Mr. Bending?"

"Three or four thousand, I imagine: you'll have to ask Jim Luckman, my business manager. He keeps track of things like that."

"Three or four thousand in petty cash?" Ketzel asked, as though he'd prefer Bending to correct the figure to "two or three hundred."

"About that. Sometimes we have to order equipment of one kind or another in a hurry, and we can usually expedite matters if we can promise cash. You know how it is."

Sergeant Ketzel nodded sourly. He evidently knew only too well how it was. Even the most respectable businessmen were doing occasional business with the black market in technological devices. But he didn't

say anything to Bending.

"What did the cash box look like?" he asked.

Bending held out his hands to measure off a distance. "About so long-ten inches, I guess; maybe six inches wide and four deep. Thin sheet steel, with a gray crackle finish. There was a lock on it, but it wasn't much of one; since it was kept in the safe, there was no need for a strong lock."

Sergeant Ketzel nodded. "In other words, an ordinary office cash box. No distinguishing marks at all?"

"It had 'Bending Consultants' on the top. And underneath that, the word 'Lab'. In black paint. That 'Lab' was to distinguish it from the petty cash box in the main office."

"I see. Do you know anything about the denominations of the bills? Were they marked in any way?"

Bending frowned. "I don't know. You'd have to ask Luckman about that, too."

"Where is he now?"

"Home, I imagine. He isn't due to report for work until ten."

"O.K. Will you leave word that we want to talk to him when he comes in? It'll take us a while to get all the information we can from the lab, here." He looked back at the hole in the wall. "It still doesn't make sense. Why should they go to all that trouble just to shut off a burglar alarm?" He shook his head and went over to where the others were working.

It was hours before the police left, and long before they were gone Sam Bending had begun to wish fervently that he had never called them. He felt that he should have kept his mouth shut and fought Power Utilities on the ground they had chosen. They had known about the Converter only two weeks, and they had already struck. He tried to remember exactly how the Utilities representative had worded what he'd said, and couldn't.

Well, there was an easy way to find out. He went over to his files and took out the recording for Friday, 30 January 1981. He threaded it through the sound player-he had no particular desire to look at the man's face again-and turned on the machine. The first sentence brought the whole scene back to mind.

* * * *

"Thank you for your time, Mr. Bending," the man whose card had announced him as Richard Olcott. He was a rather average-sized man, with a fiftyish face, graying hair that was beginning to thin, and an expression like that of a friendly poker player-pleasant, but inscrutable.

"I always have time to see a representative of Power Utilities, Mr. Olcott," Bending said. "Though I must admit that I'm more used to dealing with various engineers who work for your subsidiaries."

"Not subsidiaries, please," Olcott admonished in a friendly tone. "Like the Bell Telephone Company, Power Utilities is actually a group of independent but mutually co-operative companies organized under a parent company."

Bending grinned. "I stand corrected. What did you have on your mind, Mr. Olcott?"

Olcott's hesitation was of half-second duration, but it was perceptible.

"Mr. Bending," he began, "I understand that you have been ... ah ... working on a new and ... ah ... radically different method of power generation. Er ... is that substantially correct?"

Bending looked at the man, his blocky, big-jawed face expressionless. "I've been doing experimenting with power generators, yes," he said after a moment. "That's my business."

"Oh, quite, quite. I understand that," Olcott said hurriedly. "I ... ah ... took the trouble to look up your record before I came. I'm well aware of the invaluable work you've done in the power field."

"Thank you," Bending said agreeably. He waited to see what the other would say next. It was his move.

"However," Olcott said, "that's not the sort of thing I was referring to." He leaned forward in his chair, and his bright gray eyes seemed to take on a new life; his manner seemed to alter subtly.

"Let me put my ... our cards on the table, Mr. Bending. We understand that you have designed, and are experimenting with, an amazingly compact power source. We understand that little remains but to get the bugs out of your pilot model.

"Naturally, we are interested. Our business is supplying the nation with power. Anything from a new type solar battery on up is of interest to us." He stopped, waiting for Bending to speak.

Bending obliged. "I see Petternek let the cat out of the bag prematurely," he said with a smile. "I hadn't intended to spring it until it was a polished work of engineering art. It's been more of a hobby than anything else, you see."

Olcott smiled disarmingly. "I'm not acquainted with Mr. Petternek; to be quite honest, I have no idea where our engineers picked up the information."

"He's an engineer," Bending said. "Friends of mine. He probably got a little enthusiastic in a conversation with one of your boys. He seemed quite impressed by my Converter."

"Possibly that is the explanation." Olcott paused. "Converter, you say? That's what you call it?"

"That's right. I couldn't think up any fancier name for it. Oh, I suppose I could have, but I didn't want anything too descriptive."

"And the word 'converter' isn't descriptive?"

"Hardly," said Bending with a short laugh. "Every power supply is a converter of some kind. A nickel-cadmium battery converts chemical energy into electrical energy. A solar battery converts radiation into electrical current. The old-fashioned, oil- or coal-burning power plants converted chemical energy into heat energy, converted that into kinetic energy, and that, in turn was converted into electrical energy. The heavy-metal atomic plant does almost the same thing, except that it uses nuclear reactions instead of chemical reactions to produce the heat. The stellarator is a converter, too.

"About the only exception I can think of is the electrostatic condenser, and you could say that it converts static electricity into a current flow if you wanted to stretch a point. On the other hand, a condenser isn't usually considered as a power supply."

Olcott chuckled. "I see your point. Could you give me a rough idea of the principle on which your

Converter operates?"

Bending allowed himself a thoughtful frown. “I'd rather not, just now, Mr. Olcott. As I said, I want to sort of spring this full-blown on the world.” He grinned. He looked like a small boy who had just discovered that people liked him; but it was a calculated expression, not an automatic one.

Olcott looked into Bending's eyes without seeing them. He ran his tongue carefully over the inside of his teeth before he spoke. “Mr. Bending.” Pause. “Mr. Bending, we-and by ‘we', I mean, of course, Power Utilities,—have heard a great deal about this ... this Converter.” His chocolate-brown eyes bored deep into the gray eyes of Samson Bending. “Frankly,” he continued, “we are inclined to discount ninety per cent of the rumors that come to us. Most of them are based on purely crackpot ideas. None the less, we investigate them. If someone does discover a new process of producing power, we can't afford to be blind to new ideas just because they happen to come from ... ah ... unorthodox sources.

"You, Mr. Bending, are an unusual case. Any rumor concerning your work, no matter how fantastic, is worth looking into on your reputation alone, even though the claims may be utterly absurd."

"I have made no claims,” Bending interposed.

Olcott raised a lean hand. “I understand that, Mr. Bending. None the less, others-who may or may not know what they are talking about-have made this claim for you.” Olcott settled back in his chair and folded his hands across his slight paunch. “You've worked with us before, Mr. Bending; you know that we can-and do-pay well for advances in the power field which are contributed by our engineers. As you know, our contract is the standard one-any discovery made by an engineer while in our employ is automatically ours. None the less, we give such men a handsome royalty.” He paused, opened his brief case, and pulled out a notebook. After referring to it, he looked up at Bending and said:

"You, yourself have benefitted by this policy. According to our records, you are drawing royalties from three patented improvements in the stellarator which were discovered at times when you were employed by us-or, rather, by one of our associative corporations-in an advisory capacity. Those discoveries were, by contract, ours. By law, we could use them as we saw fit without recompense to you, other than our regular fee. None the less, we chose to pay you a royalty because that is our normal policy with all our engineers and scientific research men. We find it more expedient to operate thus."

Bending was getting a little tired of Olcott's “none the less,” but he didn't show it. “Are you trying to say that my Converter was invented during my employ with your company, Mr. Olcott?"

Olcott cleared his throat and shook his head. “No. Not necessarily. It is true that we might have a case on those grounds, but, under the circumstances, we feel it inexpedient to pursue such a course."

Which means, Bending thought, that you don't have a case at all. “Then just what are you driving at, Mr. Olcott?” he asked aloud.

"I'll put my cards on the table, Mr. Bending,” Olcott said.

You've already said that, Bending thought, and I've seen no evidence of it. “Go ahead,” he said.

"Thank you.” He cleared his throat again. “If your invention is ... ah ... worth while, we are prepared to negotiate with you for use and/or purchase of it."

Bending had always disliked people who said or wrote “and/or,” but he had no desire to antagonize the

Power Utilities representative by showing personal pique. “Let me understand you clearly,” he said. “Power Utilities wants to buy my rights to the Converter. Right?"

Olcott cleared his throat a third time. “In a word, yes. Provided, of course, that it is actually worth our while. Remember, we know almost nothing about it; the claims made for it by our ... ah ... anonymous informer are ... well, ah ... rather fantastic. But your reputation—” He let the sentence hang.

Bending was not at all immune to flattery. He grinned. “Do you mean that you came to me to talk about buying an invention you weren't even sure existed-just because of my reputation?"

"Frankly, yes,” said Olcott. “Your reputation is ... ah ... shall we say, a good one in power engineering circles."

"Are you an engineer?” Bending asked suddenly.

Olcott blinked. “Why, no. No, I am not. I'm a lawyer. I thought you understood that."

"Sorry,” Bending said. “I didn't. Most of the financial work around here is done through my Mr. Luckman. I'm not acquainted with the monetary end of the business."

Olcott smiled. “Quite all right. Evidently I am not as well known to you as you are to me. Not that it matters. Why did you ask?"

Bending stood up. “I'm going to show you something, Mr. Olcott,” he said. “Would you care to come with me to the lab?"

Olcott was on his feet in a second. “I'd be glad to, Mr. Bending."

* * * *

Bending led the man into the lab. “Over here,” he said. At the far end of the laboratory was a thick-legged table cluttered with lengths of wire, vacuum tubes, transistors, a soldering gun, a couple of meters, and the other various paraphernalia of an electronics workshop. In the center of the table, surrounded by the clutter, sat an oblong box. It didn't look like much; it was just an eighteen by twelve by ten box, made of black plastic, featureless, except for a couple of dials and knobs on the top of it, and a pair of copper studs sticking out of the end.

Still, Olcott didn't look skeptical. Nor surprised. Evidently, his informant had had plenty of information. Or else his poker face was better than Bending had thought.

"This is your pilot model?” Olcott asked.

"One of them, yes. Want to watch it go through its paces?"

"Very much."

"O.K. First, though, just how good is your technical education? I mean, how basic do I have to get?” Sam Bending was not exactly a diplomat.

Olcott, however, didn't look offended. “Let's say that if you keep it on the level of college freshman physics I'll get the general drift. All right?"

"Sure. I don't intend to get any more technical than that, anyway. I'm going to tell you what the Converter does-not how."

"Fair enough-for the moment. Go ahead."

"Right." Sam flipped a switch on the top of the box. "Takes a minute or so to warm up," he said.

When the "minute or so" had passed, Bending, who had been watching the meters on the top of the machine, said: "See this?" He pointed at a dial face. "That's the voltage. It's controlled by this vernier knob here." He turned the knob, and the needle on the voltmeter moved obligingly upwards. "Anything from ten to a thousand volts," he said. "Easily adjusted to suit your taste."

"I don't think I'd like the taste of a thousand volts," Olcott said solemnly. "Might affect the tongue adversely." Olcott didn't look particularly impressed. Why should he? Anyone can build a machine that can generate high voltage.

"Is that AC or DC?" he asked.

"DC," said Bending. "But it can easily be converted to AC. Depends on what you want to use it for."

Olcott nodded. "How much power does that thing deliver?"

Sam Bending had been waiting for that question. He delivered his answer with all the nonchalance of a man dropping a burnt match in an ash tray.

"Five hundred horsepower."

Olcott's face simply couldn't hold its expressionless expression against something like that. His lips twitched, and his eyes blinked. "Five hundred what?"

"I will not make the obvious pun," said Bending. "I said 'five hundred horsepower'-unquote. About three hundred and seventy-five kilowatts, maximum."

Olcott appeared to be unable to say anything. He simply stared at the small, innocuous-looking Converter. Bending was unable to decide whether Olcott was overawed by the truth or simply stricken dumb by what must sound like a monstrous lie.

Olcott licked his lips with the tip of his small, pink tongue. "Five hundred horsepower. Hm-m-m." He took a deep breath. "No wonder those copper studs are so thick."

"Yeah," said Bending. "If I short 'em across at low voltage, they get hot."

"Short them across?" Olcott's voice sounded harsh.

Bending was in his seventh heaven, and he showed it. His grin was running as high an energy output as that he claimed for the Converter. "Sure. The amperage is self-limiting. You can only draw about four hundred amps off the thing, no matter how low you put the voltage. When I said five hundred HP, I meant at a thousand volts. As a matter of fact, the available power in horsepower is roughly half the voltage. But that only applies to this small model. A bigger one could supply more, of course."

"What does it weigh?" asked Olcott, in a hushed voice.

"Little over a hundred pounds," Bending said.

Olcott tore his eyes away from the fantastic little box and looked into Sam Bending's eyes. "May I ask where you're getting power like that?"

"Sure. Hydrogen fusion, same as the stellarator."

"It's powered by deuterium?"

Bending delivered his bombshell. "Nope. Water. Plain, ordinary aitch-two-oh. See those little vents at the side? They exhaust oxygen and helium. It burns about four hundred milligrams of water per hour at maximum capacity."

Olcott had either regained control of himself or had passed the saturation point; Sam couldn't tell which. Olcott said: "Where do you put the water?"

"Why put water in it?" Sam asked coolly. "That small whirring sound you hear isn't the hydrogen-helium conversion; it's a fan blowing air through a cooling coil. Even in the Sahara Desert there's enough moisture in the air to run this baby."

"And the fan is powered—"

"...By the machine itself, naturally," said Bending. "It's a self-contained unit. Of course, with a really big unit, you might have to hire someone to hang out their laundry somewhere in the neighborhood, but only in case of emergencies."

"May I sit down?" asked Olcott. And, without waiting for Sam Bending's permission, he grabbed a nearby chair and sat. "Mr. Bending," he said, "what is the cost of one of those units?"

"Well, that one cost several hundred thousand dollars. But the thing could be mass produced for ... oh, around fifteen hundred dollars. Maybe less."

Olcott absorbed that, blinked, and said: "Is it dangerous? I mean, could it explode, or does it give out radiation?"

"Well, you have to treat it with respect, of course," Bending said. He rubbed his big hands together in an unconscious gesture of triumph. "Just like any power source. But it won't explode; that I can guarantee. And there's no danger from radiation. All the power comes out as electric current."

* * * *

Sam Bending remained silent while Olcott stared at the little black box. Finally, Olcott put his hands to his face and rubbed his eyes, as though he'd been too long without sleep. When he removed his hands, his eyes were focused on Bending.

"You realize," he said, "that we can't give you any sort of contract until this has been thoroughly checked by our own engineers and research men?"

"Obviously," said Sam Bending. "But—"

"Do you have a patent?" Olcott interrupted.

"It's pending," said Bending. "My lawyer thinks it will go through pretty quickly."

Olcott stood up abruptly. "Mr. Bending, if this machine is actually what you claim it to be-which, of course, we will have to determine for ourselves-I think that we can make you a handsome-a very handsome settlement."

"How much?" Bending asked flatly.

"For full rights-millions," said Olcott without hesitation. "That would be a ... shall we say, an advance ... an advance on the royalties."

"What, no bargaining?" Bending said, in a rather startled tone.

* * * *

Olcott shook his head. "Mr. Bending, you know the value of such a device as well as I do. You're an intelligent man, and so am I. Haggling will get us nothing but wasted time. We want that machine-we must have that machine. And you know it. And I know you know it. Why should we quibble?

"I can't say: 'Name your price'; this thing is obviously worth a great deal more than even Power Utilities would be able to pay. Not even a corporation like ours can whip up a billion dollars without going bankrupt. What we pay you will have to be amortized over a period of years. But we—"

"Just a minute, Mr. Olcott," Bending interrupted. "Exactly what do you intend to do with the Converter if I sell it to you?"

Olcott hesitated. "Why ... ah—" He paused. "Actually, I couldn't say," he said at last. "A decision like that would have to be made by the Board. Why?"

"How long do you think it would take you to get into production?"

"I ... ah ... frankly couldn't say," Olcott said cautiously. "Several years, I imagine..."

"Longer than that, I dare say," Bending said, with more than a touch of sarcasm. "As a matter of fact, you'd pretty much have to suppress the Converter, wouldn't you?"

Olcott looked at Bending, his face expressionless. "Of course. For a while. You know very well that this could ruin us."

"The automobile ruined the buggy-whip makers and threw thousands of blacksmiths out of work," Bending pointed out. "Such things are inevitable. Every new invention is likely to have an effect like that if it replaces something older. What do you think atomic energy would have done to coal mining if it weren't for the fact that coal is needed in the manufacture of steel? You can't let considerations like that stand in the way of technological progress, Mr. Olcott."

"Is it a question of money?" Olcott asked quietly.

Bending shook his head. "Not at all. We've already agreed that I could make as much as I want by selling it to you. No; it's just that I'm an idealist of sorts. I intend to manufacture the Converter myself, in order to make sure it gets into the hands of the people."

"I assure you, Mr. Bending, that Power Utilities would do just that-as soon as it became economically feasible for us to do so."

"I doubt it," Sam Bending said flatly. "If any group has control over the very thing that's going to put them out of business, they don't release it; they sit on it. Dictators, for instance, have throughout history, promised freedom to their people 'as soon as it was feasible'. Cincinnatus may have done it, but no one else has in the last twenty-five centuries.

"What do you suppose would have happened in the 1940s if the movie moguls of Hollywood had had the patent rights for television? How many other inventions actually have been held down simply because the interested parties did happen to get their hands on them first?

"No, Mr. Olcott; I don't think I can allow Power Utilities to have a finger in this pie or the public would never get a slice of it."

Olcott stood up slowly from the chair. "I see, Mr. Bending; you're quite frank about your views, anyway." He paused. "I shall have to talk this over with the Board. There must be some way of averting total disaster. If we find one, we'll let you know, Mr. Bending."

* * * *

And that was it. That was the line that had stuck in the back of Bending's mind for two weeks. If we find a way of averting total disaster, we'll let you know, Mr. Bending.

And they evidently thought they'd found a way. For two weeks, there had been phone calls from officers of greater or lesser importance in Power Utilities, but they all seemed to think that if they could offer enough money, Sam Bending would capitulate. Finally, they had taken the decisive step of stealing the Converter. Bending wondered how they had known where it was; he had taken the precaution of concealing it, just in case there might be an attempt at robbery, and using it as power supply for the lab had seemed the best hiding place. But evidently someone at Power Utilities had read Poe's "Purloined Letter," too.

He smiled grimly. Even if the police didn't find any clues leading them to the thieves who'd broken into his lab, the boys at Power Utilities would find themselves in trouble. The second they started to open the Converter, it would begin to fuse. If they were quick, whoever opened it should be able to get away from it before it melted down into an unrecognizable mass.

Sam Bending took the tape from the playback and returned it to his files.

He wondered how the Power Utilities boys had managed to find where the Converter was. Checking the power that had been used by Bending Consultants? Possibly. It would show that less had been used in the past two weeks than was normally the case. Only the big building next door was still using current from the power lines. Still, that would have meant that they had read the meter in the last two weeks, which, in turn, meant that they had been suspicious in the first place or they wouldn't have ordered an extra reading.

On the other hand, if—

The visiphone rang.

It was the phone with the unregistered number, a direct line that didn't go through his secretary's switchboard.

He flipped it on. “Yes?” He never bothered to identify himself on that phone; anyone who had the number knew who they were calling. The mild-looking, plumpish, blond-haired man whose face came onto the screen was immediately recognizable.

"How's everything, Mr. Bending?” he asked with cordial geniality.

"Fine, Mr. Trask,” Bending answered automatically. “And you?"

"Reasonable, reasonable. I hear you had the police out your way this morning.” There was a questioning look in his round blue eyes. “No trouble, I hope."

Sam understood the question behind the statement. Vernon Trask was the go-between for some of the biggest black market operators in the country. Bending didn't like to have to deal with him, but one had very little choice these days.

"No. No trouble. Burglary in the night. Someone opened my safe and picked up a few thousand dollars, is all."

"I see.” Trask was obviously wondering whether some black market operator would be approached by a couple of burglars in the next few days-a couple of burglars trying to peddle apparatus and equipment that had been stolen from Bending. There still were crooks who thought that the black market dealt in stolen goods of that sort.

"Some of my instruments were smashed,” Bending said, “but none of them are missing."

"I'm glad to hear that,” Trask said. And Bending knew he meant it. The black market boys didn't like to have their customers robbed of scientific equipment; it might reflect back on them. “I just thought I'd explain about missing our appointment this morning,” Trask went on. “It was unavoidable; something unexpected came up."

Trask was being cagey, as always. He didn't talk directly, even over a phone that wasn't supposed to be tapped. Bending understood, though. Some of the robotics equipment he'd contracted to get from Trask was supposed to have been delivered that morning, but when the delivery agent had seen the police car out front, he'd kept right on going naturally enough.

"That's all right, Mr. Trask,” Bending said. “What with all this trouble this morning, it actually slipped my mind. Another time, perhaps."

Trask nodded. “I'll try to make arrangements for a later date. Thanks a lot, Mr. Bending. Good-by."

Bending said good-by and cut the connection.

Samson Bending didn't like being forced to buy from the black market operators, but there was nothing else to do if one wanted certain pieces of equipment. During the “Tense War” of the late Sixties, the Federal and State governments had gone into a state of near-panic. The war that had begun in the Near East had flashed northwards to ignite the eternal Powder Keg of Europe. But there were no alliances, no general war; there were only periodic armed outbreaks, each one in turn threatening to turn into World War III. Each country found itself agreeing to an armistice with one country while trying to form an alliance with a second and defending itself from or attacking a third.

And yet, during it all, no one quite dared to use the Ultimate Weapons. There was plenty of strafing by fighter planes and sorties by small bomber squadrons, but there was none of the "massive retaliation" of World War II. There could be heard the rattle of small-arms fire and the rumble of tanks and the roar of field cannon, but not once was there the terrifying, all-enveloping blast of nuclear bombs.

But, at the time, no one knew that it wouldn't happen. The United States and the Soviet Union hovered on the edges of the war, two colossi who hesitated to interfere directly for fear they would have to come to grips with each other.

The situation made the "Brinksmanship" of former Secretary Dulles look as safe as loafing in an easy-chair.

And the bureaucratic and legislative forces of the United States Government had reacted in a fairly predictable manner. The "security" guards around scientific research, which had been gradually diminishing towards the vanishing point, had suddenly been re-imposed-this time, even more stringently and rigidly than ever before.

Coupled with this was another force-apparently unrelated-which acted to tie in with the Federal security regulations. The juvenile delinquent gangs had begun to realize the value of science. Teen-age hoodlums armed with homemade pistols were dangerous enough in the Fifties; add aimed rockets and remote-control bombs to their armories, and you have an almost uncontrollable situation. Something had to be done, and various laws controlling the sale of scientific apparatus had been passed by the fifty states. And-as with their liquor and divorce laws-no two of the states had the same set of laws, and no one of them was without gaping flaws.

By the time the off-again-on-again wars in Europe had been stilled by the combined pressure of the United Nations-in which the United States and the Soviet Union co-operated wholeheartedly, working together in a way they had not done for over twenty years-the "scientific control laws" in the United States had combined to make scientific research almost impossible for the layman, and a matter of endless red tape, forms-in-octuplicate, licenses, permits, investigations, delays, and confusion for the professional.

The answer, of course, was the black market. What bootlegging had done for the average citizen in the Twenties, the black market was doing for scientists fifty years later.

The trouble was that, unlike the Volstead Act, the scientific prohibitions aroused no opposition from the man in the street. Indeed, he rather approved of them. He needed and wanted the products of scientific research, but he had a vague fear of the scientist-the "egghead." To his way of thinking, the laws were cleverly-designed restrictions promulgated by that marvelous epitome of humanity, the common man, to keep the mysterious scientists from meddling with things they oughtn't to.

The result was that the Latin American countries went into full swing, producing just those items which North American scientists couldn't get their hands on, because the laws stayed on the books. During the next ten years, they were modified slightly, but only very slightly; but the efforts to enforce them became more and more lax. By the time the late Seventies and early Eighties rolled around, the black marketeers were doing very nicely, thank you, and any suggestion from scientists that the laws should be modified was met with an intensive counterpropaganda effort by the operators of the black market.

Actually, the word "operators" is a misnomer. It was known by the authorities at the time that there was only one ring operating; the market was too limited to allow for the big-time operations carried on by the liquor smugglers and distillers of half a century before.

Sam Bending naturally was forced to deal with the black market, just as everyone else engaged in research was; it was, for instance, the only source for a good many technical publications which had been put on the Restricted List. Sam wasn't as dependent on them as college and university research men were, simply because he was engaged in industrial work, which carried much higher priorities than educational work did.

Sam, however, was fed up with the whole mess, and would have given his eyeteeth to clear up the whole stupid farce.

* * * *

Irritated by every petty distraction at his office, Sam Bending finally gave up trying to cope with anything for the rest of the day. At three in the afternoon, he told his secretary that he was going home, jammed his hat on his head, and went out to his car.

He got in, turned the switch, and listened to the deep hum of the electric motors inside. Somehow, it made him feel so good that the irritations of the day lessened a great deal. He grinned.

Power Utilities hadn't even thought of this hiding place. The Converter in the rear of the car gave the vehicle far more power than it needed, but the extra juice came in handy sometimes. The driving motors wouldn't take the full output of the generators, of course; the Converter hardly had to strain itself to drive the automobile at top speed, and, as long as there was traction, no grade could stall the car. Theoretically, it could climb straight up a wall.

Not that Sam Bending had any intention of climbing a wall with it.

He even had power left over for the sound-effects gadget and the air-heater that made the thing appear to be powered by an ordinary turbo-electric engine. He listened and smiled as the motors made satisfying sounds while he pulled out of the parking lot and into the street. He kept that pleased, self-satisfied grin on his face for six blocks.

And then he began to notice that someone was following him.

At first, he hadn't paid much attention to it. The car was just a common Ford Cruiser of the nondescript steel blue color that was so popular. But Bending had been conscious of its presence for several blocks. He looked carefully in the mirror.

Maybe he was wrong. Maybe it had been several cars of that same color that had moved in and out of the traffic behind him. Well, he'd soon see.

He kept on going toward the North-South Expressway, and kept watching the steel-blue Ford, glancing at his rear view mirror every time he could afford to take his eyes off the traffic.

It moved back and forth, but it was never more than three cars behind him, and usually only one. Coincidence? Possibly.

At Humber Avenue, he turned left and drove southwards. The steel-blue Ford turned, too. Coincidence? Still possible.

He kept on going down Humber Avenue for ten blocks, until he came to the next cross street that would take him to a lower entrance to the North-South Expressway. He turned right, and the Ford followed.

At the ramp leading to the northbound side of the Expressway, the Ford was two cars behind.

Coincidence? No. That's pushing coincidence too far. If the men in the car had actually intended to go north on the Expressway, they would have gone on in the direction they had been taking when Bending first noticed them; they wouldn't have gone ten blocks south out of their way.

Bending's smile became grim. He had never liked the idea of being followed around, and, since the loss of one of his Converters, he was even touchier about the notion. Trouble was, his fancy, souped-up Lincoln was of no use to him at all. He could outrun them on a clear highway-but not on the crowded Expressway. Or, conversely, he could just keep on driving until they were forced to stop for fuel-but that could be a long and tedious trip if they had a full tank. And besides, they might make other arrangements before they went dry.

Well, there was another way.

He stayed on the Expressway for the next twenty miles, going far north of where he had intended to turn off. At the Marysville Exit, he went down the ramp. He had been waiting for a moment when the Ford would be a little farther behind than normal, but it hadn't come; at each exit, the driver of the trailing car would edge up, although he allowed himself to drop behind between exits. Whoever was driving the car knew what he was doing.

At the bottom of the ramp, Bending made a left turn and took the road into Marysville. It was a small town, not more than five or six thousand population, but it was big enough.

There weren't many cars on the streets that led off the main highway. Bending made a right turn and went down one of the quiet boulevards in the residential section. The steel-blue Ford dropped behind as they turned; they didn't want to make Bending suspicious, evidently.

He came to a quiet street parallel to the highway and made a left turn. As soon as he was out of sight of his pursuers, he shoved down on the accelerator. The car jumped ahead, slamming Bending back in his seat. At the next corner, he turned left again. A glance in the mirror showed him that the Ford was just turning the previous corner.

Bending's heavy Lincoln swung around the corner at high speed and shot back toward the highway. At the next corner, he cut left once more, and the mirror showed that the Ford hadn't made it in time to see him turn.

They'd probably guess he'd gone left, so he made a right turn as soon as he hit the next street, and then made another left, then another right. Then he kept on going until he got to the highway.

A left turn put him back on the highway, headed toward the Expressway. The steel-blue car was nowhere in sight.

Bending sighed and headed back south towards home.

* * * *

Sam Bending knew there was something wrong when he pulled up in front of his garage and pressed the button on the dashboard that was supposed to open the garage door. Nothing happened.

He climbed out of the car, went over to the door of the garage, and pushed the emergency button. The

door remained obstinately shut.

Without stopping to wonder what had happened, he sprinted around to the front door of the house, unlocked it, and pressed the wall switch. The lights didn't come on, and he knew what had happened.

Trailing a stream of blue invective, he ran to the rear of the house and went down the basement stairs. Sure enough. Somebody had taken his house Converter, too.

And they hadn't even had the courtesy to shunt him back onto the power lines.

At his home, he had built more carefully than he had at the lab. He had rigged in a switch which would allow him to use either the Converter or the regular power sources, so that he could work on the Converter if he wanted to. His basement was almost a duplicate of his lab in the city, except that at home he built gadgets just for the fun of watching them work, while at the lab he was doing more serious research.

He went over to the cabinet where the switch was, opened it, and punched the relay button. The lights came on.

He stalked back up the stairs and headed for the visiphone. First, he dialed his patent attorney's office; he needed some advice. If Power Utilities had their hands on two out of three of his Converters, there might be some trouble over getting the patents through.

The attorney's secretary said he wasn't in, and she didn't know if he expected to be back that day. It was, she informed Bending rather archly, nearly five in the afternoon. Bending thanked her and hung up.

He dialed the man's home, but he wasn't there, either.

Sam Bending stuck a cigarette in his mouth, fired it up, walked over to his easy-chair and sat down to think.

According to the police, the first Converter had been stolen on Friday night. The second one had obviously been taken sometime this morning, while he was in the lab with the police.

That made sense. The first one they'd tried to open had fused, so they decided to try to get a second one. Only how had they known he had had more than one? He hadn't told anyone that he had three-or even two.

Well, no matter. They had found out. The question was, what did he do next? Inform the police of the two thefts or—

There was a car pulling up outside the house.

Sam stood up and glanced out the window. It was a steel-blue Ford.

By Heaven! Did they intend to steal the third Converter, too? And right in front of his eyes, before it even got decently dark?

Sam was so furious that he couldn't even think straight. When the two men climbed out of the car and started walking toward the house, Sam ran back into his study, pulled open his desk drawer, and took out the .38 Special he kept there. It was the work of seconds to thumb six cartridges into the chambers

and swing the cylinder shut.

The door chime sounded.

* * * *

Sam went back into the front room with the revolver in his jacket pocket and his hand ready to fire it.

"Who is it?" he called, in what he hoped was a steady voice.

"We're Special Agents of the FBI," said a voice. "May we see you for a few moments, Mr. Bending?"

"Certainly. Come on in; the door's unlocked." Just walk in, you phonies! Just trot right on in, he thought.

And they did. The two men walked in, removing their hats as they did so.

"We—" one of them began. He stopped when he saw that he was addressing a round, black hole that was only a fraction more than a third of an inch in diameter but looked much, much larger from his viewpoint.

"Get your hands in the air and turn around very slowly," said Bending. "Lean forward and brace your hands against the wall."

They did as they were told. Bending frisked them carefully and thoroughly, thankful that the two years he had spent in the Army hadn't been completely wasted. Neither one of them was carrying a gun.

Bending stepped back and pocketed his own weapon. "All right. You two can turn around now. If you want to try anything, come ahead-but I don't advise it."

The two men turned around. Neither of them was exactly a small man, but the two of them together didn't outweigh Samson Bending by more than fifty pounds.

"What's the idea of the gun, Mr. Bending?" the taller of the two asked. He seemed to be the spokesman for the team.

"I'll ask the questions," Bending said. "But first, I want to tell you that, in the first place, you can get in trouble for impersonating a Federal officer, and, in the second, I don't like being followed. So you just trot right back to the boys at Power Utilities and tell them that if they want to play rough, I am perfectly willing to do likewise. That if they come after me again, I'm going to do some very unpleasant things. Understand?"

"I think we understand," said the spokesman, still relatively unruffled. "But I don't think you do. Would you care to look at our credentials, Mr. Bending?"

"Credentials?" Sam looked startled. Had he made a mistake?

"That's right. May I take my billfold out?"

Bending took his gun out again. "Go ahead. But slowly."

The billfold came out slowly. Bending took it. The identification card and the small gold badge said very plainly that the man was a Special Agent of the Federal Bureau of Investigation.

"I ... I'm sorry," Bending said weakly. "I thought you were someone else. Some men were following me this afternoon, and—"

"That was us, Mr. Bending. Sorry."

"May I verify this?" Bending asked.

"Certainly. Go right ahead."

Bending phoned the local office of the FBI and verified the identities of the two men. When he cut off, he asked dazedly: "What was it you wanted?"

"Would you mind coming with us-downtown? We'd like to have you see some people."

"Am I under arrest?"

"No." The agent smiled a little. "I suppose, if we had to, we could get you for speeding and reckless driving; that was pretty fancy dodging you did. But we're not supposed to be traffic cops."

Sam smiled feebly. "What's this all about?"

"I haven't the faintest notion, Mr. Bending. Honestly. We were told to stick with you until we got word to pick you up. We got that word just shortly after you ... hm-m-m ... after you left us. Fortunately, we found you at home. It might have been difficult..."

"Can we go in my car?" Bending asked. "I'd rather not leave it unguarded just now."

"Certainly. I'll go with you, and Steve can follow." He paused. "But I'm afraid you'll have to take that revolver out of your pocket and put it away."

"Sure," Bending said. "Sure."

* * * *

Bending's mind simply refused to function during the drive back to the city. The FBI agent beside him just sat silently while Sam drove the car.

Once, Sam asked: "Who is it that wants to see me?"

And the FBI man said: "Sorry, Mr. Bending; I can't answer any questions. My job is over as soon as I deliver you."

A little later, Sam had another question. "Can you tell me where we're going, at least?"

"Oh—" the agent laughed, "sure. I thought I had. The General Post Office Building, on Kenmore Drive."

After that, Sam didn't say anything. That this whole affair had something to do with the Converter, Sam had no doubt whatsoever. But he couldn't see exactly what, and none of his wild speculations made sense.

He pulled up at last into the parking lot behind the Post Office Building. The second FBI man came up in

the steel-blue Ford, and the three of them got out of the cars and went towards the building. It was quite dark by now, and the street lights were glowing against a faint falling of February mist. Bending, in spite of his topcoat, felt chilly.

They went in the back way, past the uniformed Postal Service guard, and took an elevator to the sixth floor. None of the three had anything to say. They walked down the hall, toward the only office that showed any light behind the frosted glass. The lettering on the glass simply said: Conference Room A-6.

The FBI man who had driven with Sam rapped on the door with gentle knuckles.

"Yes?" said a questioning voice from the other side.

"This is Hodsen, sir. Mr. Bending is with us."

The door opened, and Sam Bending felt mild shock as he saw who it was. He recognized the man from his news photos and TV appearances. It was the Honorable Bertram Condley, Secretary of Economics for the President of the United States.

"Come in, Mr. Bending," the Secretary said pleasantly. Unnecessarily, he added, "I'm Bertram Condley."

He held out his hand, and Sam took it. "It's a pleasure, Mr. Secretary."

Condley gave out with his best friendly-politico smile. "I'm sorry to have to drag you up here like this, Mr. Bending, but we felt it best this way."

Sam smiled back, with a trace of irony in the smile. "It's a pleasure, Mr. Secretary," he repeated.

Condley nodded, still smiling-but there was a spark in his eyes now. "I see we understand each other. Come on in; I want you to meet the others." He looked at the FBI men. "That's all. For now."

The Federal agents nodded and moved away into the dimness of the corridor.

"Come in, man, come in," the Secretary urged, opening the door wider.

Sam hesitated. The light within the room was none too bright. Then he stepped forward, following the Secretary.

* * * *

The outer room was dark. Not too dark, but illuminated only by the dim light from the corridor and from the inner room. From that inner room, there was only a glow of light from the frosted glass panel of the door that separated the two rooms.

Condley closed the hall door, and, as Sam stepped forward toward the lighted door, held out a hand to stop him. "Just a moment," he whispered softly. "I think you ought to know what you're walking in to, Mr. Bending."

Bending stood stock-still. "Yes, sir?" he asked, questioningly.

"I suppose you know what this is all about?" Secretary Condley asked softly.

"The Converter, I imagine," Sam Bending said.

Condley nodded, his gray hair gleaming silver in the dim light. "Exactly. I'm sorry we had to drag you up here this way, Mr. Bending, but, in the circumstances, we felt it to be the best way." He took a breath. "Do you know why we called you here?"

"No," Sam said honestly.

Condley's head nodded again. "You're in for an argument, Mr. Bending. A very powerful one, I hope. We want to convince you of something." Again he paused. "Are you an open-minded man, Mr. Bending?"

Sam Bending followed the Secretary's lead, and kept his voice low. "I like to think so, Mr. Secretary." He recognized that Condley was preparing him for something, and he recognized that the preliminary statements were calculated to soften him. And he recognized the fact that they did soften him. All right-what was the argument?

"You're an engineer, Mr. Bending," Condley said, in the same low voice. "You have been trained to evaluate facts. All I ask is that you use that training. Now, let's get in there before Tovarishch Artomonov begins to think we might be stalling him."

Condley strode toward the door and grasped the knob with a firm hand. Sam Bending followed, wondering. Artomonov? Who was Artomonov? The Secretary of Economics had indicated, by his precise enunciation of tovarishch, that the man was a Russian-or at least a citizen of one of the Soviet satellites. Sam Bending took a deep breath and decided that he was prepared for almost anything.

There were four men seated around the conference table in the back room, and the most surprising thing, as far as Sam was concerned, was that he recognized only one of them. From the big buildup, he had had half a notion that the President himself might be there.

"Mr. Samson Bending, gentlemen," said Secretary Condley to the group. They all rose and made half-hearted attempts to smile, but Sam could see that they were watching him as though he had a live grenade in his pocket.

"Mr. Bending, I believe you know Mr. Richard Olcott," the Secretary said.

Bending gave the Power Utilities executive a sardonic smile, which was returned by a solemn nod of the head.

Sure I know you, you crook, Bending thought.

"And, around the table," Condley continued, "are Dr. Edward Larchmont, the research departmental head of Power Utilities-Dr. Stefan Vanderlin, of the United States Bureau of Standards-and Dr. Alexis Andreevich Artomonov, of the Soviet Socialist Republics' representative office at the United Nations."

Sam Bending managed not to blink in astonishment as the last man was introduced-a feat which took every milligram of his self-possession. He recognized the name; A. A. Artomonov, head of the United Nation's International Trade Bureau. What was he doing here?

"If you'll sit down, Mr. Bending," Condley was saying, "we can get to business."

Bending sat down, and the others sat with him. “May I say something before we go any further?” Sam Bending asked. “May I say that I think this is a rather irregular method of doing things and that I think I ought to see my lawyer."

Secretary Condley's eyes narrowed just the slightest. He was a heavy, jowl-faced, graying man who was known for his firmness in his official capacity. “At this stage of the game, Mr. Bending, there is no need for a lawyer. We merely want to explain something to you-we want you to get all the data. If, afterwards, you still want your lawyer, you'll be perfectly free to call him. Right now, we want you to listen with an open mind."

Bending thought it over. “All right. Go ahead."

* * * *

"Very well. First, I'll agree that all this may seem a bit high-handed. But time was-and is-getting short.” He glanced at Olcott, and the glance was not all friendliness. “The Government was notified about this almost too late; we have had to act fast. Almost too fast."

"I notified the Government as soon as I was sure of my facts,” Olcott said, completely unflustered.

"That's as may be,” Condley said. “The point is that we now have the problem on our hands, and we must find an equitable solution.” He took a gold fountain pen from his pocket, and his strong, thick fingers began toying with it while his eyes remained on Sam Bending. “The fact that you have applied for a patent makes it imperative that we get the situation under control immediately."

Before Sam could answer, there was a knock on the outer door that came clearly into the rear room. Secretary Condley rose without saying a word and went out.

Dr. Larchmont, the Power Utilities physicist, decided to make small talk to bridge the hiatus. “That's a really beautiful piece of machinery you've built, Mr. Bending. Really remarkable.” He was a small, flat-faced man with a fringe of dark hair around his otherwise naked scalp.

Sam looked a little startled. “You mean you opened a Converter up?"

Larchmont nodded. “I presume you are referring to the fusing device. We X-rayed the thing thoroughly before we opened it. These days, many devices are rigged to be self-destroying, but that, in itself is a specialized field. Most of them are traps that are rather easy to get around if one is expecting them and knows how to handle them. But the Converter itself, if I may say so, is one of the most original and elegant devices I have seen in many a day."

"Thanks,” said Bending, with a touch of bitterness in his voice. “I—"

The door opened at that moment, and Secretary Condley came in followed by a tall, round-faced man with dark wavy hair and clear brown eyes.

"Jim!” Sam said in surprise.

The man was James Luckman, Sam Bending's business manager. “Hello, Sam. What's this all about? The FBI men who picked me up said I wasn't under arrest, but I had a hunch it was about as close as you can come without actual arrest."

Sam nodded. “Funny-I had that impression, too.” He looked at Condley. “What's the idea, Condley?

Jim doesn't know anything about this."

The Secretary managed to look unoffended at Bending's tone. “Possibly not. We can't be sure, of course, but-frankly, I'd be willing to accept your word.” He paused. “But-you're not a businessman, Mr. Bending?” He made it only half a question.

"No. I leave that sort of thing up to Jim. Oh, I don't say I'm completely ignorant of the field; it's just that I'm not particularly interested, that's all. Why should I be?” He went on, half belligerently. “I've known and trusted Jim for years. He knows his business; I know my science. I know enough to be able to check the account books, and he knows enough to be able to understand a technical report. Right, Jim?"

Luckman looked bewildered. “Sure, Sam. But what's all this leading up to? I don't get it.” He frowned suddenly. “Has someone accused me of cheating you?"

"No, no, no,” Condley said rapidly. “Of course not. Nothing like that.” He looked sharply at Luckman. “Do you know anything about the Converter?"

Jim Luckman glanced at Bending before replying. Bending's face remained expressionless. “Go ahead, Jim,” he said, “square with him."

Luckman spread his hands. “I know that Sam was working on something he called a Converter. I don't know anything more about it than that. Sam keeps his ideas secret until he gets them to a marketable stage, which is all right with me. I have enough work to do, handling the stuff he's already patented, without worrying about anything that isn't salable yet. So?"

Condley nodded, then gestured toward a chair. “Sit down, Mr. Luckman. Do you know these other gentlemen?” he asked rhetorically. He proceeded to introduce the others. Sam Bending noted with satisfaction that Luckman looked rather puzzled when the Russian was introduced.

Condley himself sat down again, and said: “Well, we're all here. We're not going to make this formal, gentlemen, but I hope it won't develop into a heated argument, either. Let's try to keep our tempers."

* * * *

"First, as to the Converter itself. We all know, with the possible exception of Mr. Luckman, what it does, but for his benefit, we'll go over that. The Converter, by means of what Dr. Larchmont has been wont to call ‘a very elegant method', produces electrical power directly from the fusion of hydrogen into helium. A pilot model, with a total volume of a little more than one and one-quarter cubic feet, is capable of turning out up to five hundred horsepower, either DC or AC in a wide range of frequencies. The voltage can be regulated from zero to one thousand volts by simply setting a dial.

"The device is powered by using ordinary water as fuel. At full capacity, the Converter consumes approximately four hundred milligrams of water per hour, which can easily be drawn from the moisture of the air. The machine is thus self-fueling.

"Since the nuclear energy released is converted almost one hundred per cent into electrical current, there is no danger from radiation; since the process is, by its very nature, self-limiting, there is no danger of explosion. The worst that can happen is for the machine to burn out, and, I understand, it won't do that unless it is purposely tampered with to make it do so.

"Finally, the device is so inexpensive to produce that it could be sold for about one-quarter of the price of an ordinary automobile.” He stopped, cleared his throat, and glanced at Larchmont and Vanderlin.

“Am I essentially correct, gentlemen?"

Larchmont nodded, and Vanderlin said, “That's about it."

Jim Luckman looked at Sam Bending in open admiration. “Wow,” he said softly. “You're quite a genius, Sam."

"Very well, gentlemen,” Condley continued, “we know what this device will do on a physical level. Now we must consider what it will do on an economic level. Have you considered what would happen if you put the Converter on the market, Mr. Bending?"

"Certainly,” Bending said, with an angry glance at Olcott. “The Power Utilities would lose their pants. So what? I figure that any company which tries to steal and suppress inventions deserves a licking."

Secretary Condley glanced at Olcott as though he were trying to hold back a smile, then returned his gaze to Bending. “We won't quibble over the ethics of the situation, Mr. Bending. You are correct in saying that Power Utilities would be bankrupt. They couldn't stand the competition of what amounts to almost unlimited free power. And then what would happen, with every power company in the United States suddenly put out of business?"

Sam looked puzzled. “What difference would it make? People would just be getting their power from another source, that's all."

Richard Olcott leaned forward earnestly. “May I interject something here? I know you are angry with me, Mr. Bending-perhaps with good reason. But I'd like to point out something that you might not have recognized. Public Utilities and its co-operative independent companies are not owned by individuals. Much of the stock is owned by small share-holders who have only a few shares each. The several billion dollars that these companies are worth is spread out over the nation, not just centered with a few wealthy men. In addition, a great many shares are held by insurance companies and banks. Literally millions of people would lose money-just as surely as if it had been stolen from them-if this device went on the market."

Bending frowned. He hadn't thought of it in exactly that way. “Still,” he said tentatively, “didn't blacksmiths and buggy-whip manufacturers and horse-breeders lose money after World War I?"

"Not to this extent,” Olcott said, shaking his head. “This is not 1918, Mr. Bending. Sixty years ago, our economy was based on gold, not, as it is today on production and manpower, centered in the vast interlocking web of American industry."

Condley said: “Mr. Olcott said a moment ago that millions of people would lose money just as surely as if it had been stolen from them. I think it would be more proper to say that the money will be destroyed, not stolen. A thief, after all, does put money back into circulation after he steals it. But when vast amounts of wealth are suddenly removed from circulation completely, the economic balance is disastrously upset."

* * * *

Sam Bending was still frowning. His grandfather had been a small businessman in 1929-not fabulously wealthy, but certainly well off by the social standards of the day. Two years later, in 1931, he was broke, wiped out completely, happy and eager to accept any odd job he could get to support his family.

Sam's father had had to leave school during the Thirties and go to work in order to bring in enough money to keep the family going. Grandfather Bending, weakened by long hours of labor that he was

physically unfit for, had become an invalid, and the entire support of the family had devolved upon Sam's father.

He could remember his dad talking about the breadlines and the free-soup kitchens. He could remember his grandmother, her hands crippled by arthritis, aggravated by long hours at a commercial sewing machine in a clothing center sweat-shop, just so she could bring in that little extra money that meant so much to her children and her invalid husband.

Could one invention bring all that back again? Could his own harmless-looking Converter plunge millions back into that kind of misery? It seemed hardly possible, but Sam couldn't banish the specter of the Great Depression from his mind.

"Just how far-reaching would this economic upset be?" he asked Condley.

Condley had taken out his gold fountain pen again and was rolling it between his palms. "Well, that's a question with a long answer, Mr. Bending. Let's begin small and watch it spread.

"Banks are pretty safe today, aren't they? The Federal Deposit Insurance Corporation insures all depositors for deposits up to twenty thousand dollars now. A bank is hedged in by so many legal fences that it is almost impossible for one to fail in the same way that they failed all over the country in the early Thirties. Even if one does fail, through the gross mismanagement or illegal activities of its governing board, the depositors don't get excited; they know they're covered. There hasn't been a really disastrous run on a bank for more than thirty years.

"But banks don't just keep their money in vaults; they invest it. And a significantly large percentage of that money is invested in power companies all over the nation. In an attempt to keep their heads above water, those banks would be forced to make up tremendous losses if Power Utilities failed overnight. It would force them to draw in outstanding loans for ready cash. It would mean turning in United States Savings Bonds, which would put a tremendous strain on the Government.

"In spite of that, most banks won't be able to stay solvent because their other capital investments will be dropping rapidly in value. As Mr. Olcott said, our monetary system isn't based on gold, but on production and goods. If Power Utilities and its members fail, you and your machine will have destroyed-made worthless-several billion dollars worth of machinery and equipment. You will have thrown tens of thousands of people out of work. You will have cut the underpinnings from beneath the American dollar.

"And it won't stop there. What will happen to the companies that build the dynamos and the boilers and the atomic plants for the power companies? What will happen to the copper industry when the need for millions of miles of copper wire vanishes? They will all suffer tremendous setbacks, throwing tens of thousands more out of work and lowering the value of their stock drastically.

"The banks, then, will find their investments suddenly worth only a fraction of their former value. They'll fail wholesale. And you can see what that will do to the Federal Deposit Insurance Corporation and other insurance companies."

Sam Bending nodded slowly. He could see that. Insurance companies base their business on the prediction that a certain event-death, accident, or the failure of a bank-will happen to a certain percentage of their covered clients, and they adjust their rates accordingly. But something that would change a five-percent-failure rate to a fifty-percent-failure rate would break the company.

And the unemployment rate would go up even higher. And Sam thought of something the Secretary hadn't even mentioned. State and Federal Unemployment Insurance. What would that drain do to the treasuries of the various governments involved?

Sam Bending felt as if the thing were snowballing on him. Where would the State and Federal Governments get that money? Taxes? Don't be silly. How can you collect sales taxes when sales are dropping off because of unemployment? How can you get income taxes from depleted incomes? How can you charge luxury taxes when no one is buying luxuries?

Certainly essentials like food, rent, and clothing couldn't be taxed. People would buy as cheaply as possible, which would force down prices. Which would—

* * * *

"Where would it go from there?" Sam asked Condley in a shaken voice.

Condley glanced over at the Russian. "I believe Dr. Artomonov can answer that one for you."

Artomonov was a red-faced, fleshy man with almost no hair and a huge, bristling, gray mustache. His eyes were a startling blue. "Mr. Bending," he said in excellent English, "you may recall that your depression of the Thirties was not confined to America. All of Europe became involved. The same will happen again, to a greater degree, if your machine is released to the world at this time." He brushed at his mustache with a fingertip.

"You may wonder what I am doing here, Mr. Bending. You might think that the traditional rivalry which has existed between our countries for so many decades would preclude my being admitted to such a secret session as this one. I might have thought so, too, fifteen years ago. But when something threatens both our countries, the picture changes. We fought together during the Motherland War-what you call World War II-because of the common threat of German Nazi terrorism. We co-operated to suppress the brush-fires that threatened us in Europe and the Middle East during the so-called Tense War. In big things we must co-operate.

"Again we are both threatened by a common source, Mr. Bending, and again we must co-operate."

Sam Bending felt a chill. The thought that he and his machine were a threat as great as that, a threat to the two greatest nations of Earth, was appalling.

"I am not a scientist, Mr. Bending," the Russian went on. "My title comes from a degree in economics and political science, not in physical science. As soon as this machine was demonstrated to me, however, I could appreciate its power-not only physically, but economically. I immediately contacted my superiors in Moscow to discuss the problem.

"Naturally, we would like to know the ... ah ... 'elegant' principle behind its operation. Equally naturally"-he smiled politely at Secretary Condley-"you will not tell us. However, my superiors in Moscow assure me that we need not worry on that score; a machine identically similar to yours was invented by one of our brilliant young scientists at the University of Moscow over four years ago. As a patriot, of course, he was willing to have the machine suppressed, and no news of it has leaked out."

Sam Bending found it difficult to keep from smiling. Sure, he thought, and a man named Popov invented radio, and Yablochkov invented the electric light.

"You see, Mr. Bending," Dr Artomonov continued, "while we do not have the unstable setup of

money-based capitalism, and while we do not need to worry about such antiquated and dangerous things as fluctuating stock markets, we would still find your machine a threat. Communism is based on the work of the people; our economy is based on the labor of the working man. It is thus stable, because every man must work.

"But we, too, have a vast, power network, the destruction of which would cause the unemployment of millions of our citizens. The unemployment alone would cause repercussions all over the Soviet Republics which would be difficult to deal with. We would eventually recover, of course, because of the inherent stability of our system, but the shock would not be good for us.

"The same thing would happen in every industrialized nation on Earth," Artomonov went on. "In my work with the United Nations, I have studied just such problems. European governments would fall overnight. In Germany, in the 1920s, it was cheaper to burn bundles of one-mark notes than it was to buy firewood with them. Such things will be repeated, not only in the Germanies, but all over Europe.

"Some countries, of course, will not be so drastically effected. China, and other parts of Asia which have not built up a vast industrial system, will be affected only slightly. The South American countries still have a more or less agricultural economy and will not be bothered greatly.

"But the great industrial civilizations of East and West will collapse."

With one breath, Artomonov was saying that the Soviet Union could weather the storm, and with another he was hinting that it probably wouldn't. But Sam Bending could see the point in spite of the Russian's tortuous logic.

"I think that is all I have to say for the moment," Artomonov said, "except to emphasize one point. The Great Depression hit the world some fifty years ago. It was a terrible thing for everyone concerned. But it was as nothing at all-a mere zephyr of ill wind-compared to what the Depression of the Eighties will be if your machine goes on the market."

* * * *

There was silence for a minute. Sam Bending was thinking hard, and the others could see it-and they knew there was no point in interrupting at that moment.

"Just a second," Sam said. "There's one thing that I don't really quite see. I can see that the situation you outline would develop if every power plant in America-or in the Soviet Union or Europe-were to be suddenly replaced by Converters. I can see that chaos would result." He paused, marshaling his thoughts, then went on, with a tinge of anger in his voice.

"But that's not the way it will work! You can't do a thing like that overnight. To mass produce the Converter will take time-factories will have to be tooled up for it, and all that. And distribution will take time. It seems to me that there would be plenty of time to adjust."

Condley started to say something, but Dr. Artomonov burst in explosively.

"Don't you see, Mr. Bending? The threat of the machine is enough! Even here in your own country, just the knowledge that such machines were to be made at some time in the immediate future would have a disastrous effect! Who would invest in Power Utilities if they knew that within a short time it would be bankrupt? No one would want to buy such stock, and those who had it would be frantically trying to sell what they had. The effect on the banking system would be the same as if the machine were already being used. Your Mr. Roosevelt pointed out that fear was the problem."

Bending frowned puzzledly. “I don't see—"

He was interrupted by Dr. Larchmont. “Let me see if I can't give you an analogy, Mr. Bending. Do you know anything about the so-called ‘nerve gases'?"

"Some,” admitted Sam. “Most of them aren't gases; they're finely dispersed aerosols."

Larchmont nodded. “Have you any idea how much it takes to kill a man?"

"A drop or so of the aerosol on the skin is enough, I understand."

"That's right. Now, how can such a minute amount of poison damage a human being?"

Bending began to get a glimmer of what the man was driving at. “Well, I know that some of them suppress the enzymic action with acetylcholine, which means that the nerves simply act as though their synapses had been shorted through. It only takes a small percentage of that kind of damage to the nerve fibers to ruin the whole nervous system. The signals get jammed up and confused, and the whole mechanism ceases to function. The victim dies."

Larchmont nodded. “Now, as I understand it, our banking system is the vital nerve network of our economy. And our system is built on credit-faith, if you will. Destroy that faith-even a small percentage of it-and you destroy the system.

"If your machine were to go on the market, there would be no more faith in the present utilities system. Their stocks would be worthless long before your machine actually put them out of business. And that would hit our banking system the same way a nerve gas hits the nervous system. And the victim-the American economy-would die. And the nation, as a nation, would die with it."

"I see,” said Bending slowly. He didn't like the picture at all; it was more frightening than he cared to admit, even to himself. He looked at his business manager. “What do you think, Jim?” he asked softly. He knew he could depend on Luckman.

Jim Luckman looked worried. “They're right, Sam. Clean, dead right. I know the investment pattern in this country, and I have an idea of what it must be abroad. This country would be in the middle of the worst depression in its history. At least we had Federal help during the Thirties-but there won't even be a United States Government if this hits. Nor, I think, will there be a Soviet government, in spite of what Dr. Artomonov's personal beliefs may be."

Significantly, the Russian economist said nothing.

Sam Bending closed his eyes. “I've worked on this thing for years,” he said tensely. “It was ... it means something to me. I invented it. I perfected it.” His voice began to quaver just a little. “But if it's going to do ... to do all that—” He paused and took a deep breath. “All right. I'll smash my apparatus and destroy my plans and forget about it."

Jim Luckman looked at Secretary Condley. “I don't think that would be fair. Sam's worked hard on this thing. He deserves recognition. And the people of Earth deserve to get this machine somehow. Can't something be worked out?"

"Certainly,” said Condley. “In some countries, and in some eras, dangerous inventions were suppressed

by the simplest method. If it was discovered in time, the inventor was executed summarily, along with anyone else who knew the secret, and the invention was destroyed. The United States isn't that kind of country." He looked down at his hands and the gold pen again before he went on.

"Please don't misunderstand, Mr. Bending; we are not trying to keep the Converter under wraps forever. In the first place, I don't think it would be possible. What do you think, Dr. Vanderlin?"

The Bureau of Standards man said: "I doubt it. Granted, the Converter is not something one would accidentally stumble across, nor automatically deduce from the 'previous state of the art'. I'll admit frankly that I doubt if I would ever have thought of it. But I doubt gravely that it is so unique that it will never be rediscovered independently."

"So," said Condley, "we have no intent to hold it back on that score. And, in the second place, such an invention is too valuable to allow it to be lost.

"So here is our proposition. You will sell your rights to the Converter to Power Utilities. It won't even be patented in the usual sense; we can't allow the Converter to become public property at this time. We can't make it possible for just anyone to send in a quarter to the Patent Office to find out how it works. That's why we stopped the patent application.

"But the Government will see that a contract is written up which admits that you are the inventor of the Converter, and which will give you royalties on every unit built. High royalties.

"Under strict Government supervision, Power Utilities will proceed to liquidate their holdings-slowly, so that there will be no repercussions on an economic level. The danger lies, not in the Converter's replacing existing power equipment, but in the danger of its replacing them too quickly. But with care and control, the adjustment can be made slowly. The process will take about ten years, but you will receive a lump sum, plus a monthly payment, as an advance against future royalties."

"I see," said Bending slowly. "That sounds all right to me. What about you, Jim? What do you think?"

Jim Luckman was smiling again. "Sounds fine to me, Sam. We'll have to work out the terms of the contract, of course, but I think Mr. Olcott and I can see eye to eye."

Olcott seemed to wince a little. He knew he was over a barrel.

"I suppose I'll have to be sworn to secrecy, eh?" Bending asked. He was beginning to recover his poise.

Condley nodded. "You will." He made his characteristic pause, looking down at the gold pen and back up. "Mr. Bending, don't think that this is the first time this has happened. Yours is not the first dangerous invention that has come up. It just so happens that it's the most dangerous so far. We don't like to have to work this way, but we must. There was simply nothing else to do."

Sam Bending leaned back in his chair. "That's all right. To be perfectly honest, there are a lot of details that I still don't understand. But I recognize the fact that I'm simply not an economist; I can see the broad outlines plainly enough."

Dr. Artomonov smiled widely. "I do not understand the details of your machine, either, Mr. Bending, but I understand the broad outlines of its operations well enough to be frightened when I think of what it could do to world economy if it were to be dumped on the market at this time. I am happy to see that America, as well as Mother Russia, can produce patriots of a high order."

Sam gave him a smile. “Thanks.” He didn't know quite what else to say to a statement like that. “But Jim, here, is going to spend the next several days trotting out facts and figures for me. I want to see just what would take place, if I can wrestle with that kind of data."

"Oh, brother!” said Jim Luckman softly. “Well, I'll try."

"I'll have the reports from the computers sent to you,” Condley offered. “They show the whole collapse, step by step."

Artomonov cast a speculative glance in Condley's direction, but he said nothing.

"There's one other thing,” Sam said flatly. “The Converter is my baby, and I want to go on working on it. I think Power Utilities might put me on as a permanent consultant, so that I could earn some of the money that's coming in over the next ten years. That way, my royalties won't suffer so much from the advance payments."

Jim Luckman grinned, and Richard Olcott said: “I thought you said you were no businessman, Mr. Bending."

"I may be ignorant,” said Sam, “but I'm not stupid. What about it?"

Olcott glanced at Dr. Larchmont. The little scientist was beaming.

"Definitely,” he said. “I want Mr. Bending to show me how he managed to dope that thing out. And, to be perfectly frank, there are a couple of things in there that I don't get at all."

"That's understandable,” said Dr. Vanderlin. “We only had a few hours to look at the thing. Still, I must admit it's a lulu."

"That's not what I meant,” Larchmont said. “There are some things in there that would take a long time to figure out without an explanation. I'll admit that—"

"Wait a minute,” Bending interrupted. “You said ‘a few hours', Dr. Vanderlin. You mean only since this morning?” He grinned. “What happened to the one you got Friday night? Did my fusing device work the first time?"

Vanderlin looked puzzledly at Larchmont. Larchmont said wonderingly: “Friday? You mean you had two pilot models?"

Olcott said: “Where was the other? We checked your power drain and saw you weren't using any at your house, so—"

"I had three models,” Bending said. “I've got one left in my car; you took one from my house, and the third was taken from my lab sometime Friday night. Somebody has it..."

Condley said: “Dr. Artomonov, do you know anything about this?"

The Russian shook his head. “Nothing.” He looked plainly frightened. “I assure you, my government knew nothing of this."

Condley leaped to his feet, said: “Where are those FBI men?” and ran out the door.

"The black market,” said Bending softly. “They found out somehow."

"And they've had three days to study it,” Larchmont said. “It's too late now. That thing is probably somewhere in South America by this time."

Artomonov stood up, his face oddly pale. “You must excuse me, gentlemen. I must get in touch with Moscow immediately.” He strode out of the room.

The four men remaining in the room just stared at each other for a long moment. There wasn't much else they could do.

## THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
## # 5

On the Planet Tenta I, plants of the melon and related families were so rare that the king himself had issued a royal fiat to protect them. Not knowing this, Benedict Breadfruit's young son started to pick a pumpkin. Fortunately, his father stopped him in time.

"But why can't I pick a pumpkin, father?” asked the child, “It would be a violation of the Gourd Edict, son."

## DEAD GIVEAWAY

"Mendez?” said the young man in the blue-and-green tartan jacket. “Why, yes ... sure I've heard of it. Why?"

The clerk behind the desk looked again at the information screen. “That's the destination we have on file for Scholar Duckworth, Mr. Turnbull. That was six months ago.” He looked up from the screen, waiting to see if Turnbull had any more questions.

Turnbull tapped his teeth with a thumbnail for a couple of seconds, then shrugged slightly. “Any address given for him?"

"Yes, sir. The Hotel Byron, Landing City, Mendez."

Turnbull nodded. “How much is the fare to Mendez?"

The clerk thumbed a button which wiped the information screen clean, then replaced it with another list, which flowed upward for a few seconds, then stopped. “Seven hundred and eighty-five fifty, sir,” said the clerk. “Shall I make you out a ticket?"

Turnbull hesitated. “What's the route?"

The clerk touched another control, and again the information on the screen changed. “You'll take the regular shuttle from here to Luna, then take either the Stellar Queen or the Oriona to Sirius VI. From there, you will have to pick up a ship to the Central Worlds-either to Vanderlin or BenAbram-and take a ship from there to Mendez. Not complicated, really. The whole trip won't take you more than three

weeks, including stopovers."

"I see," said Turnbull. "I haven't made up my mind yet. I'll let you know."

"Very well, sir. The Stellar Queen leaves on Wednesdays and the Oriona on Saturdays. We'll need three days' notice."

Turnbull thanked the clerk and headed toward the big doors that led out of Long Island Terminal, threading his way through the little clumps of people that milled around inside the big waiting room.

He hadn't learned a hell of a lot, he thought. He'd known that Duckworth had gone to Mendez, and he already had the Hotel Byron address. There was, however, some negative information there. The last address they had was on Mendez, and yet Scholar Duckworth couldn't be found on Mendez. Obviously, he had not filed a change of address there; just as obviously, he had managed to leave the planet without a trace. There was always the possibility that he'd been killed, of course. On a thinly populated world like Mendez, murder could still be committed with little chance of being caught. Even here on Earth, a murderer with the right combination of skill and luck could remain unsuspected.

But who would want to kill Scholar Duckworth?

And why?

Turnbull pushed the thought out of his mind. It was possible that Duckworth was dead, but it was highly unlikely. It was vastly more probable that the old scholar had skipped off for reasons of his own and that something had happened to prevent him from contacting Turnbull.

After all, almost the same thing had happened in reverse a year ago.

Outside the Terminal Building, Turnbull walked over to a hackstand and pressed the signal button on the top of the control column. An empty cab slid out of the traffic pattern and pulled up beside the barrier which separated the vehicular traffic from the pedestrian walkway. The gate in the barrier slid open at the same time the cab door did, and Turnbull stepped inside and sat down. He dialed his own number, dropped in the indicated number of coins, and then relaxed as the cab pulled out and sped down the freeway towards Manhattan.

He'd been back on Earth now for three days, and the problem of Scholar James Duckworth was still bothering him. He hadn't known anything about it until he'd arrived at his apartment after a year's absence.

* * * *

The apartment door sighed a little as Dave Turnbull broke the electronic seal with the double key. Half the key had been in his possession for a year, jealousy guarded against loss during all the time he had been on Lobon; the other half had been kept by the manager of the Excelsior Apartments.

As the door opened, Turnbull noticed the faint musty odor that told of long-unused and poorly circulated air. The conditioners had been turned down to low power for a year now.

He went inside and allowed the door to close silently behind him. The apartment was just the same-the broad expanse of pale blue rug, the matching furniture, including the long, comfortable couch and the fat overstuffed chair-all just as he'd left them.

He ran a finger experimentally over the top of the table near the door. There was a faint patina of dust covering the glossy surface, but it was very faint, indeed. He grinned to himself. In spite of the excitement of the explorations on Lobon, it was great to be home again.

He went into the small kitchen, slid open the wall panel that concealed the apartment's power controls, and flipped the switch from "maintenance" to "normal." The lights came on, and there was a faint sigh from the air conditioners as they began to move the air at a more normal rate through the rooms.

Then he walked over to the liquor cabinet, opened it, and surveyed the contents. There, in all their glory, sat the half dozen bottles of English sherry that he'd been dreaming about for twelve solid months. He took one out and broke the seal almost reverently.

Not that there had been nothing to drink for the men on Lobon: the University had not been so blue-nosed as all that. But the choice had been limited to bourbon and Scotch. Turnbull, who was not a whisky drinker by choice, had longed for the mellow smoothness of Bristol Cream Sherry instead of the smokiness of Scotch or the heavy-bodied strength of the bourbon.

He was just pouring his first glass when the announcer chimed. Frowning, Turnbull walked over to the viewscreen that was connected to the little eye in the door. It showed the face of-what was his name? Samson? Sanders. That was it, Sanders, the building superintendent.

Turnbull punched the opener and said: "Come in. I'll be right with you, Mr. Sanders."

Sanders was a round, pleasant-faced, soft-voiced man, a good ten years older than Turnbull himself. He was standing just inside the door as Turnbull entered the living room; there was a small brief case in his hand. He extended the other hand as Turnbull approached.

"Welcome home again, Dr. Turnbull," he said warmly. "We've missed you here at the Excelsior."

Turnbull took the hand and smiled as he shook it. "Glad to be back, Mr. Sanders; the place looks good after a year of roughing it."

The superintendent lifted the brief case. "I brought up the mail that accumulated while you were gone. There's not much, since we sent cards to each return address, notifying them that you were not available and that your mail was being held until your return."

He opened the brief case and took out seven standard pneumatic mailing tubes and handed them to Turnbull.

Turnbull glanced at them. Three of them were from various friends of his scattered over Earth; one was from Standard Recording Company; the remaining three carried the return address of James M. Duckworth, Ph. Sch., U.C.L.A., Great Los Angeles, California.

"Thanks, Mr. Sanders," said Turnbull. He was wondering why the man had brought them up so promptly after his own arrival. Surely, having waited a year, they would have waited until they were called for.

Sanders blinked apologetically. "Uh ... Dr. Turnbull, I wonder if ... if any of those contain money ... checks, cash, anything like that?"

"I don't know. Why?" Turnbull asked in surprise.

Sanders looked even more apologetic. “Well, there was an attempted robbery here about six months ago. Someone broke into your mailbox downstairs. There was nothing in it, of course; we've been putting everything into the vault as it came in. But the police thought it might be someone who knew you were getting money by mail. None of the other boxes were opened, you see, and—” He let his voice trail off as Turnbull began opening the tubes.

None of them contained anything but correspondence. There was no sign of anything valuable.

"Maybe they picked my box at random,” Turnbull said. “They may have been frightened off after opening the one box."

"That's very likely it,” said Sanders. “The police said it seemed to be a rather amateurish job, although whoever did it certainly succeeded in neutralizing the alarms."

Satisfied, the building superintendent exchanged a few more pleasantries with Turnbull and departed. Turnbull headed back toward the kitchen, picked up his glass of sherry, and sat down in the breakfast nook to read the letters.

The one from Standard Recording had come just a few days after he'd left, thanking him for notifying them that he wanted to suspend his membership for a year. The three letters from Cairo, London, and Luna City were simply chatty little social notes, nothing more.

The three from Scholar Duckworth were from a different breed of cat.

The first was postmarked 21 August 2187, three months after Turnbull had left for Lobon. It was neatly addressed to Dave F. Turnbull, Ph.D.

* * * *

Dear Dave (it read):

I know I haven't been as consistent in keeping up with my old pupils as I ought to have been. For this, I can only beat my breast violently and mutter mea culpa, mea culpa, mea maxima culpa. I can't even plead that I was so immersed in my own work that I hadn't the time to write, because I'm busier right now than I've been for years, and I've had to make time for this letter.

Of course, in another way, this is strictly a business letter, and it does pertain to my work, so the time isn't as hard to find as it might be.

But don't think I haven't been watching your work. I've read every one of your articles in the various journals, and I have copies of all four of your books nestled securely in my library. Columbia should be-and apparently is-proud to have a man of your ability on its staff. At the rate you've been going, it won't be long before you get an invitation from the Advanced Study Board to study for your Scholar's degree.

As a matter of fact, I'd like to make you an offer right now to do some original research with me. I may not be a top-flight genius like Metternick or Dahl, but my reputation does carry some weight with the Board. (That, Turnbull thought, was a bit of needless modesty; Duckworth wasn't the showman that Metternick was, or the prolific writer that Dahl was, but he had more intelligence and down-right wisdom than either.) So if you could manage to get a few months leave from Columbia, I'd be honored to have your assistance. (More modesty, thought Turnbull. The honor would be just the other way round.)

The problem, in case you're wondering, has to do with the Centaurus Mystery; I think I've uncovered a new approach that will literally kick the supports right out from under every theory that's been evolved for the existence of that city. Sound interesting?

I'm mailing this early, so it should reach you in the late afternoon mail. If you'll be at home between 1900 and 2000, I'll call you and give you the details. If you've got a pressing appointment, leave details with the operator.

All the best,

Jim Duckworth

* * * *

Turnbull slid the letter back into its tube and picked up the second letter, dated 22 August 2187, one day later.

* * * *

Dear Dave,

I called last night, and the operator said your phone has been temporarily disconnected. I presume these letters will be forwarded, so please let me know where you are. I'm usually at home between 1800 and 2300, so call me collect within the next three or four days.

All the best,

Jim

* * * *

The third letter was dated 10 November 2187. Turnbull wondered why it had been sent. Obviously, the manager of the Excelsior had sent Duckworth a notice that Dr. Turnbull was off-planet and could not be reached. He must have received the notice on the afternoon of 22 August. That would account for his having sent a second letter before he got the notice. Then why the third letter?

* * * *

Dear Dave,

I know you won't be reading this letter for six months or so, but at least it will tell you where I am. I guess I wasn't keeping as close tabs on your work as I thought: otherwise I would have known about the expedition to Lobon. You ought to be able to make enough credit on that trip to bring you to the attention of the Board.

And don't feel too bad about missing my first letters or the call. I was off on a wild goose chase that just didn't pan out, so you really didn't miss a devil of a lot.

As a matter of fact, it was rather disappointing to me, so I've decided to take a long-needed sabbatical leave and combine it with a little research on the half-intelligent natives of Mendez. I'll see you in a year or so.

As ever,

Jim Duckworth

* * * *

Well, that was that, Turnbull thought. It galled him a little to think that he'd been offered a chance to do research with Scholar Duckworth and hadn't been able to take it. But if the research hadn't panned out.... He frowned and turned back to the first letter.

A theory that would "literally kick the supports right out from under every theory that's been evolved for the existence of that city," he'd said. Odd. It was unlike Duckworth to be so positive about anything until he could support his own theory without much fear of having it pulled to pieces.

Turnbull poured himself a second glass of sherry, took a sip, and rolled it carefully over his tongue.

The Centaurus Mystery. That's what the explorers had called it back in 2041, nearly a century and a half before, when they'd found the great city on one of the planets of the Alpha Centaurus system. Man's first interstellar trip had taken nearly five years at sublight velocities, and bing!-right off the bat, they'd found something that made interstellar travel worthwhile, even though they'd found no planet in the Alpha Centaurus system that was really habitable for man.

They'd seen it from space-a huge domed city gleaming like a great gem from the center of the huge desert that covered most of the planet. The planet itself was Marslike-flat and arid over most of its surface, with a thin atmosphere high in CO2 and very short on oxygen. The city showed up very well through the cloudless air.

From the very beginning, it had been obvious that whoever or whatever had built that city had not evolved on the planet where it had been built. Nothing more complex than the lichens had ever evolved there, as thousands of drillings into the crust of the planet had shown.

Certainly nothing of near-humanoid construction could ever have come into being on that planet without leaving some trace of themselves or their genetic forebears except for that single huge city.

How long the city had been there was anyone's guess. A thousand years? A million? There was no way of telling. It had been sealed tightly, so none of the sand that blew across the planet's surface could get in. It had been set on a high plateau of rock, far enough above the desert level to keep it from being buried, and the transparent dome was made of an aluminum oxide glass that was hard enough to resist the slight erosion of its surface that might have been caused by the gentle, thin winds dashing microscopic particles of sand against its smooth surface.

Inside, the dry air had preserved nearly every artifact, leaving them as they had been when the city was deserted by its inhabitants at an unknown time in the past.

That's right-deserted. There were no signs of any remains of living things. They'd all simply packed up and left, leaving everything behind.

Dating by the radiocarbon method was useless. Some of the carbon compounds in the various artifacts showed a faint trace of radiocarbon, others showed none. But since the method depends on a knowledge of the amount of nitrogen in the atmosphere of the planet of origin, the rate of bombardment of that atmosphere by high-velocity particles, and several other factors, the information on the radioactivity of the specimens meant nothing. There was also the likelihood that the carbon in the various polymer resins came from oil or coal, and fossil carbon is useless for radio-dating.

Nor did any of the more modern methods show any greater success.

It had taken Man centuries of careful comparison and cross-checking to read the evolutionary history written in the depths of his own planet's crust-to try to date the city was impossible. It was like trying to guess the time by looking at a faceless clock with no hands.

There the city stood-a hundred miles across, ten thousand square miles of complex enigma.

It had given Man his first step into the ever-widening field of Cultural Xenology.

Dave Turnbull finished his sherry, got up from the breakfast nook, and walked into the living room, where his reference books were shelved. The copy of Kleistmeistenoppolous' "City of Centaurus" hadn't been opened in years, but he took it down and flipped it open to within three pages of the section he was looking for.

"It is obvious, therefore, that every one of the indicators points in the same direction. The City was not-could not have been-self-supporting. There is no source of organic material on the planet great enough to support such a city; therefore, foodstuffs must have been imported. On the other hand, it is necessary to postulate some reason for establishing a city on an otherwise barren planet and populating it with an estimated six hundred thousand individuals.

"There can be only one answer: The race that built the City did so for the same reason that human beings built such megalopolises as New York, Los Angeles, Tokyo, and London-because it was a focal point for important trade routes. Only such trade routes could support such a city; only such trade routes give reason for the City's very existence.

"And when those trade routes changed or were supplanted by others in the course of time, the reason for the City's existence vanished."

Turnbull closed the book and shoved it back into place. Certainly the theory made sense, and had for a century. Had Duckworth come across information that would seem to smash that theory?

The planet itself seemed to be perfectly constructed for a gigantic landing field for interstellar ships. It was almost flat, and if the transhipping between the interstellar vessels had been done by air, there would be no need to build a hard surface for the field. And there were other indications. Every fact that had come to light in the ensuing century had been in support of the Greek-German xenologist's theory.

Had Duckworth come up with something new?

If so, why had he decided to discard it and forget his new theory?

If not, why had he formulated the new theory, and on what grounds?

Turnbull lit a cigarette and looked sourly at the smoke that drifted up from its tip. What the devil was eating him? He'd spent too much time away from Earth, that was the trouble. He'd been too deeply immersed in his study of Lobon for the past year. Now all he had to do was get a little hint of something connected with cultural xenology, and his mind went off on dizzy tizzies.

Forget it. Duckworth had thought he was on to something, found out that he wasn't, and discarded the whole idea. And if someone like Scholar James Duckworth had decided it wasn't worth fooling with, then why was a common Ph. D. like Turnbull worrying about it? Especially when he had no idea what

had started Duckworth off in the first place.

And his thoughts came back around to that again. If Duckworth had thought enough of the idea to get excited over it, what had set him off? Even if it had later proved to be a bad lead, Turnbull felt he'd like to know what had made Duckworth think-even for a short time-that there was some other explanation for the City.

Ah, hell! He'd ask Duckworth some day. There was plenty of time.

He went over to the phone, dialed a number, and sat down comfortably in his fat blue overstuffed chair. It buzzed for half a minute, then the telltale lit up, but the screen remained dark.

"Dave!" said a feminine voice. "Are you back? Where on Earth have you been?"

"I haven't," said Turnbull. "How come no vision?"

"I was in the hammam, silly. And what do you mean 'I haven't'? You haven't what?"

"You asked me where on Earth I'd been, and I said I haven't."

"Oh! Lucky man! Gallivanting around the starways while us poor humans have to stay home."

"Yeah, great fun. Now look, Dee, get some clothes on and turn on your pickup. I don't like talking to gray screens."

"Half a sec." There was a minute's pause, then the screen came on, showing the girl's face. "Now, what do you have on your purported mind?"

"Simple. I've been off Earth for a year, staring at bearded faces and listening to baritone voices. If it isn't too short notice, I'd like to take you to dinner and a show and whatever else suggests itself afterward."

"Done!" she said. "What time?"

"Twenty hundred? At your place?"

"I'll be waiting."

Dave Turnbull cut the circuit, grinning. The Duckworth problem had almost faded from his mind. But it flared back up again when he glanced at the mail tubes on his desk.

"Damn!" he said.

He turned back to the phone, jammed a finger into the dial and spun it angrily. After a moment, the screen came to life with the features of a beautifully smiling but obviously efficient blond girl.

"Interstellar Communications. May I serve you, sir?"

"How long will it take to get a message to Mendez? And what will it cost?"

"One moment, sir." Her right hand moved off-screen, and her eyes shifted to look at a screen that Turnbull couldn't see. "Mendez," she said shortly. "The message will reach there in five hours and

thirty-six minutes total transmission time. Allow an hour's delay for getting the message on the tapes for beaming.

"The cost is one seventy-five per symbol. Spaces and punctuation marks are considered symbols. A, an, and, and the are symbols."

Turnbull thought a moment. It was high-damned high. But then a man with a bona fide Ph. D. was not exactly a poor man if he worked at his specialty or taught.

"I'll call you back as soon as I've composed the message," he said.

"Very well, sir."

He cut the circuit, grabbed a pencil and started scribbling. When he'd finished reducing the thing to its bare minimum, he started to dial the number again. Then he scowled and dialed another number.

This time, a mild-faced young man in his middle twenties appeared. "University of California in Los Angeles. Personnel Office. May I serve you?"

"This is Dr. Dave Turnbull, in New York. I understand that Scholar Duckworth is on leave. I'd like his present address."

The young man looked politely firm. "I'm sorry, doctor; we can not give out that information."

"Oh, yap! Look here; I know where he is; just give me—" He stopped. "Never mind. Let me talk to Thornwald."

Thornwald was easier to deal with, since he knew both Duckworth and Turnbull. Turnbull showed him Duckworth's letter on the screen. "I know he's on Mendez; I just don't want to have to look all over the planet for him."

"I know, Dave. I'm sure it's all right. The address is Landing City, Hotel Byron, Mendez."

"Thanks, Thorn; I'll do you a favor some day."

"Sure. See you."

Turnbull cut off, dialed Interstellar Communications, sent his message, and relaxed. He was ready to make a night of it. He was going to make his first night back on Earth a night to remember.

He did.

* * * *

The next morning, he was feeling almost flighty. He buzzed and flitted around his apartment as though he'd hit a high point on a manic cycle, happily burbling utter nonsense in the form of a perfectly ridiculous popular song.

My dear, the merest touch of you Has opened up my eyes; And if I get too much of you, You really paralyze! Donna, Donna, bella Donna, Clad in crimson bright, Though I'm near you, I don't wanna See the falling shades of night!

Even when the phone chimed in its urgent message, it didn't disturb his frothy mood. But three minutes later he had dropped down to earth with a heavy clunk.

His message to Mendez had not been delivered. There was not now, and never had been a Scholar James Duckworth registered at the Hotel Byron in Landing City. Neither was his name on the incoming passenger lists at the spaceport at Landing City.

He forced himself to forget about it; he had a date with Dee again that night, and he was not going to let something silly like this bother him. But bother him it did. Unlike the night before, the date was an utter fiasco, a complete flop. Dee sensed his mood, misinterpreted it, complained of a headache, and went home early. Turnbull slept badly that night.

Next morning, he had an appointment with one of the executives of U.C.L.I.-University of Columbia in Long Island-and, on the way back he stopped at the spaceport to see what he could find out. But all he got was purely negative information.

On his way back to Manhattan, he sat in the autocab and fumed.

When he reached home, he stalked around the apartment for an hour, smoking half a dozen cigarettes, chain fashion, and polishing off three glasses of Bristol Cream without even tasting it.

Dave Turnbull, like any really top-flight investigator, had developed intuitive thinking to a fine art. Ever since the Lancaster Method had shown the natural laws applying to intuitive reasoning, no scientist worthy of the name failed to apply it consistently in making his investigations. Only when exact measurement became both possible and necessary was there any need to apply logic to a given problem.

A logician adds two and two and gets four; an intuitionist multiplies them and gets the same answer. But a logician, faced with three twos, gets six-an intuitionist gets eight. Intuition will get higher orders of answers from a given set of facts than logic will.

Turnbull applied intuition to the facts he knew and came up with an answer. Then he phoned the New York Public Library, had his phone connected with the stacks, and spent an hour checking for data that would either prove or disprove his theory. He found plenty of the former and none of the latter.

Then he called his superiors at Columbia.

He had to write up his report on the Lobon explorations. Would it be possible for him to take a six-month leave of absence for the purpose?

It would.

The following Saturday, Dr. Dave F. Turnbull was on the interstellar liner Oriona, bound for Sirius.

* * * *

If ever there was a Gold Mine In The Sky, it was Centaurus City. To the cultural xenologists who worked on its mysterious riches, it seemed to present an almost inexhaustible supply of new data. The former inhabitants had left everything behind, as though it were no longer of any value whatever. No other trace of them had as yet been found anywhere in the known galaxy, but they had left enough material in Centaurus City to satisfy the curiosity of Mankind for years to come, and enough mystery and complexity to whet that curiosity to an even sharper degree.

It's difficult for the average person to grasp just how much information can be packed into a city covering ten thousand square miles with a population density equal to that of Manhattan. How long would it take the hypothetical Man From Mars to investigate New York or London if he had only the City to work with, if he found them just as they stand except that the inhabitants had vanished?

The technological level of the aliens could not be said to be either "above" or "below" that of Man: it could only be said to be "different." It was as if the two cultures complemented each other; the areas of knowledge which the aliens had explored seemed to be those which Mankind had not yet touched, while, at the same time, there appeared to be many levels of common human knowledge which the aliens had never approached.

From the combination of the two, whole new fields of human thought and endeavor had been opened.

No trace of the alien spaceships had been uncovered, but the anti-gravitational devices in their aircraft, plus the basic principles of Man's own near-light-velocity drive had given Man the ultralight drive.

Their knowledge of social organization and function far exceeded that of Man, and the hints taken from the deciphered writings of the aliens had radically changed Man's notions of government. Now humanity could build a Galactic Civilization-a unity that was neither a pure democracy nor an absolute dictatorship, but resulted in optimum governmental control combined with optimum individual freedom. It was e pluribus unum plus. Their technological writings were few, insofar as physics and chemistry were concerned. What there were turned out to be elementary texts rather than advanced studies-which was fortunate, because it had been through these that the cultural xenologists had been able to decipher the language of the aliens, a language that was no more alien to the modern mind than, say, ancient Egyptian or Cretan.

But without any advanced texts, deciphering the workings of the thousands of devices that the aliens had left behind was a tedious job. The elementary textbooks seemed to deal with the same sort of science that human beings were used to, but, at some point beyond, the aliens had taken a slightly different course, and, at first, only the very simplest of their mechanisms could be analyzed. But the investigators learned from the simpler mechanisms, and found themselves able to take the next step forward to more complex ones. However, it still remained a fact that the majority of the devices were as incomprehensible to the investigators as would the function of a transistor have been to James Clerk Maxwell.

In the areas of the social sciences, data was deciphered at a fairly rapid rate; the aliens seemed to have concentrated all their efforts on that. Psionics, on the other hand, seemed never to have occurred to them, much less to have been investigated. And yet, there were devices in Centaurus City that bore queer generic resemblances to common Terrestrial psionic machines. But there was no hint of such things in the alien literature.

And the physical sciences were deciphered only slowly, by a process of cut-and-try and cut-and-try again.

The investigations would take time. There were only a relatively small handful of men working on the problems that the City posed. Not because there weren't plenty of men who would have sacrificed their time and efforts to further the work, but because the planet, being hostile to Man, simply would not support very many investigators. It was not economically feasible to pour more men and material into the project after the point of diminishing returns had been reached. Theoretically, it would have been possible to re-seal the City's dome and pump in an atmosphere that human beings could live with, but, aside from every other consideration, it was likely that such an atmosphere would ruin many of the artifacts within the City.

Besides, the work in the City was heady stuff. Investigation of the City took a particular type of high-level mind, and that kind of mind did not occur in vast numbers.

It was not, Turnbull thought, his particular dish of tea. The physical sciences were not his realm, and the work of translating the alien writings could be done on Earth, from ‘stat copies, if he'd cared to do that kind of work.

* * * *

Sirius VI was a busy planet-a planet that was as Earthlike as a planet could be without being Earth itself. It had a single moon, smaller than Earth's and somewhat nearer to the planet itself. The Oriona landed there, and Dave Turnbull took a shuttle ship to Sirius VI, dropping down at the spaceport near Noiberlin, the capital.

It took less than an hour to find that Scholar Duckworth had gone no farther on his journey to Mendez than Sirius VI. He hadn't cashed in his ticket; if he had, they'd have known about it on Earth. But he certainly hadn't taken a ship toward the Central Stars, either.

Turnbull got himself a hotel room and began checking through the Noiberlin city directory. There it was, big as life and fifteen times as significant. Rawlings Scientific Corporation.

Turnbull decided he might as well tackle them right off the bat; there was nothing to be gained by pussyfooting around.

He used the phone, and, after browbeating several of the employees and pulling his position on a couple of executives, he managed to get an appointment with the Assistant Director, Lawrence Drawford. The Director, Scholar Jason Rawlings, was not on Sirius VI at the time.

The appointment was scheduled for oh nine hundred the following morning, and Turnbull showed up promptly. He entered through the big main door and walked to the reception desk.

"Yes?” said the girl at the desk.

"How do you do,” Turnbull said. “My name is Turnbull; I think I'm expected."

"Just a moment.” She checked with the information panel on her desk, then said: “Go right on up, Dr. Turnbull. Take Number Four Lift Chute to the eighteenth floor and turn left. Dr. Drawford's office is at the end of the hall."

Turnbull followed directions.

Drawford was a heavy-set, florid-faced man with an easy smile and a rather too hearty voice.

"Come in, Dr. Turnbull; it's a pleasure to meet you. What can I do for you?” He waved Turnbull to a chair and sat down behind his desk.

Turnbull said carefully: “I'd just like to get a little information, Dr. Drawford."

Drawford selected a cigar from the humidor on his desk and offered one to Turnbull. “Cigar? No? Well, if I can be of any help to you, I'll certainly do the best I can.” But there was a puzzled look on his face as he lit his cigar.

"First," said Turnbull, "am I correct in saying that Rawlings Scientific is in charge of the research program at Centaurus City?"

Drawford exhaled a cloud of blue-gray smoke. "Not precisely. We work as a liaison between the Advanced Study Board and the Centaurus group, and we supply the equipment that's needed for the work there. We build instruments to order-that sort of thing. Scholar Rawlings is a member of the Board, of course, which admits of a somewhat closer liaison than might otherwise be possible.

"But I'd hardly say we were in charge of the research. That's handled entirely by the Group leaders at the City itself."

Turnbull lit a cigarette. "What happened to Scholar Duckworth?" he said suddenly.

Drawford blinked. "I beg your pardon?"

Again Turnbull's intuitive reasoning leaped far ahead of logic; he knew that Drawford was honestly innocent of any knowledge of the whereabouts of Scholar James Duckworth.

"I was under the impression," Turnbull said easily, "that Scholar Duckworth was engaged in some sort of work with Scholar Rawlings."

Drawford smiled and spread his hands. "Well, now, that may be. Dr. Turnbull. If so, then they're engaged in something that's above my level."

"Oh?"

Drawford pursed his lips for a moment, frowning. Then he said: "I must admit that I'm not a good intuitive thinker, Dr. Turnbull. I have not the capacity for it, I suppose. That's why I'm an engineer instead of a basic research man; that's why I'll never get a Scholar's degree." Again he paused before continuing. "For that reason, Scholar Rawlings leaves the logic to me and doesn't burden me with his own business. Nominally, he is the head of the Corporation; actually, we operate in different areas-areas which, naturally, overlap in places, but which are not congruent by any means."

"In other words," said Turnbull, "if Duckworth and Rawlings were working together, you wouldn't be told about it."

"Not unless Scholar Rawlings thought it was necessary to tell me," Drawford said. He put his cigar carefully in the ashdrop. "Of course, if I asked him, I'm sure he'd give me the information, but it's hardly any of my business."

* * * *

Turnbull nodded and switched his tack. "Scholar Rawlings is off-planet, I believe?"

"That's right. I'm not at liberty to disclose his whereabouts, however," Drawford said.

"I realize that. But I'd like to get a message to him, if possible."

Drawford picked up his cigar again and puffed at it a moment before saying anything. Then, "Dr. Turnbull, please don't think I'm being stuffy, but may I ask the purpose of this inquiry?"

"A fair question," said Turnbull, smiling. "I really shouldn't have come barging in here like this without explaining myself first." He had his lie already formulated in his mind. "I'm engaged in writing up a report on the cultural significance of the artifacts on the planet Lobon-you may have heard something of it?"

"I've heard the name," Drawford admitted. "That's in the Sagittarius Sector somewhere, as I recall."

"That's right. Well, as you know, the theory for the existence of Centaurus City assumes that it was, at one time, the focal point of a complex of trade routes through the galaxy, established by a race that has passed from the galactic scene."

Drawford was nodding slowly, waiting to hear what Turnbull had to say.

"I trust that you'll keep this to yourself, doctor," Turnbull said, extinguishing his cigarette. "But I am of the opinion that the artifacts on Lobon bear a distinct resemblance to those of the City." It was a bald, out-and-out lie, but he knew Drawford would have no way of knowing that it was. "I think that Lobon was actually one of the colonies of that race-one of their food-growing planets. If so, there is certainly a necessity for correlation between the data uncovered on Lobon and those which have been found in the City."

Drawford's face betrayed his excitement. "Why ... why, that's amazing! I can see why you wanted to get in touch with Scholar Rawlings, certainly! Do you really think there's something in this idea?"

"I do," said Turnbull firmly. "Will it be possible for me to send a message to him?"

"Certainly," Drawford said quickly. "I'll see that he gets it as soon as possible. What did you wish to say?"

Turnbull reached into his belt pouch, pulled out a pad and stylus, and began to write.

I have reason to believe that I have solved the connection between the two sources of data concerned in the Centaurus City problem. I would also like to discuss the Duckworth theory with you.

When he had finished, he signed his name at the bottom and handed it to Drawford.

Drawford looked at it, frowned, and looked up at Turnbull questioningly.

"He'll know what I mean," Turnbull said. "Scholar Duckworth had an idea that Lobon was a data source on the problem even before we did our digging there. Frankly, that's why I thought Duckworth might be working with Scholar Rawlings."

Drawford's face cleared. "Very well. I'll put this on the company transmitters immediately, Dr. Turnbull. And-don't worry, I won't say anything about this to anyone until Scholar Rawlings or you, yourself, give me the go-ahead."

"I'd certainly appreciate that," Turnbull said, rising from his seat. "I'll leave you to your work now, Dr. Drawford. I can be reached at the Mayfair Hotel."

The two men shook hands, and Turnbull left quickly.

* * * *

Turnbull felt intuitively that he knew where Rawlings was. On the Centaurus planet-the planet of the City.

But where was Duckworth? Reason said that he, too, was at the City, but under what circumstances? Was he a prisoner? Had he been killed outright?

Surely not. That didn't jibe with his leaving Earth the way he had. If someone had wanted him killed, they'd have done it on Earth; they wouldn't have left a trail to Sirius IV that anyone who was interested could have followed.

On the other hand, how could they account for Duckworth's disappearance, since the trail was so broad? If the police—

No. He was wrong. The trouble with intuitive thinking is that it tends to leave out whole sections of what, to a logical thinker, are pieces of absolutely necessary data.

Duckworth actually had no connection with Rawlings-no logical connection. The only thing the police would have to work with was the fact that Scholar Duckworth had started on a trip to Mendez and never made it any farther than Sirius IV. There, he had vanished. Why? How could they prove anything?

On the other hand, Turnbull was safe. The letters from Duckworth, plus his visit to Drawford, plus his acknowledged destination of Sirius IV, would be enough to connect up both cases if Turnbull vanished. Rawlings should know he couldn't afford to do anything to Turnbull.

Dave Turnbull felt perfectly safe.

He was in his hotel room at the Mayfair when the announcer chimed, five hours later. He glanced up from his book to look at the screen. It showed a young man in an ordinary business jumper, looking rather boredly at the screen.

"What is it?" Turnbull asked.

"Message for Dr. Turnbull from Rawlings Scientific Corporation," said the young man, in a voice that sounded even more bored than his face looked.

Turnbull sighed and got up to open the door. When it sectioned, he had only a fraction of a second to see what the message was.

It was a stungun in the hand of the young man.

It went off, and Turnbull's mind spiraled into blankness before he could react.

* * * *

Out of a confused blur of color, a face sprang suddenly into focus, swam away again, and came back. The lips of the face moved.

"How do you feel, son?"

Turnbull looked at the face. It was that of a fairly old man who still retained the vitality of youth. It was lined, but still firm.

It took him a moment to recognize the face-then he recalled stereos he'd seen.

It was Scholar Jason Rawlings.

Turnbull tried to lift himself up and found he couldn't.

The scholar smiled. “Sorry we had to strap you down,” he said, “but I'm not nearly as strong as you are, and I didn't have any desire to be jumped before I got a chance to talk to you."

Turnbull relaxed. There was no immediate danger here.

"Know where you are?” Rawlings asked.

"Centaurus City,” Turnbull said calmly. “It's a three-day trip, so obviously you couldn't have made it in the five hours after I sent you the message. You had me kidnaped and brought here."

The old man frowned slightly. “I suppose, technically, it was kidnaping, but we had to get you out of circulation before you said anything that might ... ah ... give the whole show away."

Turnbull smiled slightly. “Aren't you afraid that the police will trace this to you?"

"Oh, I'm sure they would eventually,” said Rawlings, “but you'll be free to make any explanations long before that time."

"I see,” Turnbull said flatly. “Mind operation. Is that what you did to Scholar Duckworth?"

The expression on Scholar Rawling's face was so utterly different from what Turnbull had expected that he found himself suddenly correcting his thinking in a kaleidoscopic readjustment of his mind.

"What did you think you were on to, Dr. Turnbull?” the old man asked slowly.

Turnbull started to answer, but, at that moment the door opened.

The round, pleasant-faced gentleman who came in needed no introduction to Turnbull.

Scholar Duckworth said: “Hello, Dave. Sorry I wasn't here when you woke up, but I got—” He stopped. “What's the matter?"

"I'm just cursing myself for being a fool,” Turnbull said sheepishly. “I was using your disappearance as a datum in a problem that didn't require it."

Scholar Rawlings laughed abruptly. “Then you thought—"

Duckworth chuckled and raised a hand to interrupt Rawlings. “Just a moment, Jason; let him logic it out to us."

"First take these straps off,” said Turnbull. “I'm stiff enough as it is, after being out cold for three days."

Rawlings touched a button on the wall, and the restraining straps vanished. Turnbull sat up creakily, rubbing his arms.

"Well?” said Duckworth.

Turnbull looked up at the older man. “It was those first two letters of yours that started me off."

"I was afraid of that," Duckworth said wryly. "I ... ah ... tried to get them back before I left Earth, but, failing that, I sent you a letter to try to throw you off the track."

"Did you think it would?" Turnbull asked.

"I wasn't sure," Duckworth admitted. "I decided that if you had what it takes to see through it, you'd deserve to know the truth."

"I think I know it already."

"I dare say you do," Duckworth admitted. "But tell us first why you jumped to the wrong conclusion."

Turnbull nodded. "As I said, your letters got me worrying. I knew you must be on to something or you wouldn't have been so positive. So I started checking on all the data about the City-especially that which had come in just previous to the time you sent the letters.

"I found that several new artifacts had been discovered in Sector Nine of the City-in the part they call the Bank Buildings. That struck a chord in my memory, so I looked back over the previous records. That Sector was supposed to have been cleaned out nearly ninety years ago.

"The error I made was in thinking that you had been forcibly abducted somehow-that you had been forced to write that third letter. It certainly looked like it, since I couldn't see any reason for you to hide anything from me.

"I didn't think you'd be in on anything as underhanded as this looked, so I assumed that you were acting against your will."

Scholar Rawlings smiled. "But you thought I was capable of underhanded tactics? That's not very flattering, young man."

Turnbull grinned. "I thought you were capable of kidnaping a man. Was I wrong?"

Rawlings laughed heartily. "Touche. Go on."

* * * *

"Since artifacts had been found in a part of the City from which they had previously been removed, I thought that Jim, here, had found a ... well, a cover-up. It looked as though some of the alien machines were being moved around in order to conceal the fact that someone was keeping something hidden. Like, for instance, a new weapon, or a device that would give a man more power than he should rightfully have."

"Such as?" Duckworth asked.

"Such as invisibility, or a cheap method of transmutation, or even a new and faster space drive. I wasn't sure, but it certainly looked like it might be something of that sort."

Rawlings nodded thoughtfully. "A very good intuition, considering the fact that you had a bit of erroneous data."

"Exactly. I thought that Rawlings Scientific Corporation-or else you, personally-were concealing

something from the rest of us and from the Advisory Board. I thought that Scholar Duckworth had found out about it and that he'd been kidnaped to hush him up. It certainly looked that way."

"I must admit it did, at that," Duckworth said. "But tell me-how does it look now?"

Turnbull frowned. "The picture's all switched around now. You came here for a purpose-to check up on your own data. Tell me, is everything here on the level?"

Duckworth paused before he answered. "Everything human," he said slowly.

"That's what I thought," said Turnbull. "If the human factor is eliminated-at least partially-from the data, the intuition comes through quite clearly. We're being fed information."

Duckworth nodded silently.

Rawlings said: "That's it. Someone or something is adding new material to the City. It's like some sort of cosmic bird-feeding station that has to be refilled every so often."

Turnbull looked down at his big hands. "It never was a trade route focus," he said. "It isn't even a city, in our sense of the term, no more than a birdhouse is a nest." He looked up. "That city was built for only one purpose-to give human beings certain data. And it's evidently data that we need in a hurry, for our own good."

"How so?" Rawlings asked, a look of faint surprise on his face.

"Same analogy. Why does anyone feed birds? Two reasons-either to study and watch them, or to be kind to them. You feed birds in the winter because they might die if they didn't get enough food."

"Maybe we're being studied and watched, then," said Duckworth, probingly.

"Possibly. But we won't know for a long time-if ever."

Duckworth grinned. "Right. I've seen this City. I've looked it over carefully in the past few months. Whatever entities built it are so far ahead of us that we can't even imagine what it will take to find out anything about them. We are as incapable of understanding them as a bird is incapable of understanding us."

"Who knows about this?" Turnbull asked suddenly.

"The entire Advanced Study Board at least," said Rawlings. "We don't know how many others. But so far as we know everyone who has been able to recognize what is really going on at the City has also been able to realize that it is something that the human race en masse is not yet ready to accept."

"What about the technicians who are actually working there?" asked Turnbull.

Rawlings smiled. "The artifacts are very carefully replaced. The technicians-again, as far as we know-have accepted the evidence of their eyes."

* * * *

Turnbull looked a little dissatisfied. "Look, there are plenty of people in the galaxy who would literally hate the idea that there is anything in the universe superior to Man. Can you imagine the storm of reaction

that would hit if this got out? Whole groups would refuse to have anything to do with anything connected with the City. The Government would collapse, since the whole theory of our present government comes from City data. And the whole work of teaching intuitive reasoning would be dropped like a hot potato by just those very people who need to learn to use it.

"And it seems to me that some precautions—" He stopped, then grinned rather sheepishly. "Oh," he said, "I see."

Rawlings grinned back. "There's never any need to distort the truth. Anyone who is psychologically incapable of allowing the existence of beings more powerful than Man is also psychologically incapable of piecing together the clues which would indicate the existence of such beings."

Scholar Duckworth said: "It takes a great deal of humility-a real feeling of honest humility-to admit that one is actually inferior to someone-or something-else. Most people don't have it-they rebel because they can't admit their inferiority."

"Like the examples of the North American Amerindian tribes." Turnbull said. "They hadn't reached the state of civilization that the Aztecs or Incas had. They were incapable of allowing themselves to be beaten and enslaved-they refused to allow themselves to learn. They fought the white man to the last ditch-and look where they ended up."

"Precisely," said Duckworth. "While the Mexicans and Peruvians today are a functioning part of civilization-because they could and did learn."

"I'd just as soon the human race didn't go the way of the Amerindians," Turnbull said.

"I have a hunch it won't," Scholar Rawlings said. "The builders of the City, whoever they are, are edging us very carefully into the next level of civilization-whatever it may be. At that level, perhaps we'll be able to accept their teaching more directly."

Duckworth chuckled. "Before we can become gentlemen, we have to realize that we are not gentlemen."

Turnbull recognized the allusion. There is an old truism to the effect that a barbarian can never learn what a gentleman is because a barbarian cannot recognize that he isn't a gentleman. As soon as he recognizes that fact, he ceases to be a barbarian. He is not automatically a gentleman, but at least he has become capable of learning how to be one.

"The City itself," said Rawlings, "acts as a pretty efficient screening device for separating the humble from the merely servile. The servile man resents his position so much that he will fight anything which tries to force recognition of his position on him. The servile slave is convinced that he is equal to or superior to his masters, and that he is being held down by brute force. So he opposes them with brute force and is eventually destroyed."

Turnbull blinked. "A screening device?" Then, like a burst of sunlight, the full intuition came over him.

Duckworth's round face was positively beaming. "You're the first one ever to do it," he said. "In order to become a member of the Advanced Study Board, a scholar must solve that much of the City's secret by himself. I'm a much older man than you, and I just solved it in the past few months.

"You will be the first Ph.D. to be admitted to the Board while you're working on your scholar's degree. Congratulations."

Turnbull looked down at his big hands, a pleased look on his face. Then he looked up at Scholar Duckworth. “Got a cigarette, Jim? Thanks. You know, we've still got plenty of work ahead of us, trying to find out just what it is that the City builders want us to learn."

Duckworth smiled as he held a flame to the tip of Turnbull's cigarette.

"Who knows?” he said quietly. “Hell, maybe they want us to learn about them!"

## THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
## # 6

"On the planet Toupher VI,” said Benedict Breadfruit in his address to the members of the Institute for Twenty-First Century Studies, a group specializing in ancient history, “the natives keep time by means of cords which have knots tied along their length at precisely measured intervals. Since the material from which these cords are made is remarkably even in its rate of burning, it is possible to tell the exact hour by noticing how many knots have burned after one end has been lit."

"What is this remarkable contraption called?” asked one of the members.

"Why, naturally,” said Benedict Breadfruit in his best British accent, “it would be a knot clock."

## ... OR YOUR MONEY BACK

There are times when I don't know my own strength. Or, at least, the strength of my advice. And the case of Jason Howley was certainly an instance of one of those times.

When he came to my office with his gadget, I heard him out, trying to appear both interested and co-operative-which is good business. But I am forced to admit that neither Howley nor his gadget were very impressive. He was a lean, slope-shouldered individual, five-feet-eight or nine-which was shorter than he looked-with straight brown hair combed straight back and blue eyes which were shielded with steel-rimmed glasses. The thick, double-concave lenses indicated a degree of myopia that must have bordered on total blindness without glasses, and acute tunnel vision, even with them.

He had a crisp, incisive manner that indicated he was either a man who knew what he was doing or a man who was trying to impress me with a ready-made story. I listened to him and looked at his gadget without giving any more indication than necessary of what I really thought.

When he was through, I said: “You understand, Mr. Howley that I'm not a patent lawyer; I specialize in criminal law. Now, I can recommend—"

But he cut me off. “I understand that, counselor,” he said sharply. “Believe me, I have no illusion whatever that this thing is patentable under the present patent system. Even if it were, this gadget is designed to do something that may or may not be illegal, which would make it hazardous to attempt to patent it, I should think. You don't patent new devices for blowing safes or new drugs for doping horses, do you?"

"Probably not,” I said dryly, “although, as I say, I'm not qualified to give an opinion on patent law. You say that gadget is designed to cause minute, but significant, changes in the velocities of small, moving

objects. Just how does that make it illegal?"

He frowned a little. “Well, possibly it wouldn't, except here in Nevada. Specifically, it is designed to influence roulette and dice games."

I looked at the gadget with a little more interest this time. There was nothing new in the idea of inventing a gadget to cheat the red-and-black wheels, of course; the local cops turn up a dozen a day here in the city. Most of them either don't work at all or else they're too obvious, so the users get nabbed before they have a chance to use them.

The only ones that really work have to be installed in the tables themselves, which means they're used to milk the suckers, not rob the management. And anyone in the State of Nevada who buys a license to operate and then uses crooked wheels is (a) stupid, and (b) out of business within a week. Howley was right. Only in a place where gambling is legalized is it illegal-and unprofitable-to rig a game.

The gadget itself didn't look too complicated from the outside. It was a black plastic box about an inch and a half square and maybe three and a half long. On one end was a lensed opening, half an inch in diameter, and on two sides there were flat, silver-colored plates. On the top of it, there was a dial which was, say, an inch in diameter, and it was marked off just exactly like a roulette wheel.

"How does it work?” I asked.

He picked it up in his hand, holding it as though it were a flashlight, with the lens pointed away from him.

"You aim the lens at the wheel,” he explained, “making sure that your thumb is touching the silver plate on one side, and your fingers touching the plate on the other side. Then you set this dial for whatever number you want to come up and concentrate on it while the ball is spinning. For dice, of course, you only need to use the first six or twelve numbers on the dial, depending on the game."

* * * *

I looked at him for a long moment, trying to figure his angle. He looked back steadily, his eyes looking like small beads peering through the bottoms of a couple of shot glasses.

"You look skeptical, counselor,” he said at last.

"I am. A man who hasn't got the ability to be healthily skeptical has no right to practice law-especially criminal law. On the other hand, no lawyer has any right to judge anything one way or the other without evidence.

"But that's neither here nor there at the moment. What I'm interested in is, what do you want me to do? People rarely come to a criminal lawyer unless they're in a jam. What sort of jam are you in at the moment?"

"None,” said Howley. “But I will be very soon. I hope."

Well, I've heard odder statements than that from my clients. I let it ride for the moment and looked down at the notes I'd taken while he'd told me his story.

"You're a native of New York City?” I asked.

"That's right. That's what I said."

"And you came out here for what? To use that thing on our Nevada tables?"

"That's right, counselor."

"Can't you find any games to cheat on back home?"

"Oh, certainly. Plenty of them. But they aren't legal. I wouldn't care to get mixed up in anything illegal. Besides, it wouldn't suit my purpose."

That stopped me for a moment. "You don't consider cheating illegal? It certainly is in Nevada. In New York, if you were caught at it, you'd have the big gambling interests on your neck; here, you'll have both them and the police after you. And the district attorney's office."

He smiled. "Yes, I know. That's what I'm expecting. That's why I need a good lawyer to defend me. I understand you're the top man in this city."

"Mr. Howley," I said carefully, "as a member of the Bar Association and a practicing attorney in the State of Nevada, I am an Officer of the Court. If you had been caught cheating and had come to me, I'd be able to help you. But I can't enter into a conspiracy with you to defraud legitimate businessmen, which is exactly what this would be."

He blinked at me through those shot-glass spectacles. "Counselor, would you refuse to defend a man if you thought he was guilty?"

I shook my head. "No. Legally, a man is not guilty until proven so by a court of law. He has a right to trial by jury. For me to refuse to give a man the defense he is legally entitled to, just because I happened to think he was guilty, would be trial by attorney. I'll do the best I can for any client; I'll work for his interests, no matter what my private opinion may be."

He looked impressed, so I guess there must have been a note of conviction in my voice. There should have been, because it was exactly what I've always believed and practiced.

"That's good, counselor," said Howley. "If I can convince you that I have no criminal intent, that I have no intention of defrauding anyone or conspiring with you to do anything illegal, will you help me?"

I didn't have to think that one over. I simply said, "Yes." After all, it was still up to me to decide whether he convinced me or not. If he didn't, I could still refuse the case on those grounds.

"That's fair enough, counselor," he said. Then he started talking.

* * * *

Instead of telling you what Jason Howley said he was going to do, I'll tell you what he did do. They are substantially the same, anyway, and the old bromide about actions speaking louder than words certainly applied in this case.

Mind you, I didn't see or hear any of this, but there were plenty of witnesses to testify as to what went on. Their statements are a matter of court record, and Jason Howley's story is substantiated in every respect.

He left my office smiling. He'd convinced me that the case was not only going to be worthwhile, but fun.

I took it, plus a fat retainer.

Howley went up to his hotel room, changed into his expensive evening clothes, and headed out to do the town. I'd suggested several places, but he wanted the biggest and best-the Golden Casino, a big, plush, expensive place that was just inside the city limits. In his pockets, he was carrying less than two hundred dollars in cash.

Now, nobody with that kind of chicken feed can expect to last long at the Golden Casino unless they stick to the two-bit one-armed bandits. But putting money on a roulette table is in a higher bracket by far than feeding a slot machine, even if you get a steady run of lemons.

Howley didn't waste any time. He headed for the roulette table right away. He watched the play for about three spins of the wheel, then he took out his gadget-in plain sight of anyone who cared to watch-and set the dial for thirteen. Then he held it in his hand with thumb and finger touching the plates and put his hand in his jacket pocket, with the lens aimed at the wheel. He stepped up to the table, bought a hundred dollars worth of chips, and put fifty on Number Thirteen.

"No more bets," said the croupier. He spun the wheel and dropped the ball.

"Thirteen, Black, Odd, and Low," he chanted after a minute. With a practiced hand, he raked in the losers and pushed out Howley's winnings. There was sixteen hundred dollars sitting on thirteen now. Howley didn't touch it.

The wheel went around and the little ball clattered around the rim and finally fell into a slot.

"Thirteen, Black, Odd, and Low," said the croupier. This time, he didn't look as nonchalant. He peered curiously at Howley as he pushed out the chips to make a grand total of fifty-one thousand two hundred dollars. The same number doesn't come up twice in succession very often, and it is very rare indeed that the same person is covering it both times with a riding bet.

"Two thousand limit, sir," the croupier said, when it looked as though Howley was going to let the fifty-one grand just sit there.

Howley nodded apologetically and pulled off everything but two thousand dollars worth of chips.

The third time around, the croupier had his eyes directly on Howley as he repeated the chant: "Thirteen, Black, Odd, and Low." Everybody else at the table was watching Howley, too. The odds against Howley-or anyone else, for that matter-hitting the same number three times in a row are just under forty thousand to one.

Howley didn't want to overdo it. He left two thousand on thirteen, raked in the rest, and twisted the dial on his gadget over a notch.

Everyone at the table gasped as the little ball dropped.

"That was a near miss," whispered a woman standing nearby.

The croupier said: "Fourteen, Red, Even, and Low." And he raked in Howley's two thousand dollars with a satisfied smile. He had seen runs of luck before.

Howley deliberately lost two more spins the same way. Nobody who was actually cheating would call

too much attention to himself, and Howley wanted it to look as though he were trying to cover up the fact that he had a sure thing.

He took the gadget out of his pocket and deliberately set it to the green square marked 00. Then he put it back in his pocket and put two thousand dollars on the Double Zero.

* * * *

There was more than suspicion in the croupier's eyes when he raked in all the bets on the table except Howley's. It definitely didn't look good to him. A man who had started out with a fifty-dollar bet had managed to run it up to one hundred seventy-four thousand two hundred dollars in six plays.

Howley looked as innocent as possible under the circumstances, and carefully dropped the dial on his gadget back a few notches. Then he bet another two thousand on High, an even money bet.

Naturally, he won.

He twisted the dial back a few more notches and won again on High.

Then he left it where it was and won by betting on Red.

By this time, of course, things were happening. The croupier had long since pressed the alarm button, and five men had carefully surrounded Howley. They looked like customers, but they were harder-looking than the average, and they were watching Howley, not the wheel. Farther back from the crowd, three of the special deputies from the sheriff's office were trying to look inconspicuous in their gray uniforms and white Stetsons and pearl-handled revolvers in black holsters. You can imagine how inconspicuous they looked.

Howley decided to do it up brown. He reset his gadget as surreptitiously as possible under the circumstances, and put his money on thirteen again.

"Thirteen, Black, Odd, and Low," said the croupier in a hollow voice.

The five men in evening dress and the three deputies moved in closer.

Howley nonchalantly scraped in his winnings, leaving the two thousand on the thirteen spot.

There was a combination of hostility and admiration in every eye around the table when the croupier said, "Thirteen, Black, Odd, and Low" for the fifth time in the space of minutes. And everyone of those eyes was turned on Jason Howley.

The croupier smiled his professional smile. "I'm sorry, ladies and gentlemen; we'll have to discontinue play for a while. The gentleman has broken the bank at this table." He turned the smile on Howley. "Congratulations, sir."

Howley smiled back and began stacking up over three hundred thousand dollars worth of plastic disks. It made quite a pile.

One of the deputies stepped up politely. "I'm an officer, sir," he said. "May I help you carry that to the cashier's office?"

Howley looked at the gold star and nodded. "Certainly. Thanks."

The other two deputies stepped up, too, and the three of them walked Howley toward the cashier's office. Behind them came the five men in dinner jackets.

"You'll have to step into the office to cash that much, sir," said one of the deputies as he opened the door. Howley walked in as though he hadn't a care in the world. He put his chips on the desk, and the deputies followed suit, while one of the dinner-jacketed men closed the door.

Then one of the deputies said: "I believe this gentleman is carrying a gun."

He had his own revolver out and had it pointed at Howley's middle. "Carrying a concealed weapon is illegal in this city," he went on. "I'm afraid we'll have to search you."

Howley didn't object. He put his hands up high and stood there while his pockets were frisked.

"Well, well," said the deputy coolly. "What on Earth is this?"

It was Howley's gadget, and the dial still pointed to Thirteen-Black, Odd, and Low.

* * * *

The next morning, I went down to the jail in response to a phone call from Howley. The special deputies had turned him over to the city police and he was being held "under suspicion of fraud." I knew we could beat that down to an "attempt to defraud," but the object was to get Howley off scott-free. After Howley told me the whole story, I got busy pushing the case through. As long as he was simply being held on suspicion, I couldn't get him out on bail, so I wanted to force the district attorney or the police to prefer charges.

Meanwhile, I made sure that Howley's gadget had been impounded as evidence. I didn't want anyone fiddling with it before the case went to court-except, of course, the D. A. and his men. There wasn't much I could do to keep it out of their hands.

After throwing as much weight around as I could, including filing a petition for a writ of habeas corpus with Judge Grannis, I went over to Howley's hotel with a signed power of attorney that Howley had given me, and I got a small envelope out of the hotel safe. It contained a baggage check.

I went over to the bus depot, turned over the check to the baggage department, and went back to my office with a small suitcase. I locked myself in and opened the case. Sure enough, it contained three dozen of the little gadgets.

Then I sat down to wait. By noon, Judge Grannis had issued the writ of habeas corpus, and, rather than release Jason Howley, the police had booked him, and District Attorney Thursby was getting the case ready for the grand jury. There was over a quarter of a million dollars at stake, and the men behind the Golden Casino were bringing pressure to bear. If Howley wasn't convicted, they'd have to give him his money-and that was the last thing they wanted to do. A quarter of a million bucks isn't small potatoes, even to a gambling syndicate.

It wasn't until early on the morning of the third day after Howley's arrest that I got a tip-off from one of my part-time spies. I scooped up the phone when it rang and identified myself.

"Counselor? Look, this is Benny." I recognized the voice and name. Benny was one of the cabbies that I'd done favors for in the past.

"What's the trouble, Benny?"

"Oh, no trouble. I just got a little tip you might be interested in."

"Fire away."

"Well, the D.A. and some of his boys went into the Golden Casino about ten minutes ago, and now they're closin' up the place. Just for a little while, I understand. Hour, maybe. They're chasin' everyone out of the roulette room."

"Thanks, Benny," I said, "thanks a lot."

"Well, I knew you was working on that Howley case, and I thought this might be important, so I—"

"Sure, Benny. Come by my office this afternoon. And thanks again."

I hung up and started moving.

Within ten minutes, I was pulling up and parking across the street from the Golden Casino. I locked the car and dodged traffic to get across the street, as though I'd never heard of laws against jaywalking.

There were still plenty of people in the Casino. The bar was full, and the dice and card games were going full blast. The slot machines were jingling out their infernal din while fools fed coins into their insatiable innards.

But the roulette room was closed, and a couple of be-Stetsoned deputies were standing guard over the entrance. I headed straight for them.

Both of them stood pat, blocking my way, so I stopped a few feet in front of them.

"Hello, counselor," said one. "Sorry, the roulette room's closed."

I knew the man slightly. "Let me in, Jim," I said. "I want to see Thursby."

The men exchanged glances. Obviously, the D.A. had given them orders.

"Can't do it, counselor," said Jim. "We're not to let anyone in."

"Tell Thursby I'm out here and that I want to see him."

He shrugged, opened the door, stuck his head inside, and called to District Attorney Thursby to tell him that I was outside. I could hear Thursby's muffled "Damn!" from within. But when he showed up at the door, his face was all smiles.

"What's the trouble?" he asked pleasantly.

I smiled back, giving him my best. "No trouble at all, Thursby. I just wanted to watch the experiment."

"Experiment?" He looked honestly surprised, which was a fine piece of acting. "We're just checking to see if the table's wired, that's all. If it is, your client may be in the clear; maybe we can hang it on the

croupier."

"And get a conspiracy charge on my client, too, eh? Well, if you don't mind, I'd like to watch that table check myself. You know how it is."

Thursby hesitated, then he scowled. “Oh, all right. Come on in. But stay out of the way."

I grinned. “Sure. All I want to do is protect my client's interests."

Thursby just grunted and opened the door wider to let me in. He was a shrewd lawyer, a good D.A., and basically honest, even if he did have a tendency to bend under pressure from higher up.

* * * *

They were checking the table, all right. They had three specialists going over it with everything from fine tooth combs to Geiger counters. They found nothing. No magnets, no wires, no mechanical gimmicks. Nothing.

It took them an hour to take that table apart, check it, and put it back together again. When it was all over, Thursby glanced at me, then said: “O.K., boys; that does it. Let's go."

The men looked at him oddly, and I knew why.

"Aren't you going to test my client's gadget?” I asked innocently.

Thursby looked angrily baffled for a moment, then he clamped his lips grimly. “As long as we're here, I guess we might as well."

I knew perfectly well it was what he had intended to do all along.

"One of you guys spin that wheel,” he said to the technicians. One of them gave the wheel a spin and dropped the ball. It clattered on its merry way and dropped into a slot. Forty-two.

Thursby took the gadget out of his pocket. It was still set at Thirteen.

The men who had surrounded Howley on the night of his arrest had been keeping their eyes open, and they had seen how Howley had handled the thing. Well-almost how. Thursby had the lens opening pointed at the wheel, but his thumb and fingers weren't touching the silver plates properly.

"Spin it again,” he said.

Everyone's eyes were on the ball as it whirled, so I had time to get my own copy of Howley's gadget out and set it at Thirteen. I hoped the thing would work for me. I concentrated on Thirteen, making sure my thumb and fingers were placed right.

Evidently they were. The ball fell into Thirteen, Black, Odd, and Low.

A huge grin spread over Thursby's face, but he was man enough not to turn and grin at me. “Try it again,” he said.

Thirteen, Black, Odd, and Low.

"I wonder how the thing works?" said Thursby, looking at the gadget in a sort of pleased awe.

"You'd better be able to prove that it does work, Thursby," I said, trying to put irritation into my voice.

This time, he did grin at me. "Oh, I think we can prove that, all right." He turned back to the technician. "Spin it once more, Sam, and show the defense counsel, here, how it works."

The technician did as he was told. "Thirteen, Black, Odd, and Low," he chanted, grinning.

"Let's try another number," Thursby said. He turned the dial to One. And this time, when he pointed it, his fingers were touching the plates in the right places.

"Just a minute," I said. "Let me spin that thing."

"Be my guest, counselor," said Thursby.

I spun the wheel and scooted the ball along the rim. It dropped into a slot. One, Red, Odd, and Low. I looked as disappointed and apprehensive as I could.

"Co-incidence," I said. "Nothing more. You haven't proved anything."

Thursby's grin widened. "Of course I haven't," he said with a soothing, patronizing tone. "But I don't have to prove anything until I get to court."

Then he looked at the technicians and jerked his head toward the door. "Let's go, boys. Maybe the counselor wants to look over the table for himself. Maybe he thinks we've got it rigged."

There was a chorus of guffaws as they walked out. I just stood there, scowling, trying to keep from laughing even harder than they were.

* * * *

Jason Howley sat next to me at the defense table, just inside the low partition that divided the court from the public. There weren't many people in the auditorium itself; listening to some poor dope get himself sentenced for cheating at gambling is considered pretty dull entertainment in the State of Nevada.

Thursby had managed to push the indictment through the grand jury in a hurry, but, as he sat across the room from me at the prosecution table, I thought I could detect a false note in the assumed look of confidence that he was trying to wear.

Howley tapped me on the shoulder. I turned around, and he whispered: "How much longer?"

I tapped my wrist watch. "Couple minutes. Judge Lapworth is one of those precisionists. Never a moment late or early. Getting jumpy?"

He shook his head gently and smiled. "No. You've handled this even better than I'd have imagined. You thought of things I didn't even know existed. I'm no lawyer; I can see that."

I returned the smile. "And I don't invent gimmicks, either. So what?"

His eyes looked at me from behind the distorting negative lenses. "I've been wondering, counselor-why are you so interested in this? I mean, I offered you a pretty good fee, and all that, but it seems to me

you're taking an unusual interest in the case."

I grinned at him. “Mr. Howley, my profession is Law-with a capital L. The study of the Law isn't like the study of physics or whatever; these are manmade laws-commands, not descriptions. They don't necessarily have anything to do with facts at all. Take the word ‘insanity,’ for instance; the word isn't even used by head-shrinkers any more because it's a legal definition that has nothing whatever to do with the condition of the human mind.

"Now, any such set of laws as that can't possibly be self-consistent and still have some use on an action level. A lawyer's job is to find the little inconsistencies in the structure, the places where the pieces have been jammed together in an effort to make them look like a structured whole. To find, in other words, the loopholes and use them.

"And when I find a loophole, I like to wring everything I can out of it. I'm enjoying this."

Howley nodded. “I see. But what if something—"

I held up my hand to silence him, because the door to the judges’ chambers opened at that moment, and Judge Lapworth came in as the bailiff announced him. We all stood up while the bailiff intoned his “Oyez, oyez."

Thursby made a short preliminary speech to the jury, and I requested and was granted permission to hold my own opening statement until the defense was ready to present its case.

Thursby was looking worried, although it took a trained eye to see it. I was pretty sure I knew why. He had been pushed too hard and had gone too fast. He'd managed to slide through the grand jury too easily, and I had managed to get the trial date set for a week later. Thursby's case was far from being as tight as he wanted it.

* * * *

I just sat still while the prosecution brought forth its witnesses and evidence. The croupier, the deputies, several employees of the Golden Casino, and a couple of patrons all told their stories. I waived cross-examination in every case, which made Thursby even edgier than he had been.

When he called in the head of the technicians who had inspected the table at the casino, I made no objection to his testimony, but I made my first cross-examination.

"Mr. Thompson, you have stated your qualifications as an expert on the various devices which have been used to illegally influence the operation of gambling devices in this state."

Thursby said: “Oh, if the Court please, I should like to remind counsel for the defense that he has already accepted the qualifications of the witness."

"I am not attempting to impugn the qualifications of the witness,” I snapped.

Judge Lapworth frowned at Thursby. “Are you making an objection, Mr. District Attorney?"

Thursby pursed his lips, said, “No, Your Honor,” and sat down.

"Proceed with the cross-examination,” said the judge.

"Mr. Thompson," I said, "you have testified that you examined the table at the Golden Casino for such devices and found none. Is that right?"

"That's right," he said positively.

"Have you seen the device labeled People's Exhibit A, which was found by the officers on the person of the defendant?"

"Well ... yes. I have."

"Have you examined this device?"

Thursby was on his feet. "Objection, Your Honor! This material was not brought out in direct examination!"

"Sustained," said Judge Lapworth.

"Very well, Your Honor," I said. Then I turned back to Thompson. "As an expert in this field, Mr. Thompson, you have examined many different devices for cheating gambling equipment, haven't you?"

"Yes, I have."

"How many, would you say?"

"Oh ... several hundred."

"Several hundred different types?"

"No. Several hundred individual devices. Most of them are just variations of two or three basic types."

"And you are familiar with the function of these basic types and their variations?"

"I am."

"You know exactly how all of them work, then?"

He saw where I was heading. "Most of them," he hedged.

Thursby saw where I was heading, too, and was sweating. I'd managed to get around his objection.

"Have you ever examined any which you could not understand?"

"I ... I don't quite know what you mean."

"Have you ever," I said firmly, "come across a device used in cheating which you could not comprehend or explain the operation of?"

Thursby stood up. "Same objection as before, Your Honor."

"Your Honor," I said, "I am merely trying to find the limitations of the witness' knowledge; I am not trying to refute his acknowledged ability."

"Overruled," said Judge Lapworth. "The witness will answer the question."

I repeated the question.

"Yes," Thompson said in a low voice.

"More than once?"

"Only once."

"Only once. You did find one device which didn't operate in any fashion you can explain. Is that right?"

"That's right."

"Can you tell me what this device was?"

Thompson took a deep breath. "It was People's Exhibit A-the device taken from the defendant at the time of his arrest."

There was a buzz in the courtroom.

"No more questions," I said, turning away. Then, before Thompson could leave the stand, I turned back to him. "Oh, just one moment, Mr. Thompson. Did you examine this device carefully? Did you take it apart?"

"I opened it and looked at it."

"You just looked at it? You didn't subject it to any tests?"

Thompson took a deep breath. "No."

"Why not?"

"There wasn't anything inside it to test."

* * * *

This time, there was more than just a buzz around the courtroom. Judge Lapworth rapped for order.

When the room was quiet, I said: "The box was empty, then?"

"Well, no. Not exactly empty. It had some stuff in it."

I turned to the judge. "If the Court please, I would like to have the so-called device, Exhibit A, opened so that the members of the jury may see for themselves what it contains."

Judge Lapworth said: "The Court would like very much to see the internal workings of this device, too. Bailiff, if you will, please."

The bailiff handed him the gadget from the exhibit table.

"How does it open?" asked the judge. He turned to Thompson. "Will the witness please open the box?"

Reluctantly, Thompson thumbed the catch and slid off the top.

The judge took it from him, looked inside, and stared for a long moment.

I had already seen the insides. It was painted white, and there were inked lines running all over the inside, and various pictures-a ball, a pair of dice, a roulette wheel-and some other symbols that I didn't pretend to understand.

Otherwise, the box was empty.

After a moment, Judge Lapworth looked up from the box and stared at Thursby. Then he looked at Thompson. "Just what tests did you perform on this ... this thing, Mr. Thompson?"

"Well, Your Honor," Thompson said, visibly nervous, "I checked it for all kinds of radiation and magnetism. There isn't anything like that coming from it. But," he added lamely, "there wasn't much else to test. Not without damaging the box."

"I see." His honor glared at Thursby, but didn't say anything to him. He simply ordered the box to be shown to the jury.

Thursby was grimly holding his ground, waiting.

"Have you any more questions, counselor?" the judge asked.

"No, Your Honor, I have not."

"Witness may step down," said his honor to Thompson.

* * * *

Thursby stood up. "If the Court please, I would like to stage a small demonstration for the members of the jury."

The Court gave permission, and a roulette wheel was hauled in on a small table.

I watched with interest and without objection while Thursby demonstrated the use of the gadget and then asked each of the jurors in turn to try it. It was a long way from being a successful demonstration. Some of the jurors didn't hold the thing right, and some of those that did just didn't have the mental ability required to use it. But that didn't bother Thursby.

"Your Honor, and Gentlemen of the Jury," he said, "you are all aware that a device constructed for the purpose of cheating at any gambling game is not necessarily one hundred per cent infallible. It doesn't have to be. All it has to do is turn the odds in favor of the user.

"You are all familiar with loaded dice, I'm sure. And you know that loading dice for one set of numbers merely increases the probability that those numbers will come up; it does not guarantee that they will come up every time.

"It is the same with marked cards. Marking the backs of a deck of cards doesn't mean that you will invariably get a better hand than your opponent; it doesn't even mean that you will win every hand.

"The device taken from the defendant at the Golden Casino does not, as you have seen, work every time. But, as you have also seen, it certainly does shift the odds by a considerable percentage. And that, I submit, is illegal under the laws of this state."

He went on, building on that theme for a while, then he turned the trial over to the defense.

"Call Dr. Pettigrew to the stand," I said.

I heard Thursby's gasp, but I ignored it.

A chunky, balding man with a moon face and an irritated expression came up to be sworn in. He was irritated with me for having subpoenaed him, and he showed it. I hoped he wouldn't turn out to be hostile.

"You are Dr. Herbert Pettigrew?" I asked.

"That is correct."

"State your residence, please."

"3109 La Jolla Boulevard, Los Angeles, California."

"You are called 'Doctor' Pettigrew, I believe. Would you tell the Court what right you have to that title?"

He looked a little miffed, but he said: "It is a scholarly title. A Doctorate of Philosophy in physics from Massachusetts Institute of Technology."

"I see. Would you mind telling the Court what other academic degrees you have?"

He reeled off a list of them, all impressive.

"Thank you, doctor," I said. "Now, what is your present occupation?"

"I am a Professor of Physics, at the University of California in Los Angeles."

I went on questioning him to establish his ability in his field, and by the time I was finished, the jury was pretty well impressed with his status in the scientific brotherhood. And not once did Thursby object.

Then I said, "Dr. Pettigrew, I believe you came to this city on a professional matter?"

"Yes, I did." He didn't hesitate to answer, so I figured I hadn't got his goat too much.

"And what was the nature of that matter?"

"I was asked to come here by Mr. Harold Thursby, the District Attorney, to perform some scientific tests on the ... er ... device ... the device known as People's Exhibit A."

"Did you perform these tests?"

"I did."

"At the request of District Attorney Thursby, is that right?"

"That is correct."

"May I ask why Mr. Thursby did not call you as a witness for the prosecution?"

Thursby, as I had expected, was on his feet. “Objection! The question calls for a conclusion of the witness!"

"Sustained,” said Judge Lapworth.

"Dr. Pettigrew,” I said, “what were your findings in reference to Exhibit A?"

He shrugged. “The thing is a plastic box with a dial set in one side, a plastic lens in one end, and a couple of strips of silver along two other sides. Inside, there are a lot of markings in black ink on white paint.” He gestured toward the exhibit table. “Just what you've seen; that's all there is to it."

"What sort of tests did you perform to determine this, Dr. Pettigrew?” I asked.

He took a long time answering that one. He had X-rayed the thing thoroughly, tested it with apparatus I'd never heard of, taken scrapings from all over it for microchemical analysis, and even tried it himself on a roulette wheel. He hadn't been able to make it work.

"And what is your conclusion from these findings?” I asked.

Again he shrugged. “The thing is just a box, that's all. It has no special properties."

"Would you say that it could be responsible for the phenomena we have just seen? By that, I mean the peculiar action of the roulette wheel, demonstrated here by the prosecution."

"Definitely not,” he stated flatly. “The box could not possibly have any effect on either the wheel or the ball."

"I see. Thank you, doctor; that's all. Cross-examine."

Thursby walked over to the witness stand with a belligerent scowl on his face. “Dr. Pettigrew, you say that the box couldn't possibly have had any effect on the wheel. And yet, we have demonstrated that there is an effect. Don't you believe the testimony of your own senses?"

"Certainly I do!” snapped Pettigrew.

"Then how do you account for the behavior of the roulette wheel as you have just seen it demonstrated in this court?"

I suppressed a grin. Thursby was so mad that he was having trouble expressing himself clearly.

"In several ways!” Pettigrew said sharply. “In the first place, that wheel could be rigged."

Thursby purpled. “Now, just a minute! I—"

I started to object, but Judge Lapworth beat me to it.

"Are you objecting to the answer, Mr. District Attorney?"

"The witness is insinuating that I falsified evidence!"

"I am not!" said Pettigrew, visibly angry. "You asked me how I could account for its behavior, and I told you one way! There are others!"

"The wheel will be examined," said Judge Lapworth darkly. "Tell us the other ways, Dr. Pettigrew."

"Pure chance," said Pettigrew. "Pure chance, Your Honor. I'm sure that everyone in this courtroom has seen runs of luck on a roulette wheel. According to the laws of probability, such runs must inevitably happen. Frankly, I believe that just such a run has occurred here. I do not think for a minute that Mr. Thursby or anyone else rigged that wheel."

"I see; thank you, Dr. Pettigrew," said the judge. "Any further questions, Mr. District Attorney?"

"No further questions," Thursby said, trying to hide his anger.

* * * *

"Call your next witness," said the judge, looking at me.

"I call Mr. Jason Howley to the stand."

Howley sat down and was sworn in. I went through the preliminaries, then asked: "Mr. Howley, you have seen People's Exhibit A?"

"I have."

"To whom does it belong?"

"It is mine. It was taken from me by—"

"Just answer the question, please," I admonished him. He knew his script, but he was jumping the gun. "The device is yours, then?"

"That's right."

"Under what circumstances did this device come into the hands of the police?"

He told what had happened on the night of the big take at the Golden Casino.

"Would you explain to us just what this device is?" I asked when he had finished.

"Certainly," he said. "It's a good luck charm."

I could hear the muffled reaction in the courtroom.

"A good luck charm. I see. Then it has no effect on the wheel at all?"

"Oh, I wouldn't say that," Howley said disarmingly. He smiled and looked at the jury. "It certainly has

some effect. It's the only good luck charm I ever had that worked."

The jury was grinning right back at him. They were all gamblers at heart, and I never knew a gambler yet who didn't have some sort of good luck charm or superstition when it came to gambling. We had them all in the palms of our hands.

"What I mean is, does it have any physical effect on the wheel?"

Howley looked puzzled. "Well, I don't know about that. That's not my field. You better ask Dr. Pettigrew."

There was a smothered laugh somewhere in the courtroom.

"Just how do you operate this good luck charm, Mr. Howley?" I asked.

"Why, you just hold it so that your thumb touches one strip of silver and your fingers touch the other, then you set the dial to whatever number you want to come up and wish."

"Wish? Just wish, Mr. Howley?"

"Just wish. That's all. What else can you do with a good luck charm?"

This time, the judge had to pound for order to stop the laughing.

I turned Howley over to Thursby.

The D.A. hammered at him for half an hour trying to get something out of Howley, but he didn't get anywhere useful. Howley admitted that he'd come to Nevada to play the wheels; what was wrong with that? He admitted that he'd come just to try out his good luck charm-and what was wrong with that? He even admitted that it worked for him every time—

And what was wrong, pray, with that?

Thursby knew he was licked. He'd known it for a long time. His summation to the jury showed it. The expressions on the faces of the jury as they listened showed it.

They brought in a verdict of Not Guilty.

* * * *

When I got back to my office, I picked up the phone and called the Golden Casino. I asked for George Brockey, the manager. When I got him on the phone and identified myself, he said, "Oh. It's you." His voice didn't sound friendly.

"It's me," I said.

"I suppose you're going to slap a suit for false arrest on the Casino now, eh, counselor?"

"Not a bit of it, George," I said. "The thought occurred to me, but I think we can come to terms."

"Yeah?"

"Nothing to it, George. You give us the three hundred grand and we don't do a thing."

"Yeah?" He didn't get it. He had to fork over the money anyway, according to the court order, so what was the deal?

"If you want to go a little further, I'll tell you what we'll do. We'll give you one of our little good luck charms, if you'll promise to call your boys off Howley."

"Nobody's on Howley," he said. "You ought to know better than that. In this state, if we get whipped in court, we play it square. Did you think we were going to get rough?"

"No. But you kind of figured on lifting that gadget as soon as he gets it back from the D.A., didn't you? I saw your boys waiting at his hotel. I'm just telling you that you don't have to do that. We'll give you the gadget. There are plenty more where that came from."

"I see," Brockey said after a long pause. "O.K., counselor. It's a deal."

"Fine. We'll pick up the money later this evening, if that's O.K."

"Sure, counselor. Anytime. Anytime at all." He hung up.

I grinned at Howley, who was sitting across the desk from me. "Well, that winds it up."

"I don't get it," Howley said. "Why'd you call up Brockey? What was the purpose of that 'deal'?"

"No deal," I told him. "I was just warning him that killing you and taking the gadget wouldn't do any good, that we've covered you. He won't bother having anything done to you if he knows that the secret of the gadget is out already."

Howley's eyes widened behind those spectacles of his. "You mean they'd kill me? I thought Nevada gamblers were honest."

"Oh, they are, they are. But this is a threat to their whole industry. It's more than that, it may destroy them. Some of them might kill to keep that from happening. But you don't have to worry now."

"Thanks. Tell me, do you think we've succeeded?"

"In what you set out to do? Certainly. When we mail out those gadgets to people all over the state, the place will be in an uproar. With all the publicity this case is getting, it'll have to work. You now have a court decision on your side, a decision which says that a psionic device can be legally used to influence gambling games.

"Why, man, they'll have to start investigating! You'll have every politico in the State of Nevada insisting that scientists work on that thing. To say nothing of what the syndicate will do."

"All I wanted to do," said Howley, "was force people to take notice of psionics. I guess I've done that."

"You certainly have, brother. I wonder what it will come to?"

"I wonder, myself, sometimes," Howley said.

That was three and a half years ago. Neither Howley nor I are wondering now. According to the front page of today's Times, the first spaceship, with a crew of eighty aboard, reached Mars this morning. And, on page two, there's a small article headlined: ROCKET OBSOLETE, SAY SCIENTISTS.

It sure is.

## THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
## #7

The Black Beast of Betelgeuse, although horrible in aspect, was really a very pleasant fellow when you got to know him, as Benedict Breadfruit did. But because of his alienness he was forbidden to go to Earth by a Galactic Space Lines regulation forbidding tickets to be sold to “horrible monsters,"

"It's an unfair law,” said the Black Beast. “You're a man of some importance, Benedict; couldn't you do something about it?"

Breadfruit nodded. “I believe I can get the wretch anulled, Bete Noir."

## SUITE MENTALE

### OVERTURE-ADAGIO MISTERIOSO

The neurosurgeon peeled the thin surgical gloves from his hands as the nurse blotted the perspiration from his forehead for the last time after the long, grueling hours.

"They're waiting outside for you, Doctor,” she said quietly.

The neurosurgeon nodded wordlessly. Behind him, three assistants were still finishing up the operation, attending to the little finishing touches that did not require the brilliant hand of the specialist. Such things as suturing up a scalp, and applying bandages.

The nurse took the sterile mask-no longer sterile now-while the doctor washed and dried his hands.

"Where are they?” he asked finally. “Out in the hall, I suppose?"

She nodded. “You'll probably have to push them out of the way to get out of Surgery."

* * * *

Her prediction was almost perfect. The group of men in conservative business suits, wearing conservative ties, and holding conservative, soft, felt hats in their hands were standing just outside the door. Dr. Mallon glanced at the five of them, letting his eyes stop on the face of the tallest. “He may live,” the doctor said briefly.

"You don't sound very optimistic, Dr. Mallon,” said the FBI man.

Mallon shook his head. “Frankly, I'm not. He was shot laterally, just above the right temple, with what looks to me like a .357 magnum pistol slug. It's in there—” He gestured back toward the room he had just left. “-you can have it, if you want. It passed completely through the brain, lodging on the other side of the head, just inside the skull. What kept him alive, I'll never know, but I can guarantee that he might

as well be dead; it was a rather nasty way to lobotomize a man, but it was effective, I can assure you."

The Federal agent frowned puzzledly. “Lobotomized? Like those operations they do on psychotics?"

"Similar,” said Mallon. “But no psychotic was ever butchered up like this; and what I had to do to him to save his life didn't help anything."

The men looked at each other, then the big one said: “I'm sure you did the best you could, Dr. Mallon."

The neurosurgeon rubbed the back of his hand across his forehead and looked steadily into the eyes of the big man.

"You wanted him alive,” he said slowly, “and I have a duty to save life. But frankly, I think we'll all eventually wish we had the common human decency to let Paul Wendell die. Excuse me, gentlemen; I don't feel well.” He turned abruptly and strode off down the hall.

* * * *

One of the men in the conservative suits said: “Louis Pasteur lived through most of his life with only half a brain and he never even knew it, Frank; maybe—"

"Yeah. Maybe,” said the big man. “But I don't know whether to hope he does or hope he doesn't.” He used his right thumbnail to pick a bit of microscopic dust from beneath his left index finger, studying the operation without actually seeing it. “Meanwhile, we've got to decide what to do about the rest of those screwballs. Wendell was the only sane one, and therefore the most dangerous-but the rest of them aren't what you'd call safe, either."

The others nodded in a chorus of silent agreement.

* * * *

## NOCTURNE-TEMPO DI VALSE

"Now what the hell's the matter with me?” thought Paul Wendell. He could feel nothing. Absolutely nothing: No taste, no sight, no hearing, no anything. “Am I breathing?” He couldn't feel any breathing. Nor, for that matter, could he feel heat, nor cold, nor pain.

"Am I dead? No. At least, I don't feel dead. Who am I? What am I?” No answer. Cogito, ergo sum. What did that mean? There was something quite definitely wrong, but he couldn't quite tell what it was. Ideas seemed to come from nowhere; fragments of concepts that seemed to have no referents. What did that mean? What is a referent? A concept? He felt he knew intuitively what they meant, but what use they were he didn't know.

There was something wrong, and he had to find out what it was. And he had to find out through the only method of investigation left open to him.

So he thought about it.

* * * *

## SONATA-ALLEGRO CON BRIO

The President of the United States finished reading the sheaf of papers before him, laid them neatly to one side, and looked up at the big man seated across the desk from him.

"Is this everything, Frank?" he asked.

"That's everything, Mr. President; everything we know. We've got eight men locked up in St. Elizabeth's, all of them absolutely psychotic, and one human vegetable named Paul Wendell. We can't get anything out of them."

The President leaned back in his chair. "I really can't quite understand it. Extra-sensory perception-why should it drive men insane? Wendell's papers don't say enough. He claims it can be mathematically worked out-that he did work it out-but we don't have any proof of that."

The man named Frank scowled. "Wasn't that demonstration of his proof enough?"

A small, graying, intelligent-faced man who had been sitting silently, listening to the conversation, spoke at last. "Mr. President, I'm afraid I still don't completely understand the problem. If we could go over it, and get it straightened out—" He left the sentence hanging expectantly.

"Certainly. This Paul Wendell is a-well, he called himself a psionic mathematician. Actually, he had quite a respectable reputation in the mathematical field. He did very important work in cybernetic theory, but he dropped it several years ago-said that the human mind couldn't be worked at from a mechanistic angle. He studied various branches of psychology, and eventually dropped them all. He built several of those queer psionic machines-gold detectors, and something he called a hexer. He's done a lot of different things, evidently."

"Sounds like he was unable to make up his mind," said the small man.

* * * *

The President shook his head firmly. "Not at all. He did new, creative work in every one of the fields he touched. He was considered something of a mystic, but not a crackpot, or a screwball.

"But, anyhow, the point is that he evidently found what he'd been looking for for years. He asked for an appointment with me; I okayed the request because of his reputation. He would only tell me that he'd stumbled across something that was vital to national defense and the future of mankind; but I felt that, in view of the work he had done, he was entitled to a hearing."

"And he proved to you, beyond any doubt, that he had this power?" the small man asked.

Frank shifted his big body uneasily in his chair. "He certainly did, Mr. Secretary."

The President nodded. "I know it might not sound too impressive when heard second-hand, but Paul Wendell could tell me more of what was going on in the world than our Central Intelligence agents have been able to dig up in twenty years. And he claimed he could teach the trick to anyone.

"I told him I'd think it over. Naturally, my first step was to make sure that he was followed twenty-four hours a day. A man with information like that simply could not be allowed to fall into enemy hands." The President scowled, as though angry with himself. "I'm sorry to say that I didn't realize the full potentialities of what he had said for several days-not until I got Frank's first report."

* * * *

"You could hardly be expected to, Mr. President," Frank said. "After all, something like that is pretty heady stuff."

"I think I follow you," said the Secretary. "You found he was already teaching this trick to others."

The President glanced at the FBI man. Frank said: "That's right; he was holding meetings-classes, I suppose you'd call them-twice a week. There were eight men who came regularly."

"That's when I gave the order to have them all picked up. Can you imagine what would happen if everybody could be taught to use this ability? Or even a small minority?"

"They'd rule the world," said the Secretary softly.

The President shrugged that off. "That's a small item, really. The point is that nothing would be hidden from anyone.

"The way we play the Game of Life today is similar to playing poker. We keep a straight face and play the cards tight to our chest. But what would happen if everyone could see everyone else's cards? It would cease to be a game of strategy, and become a game of pure chance.

* * * *

"We'd have to start playing Life another way. It would be like chess, where you can see the opponent's every move. But in all human history there has never been a social analogue for chess. That's why Paul Wendell and his group had to be stopped-for a while at least."

"But what could you have done with them?" asked the Secretary. "Imprison them summarily? Have them shot? What would you have done?"

The President's face became graver than ever. "I had not yet made that decision. Thank Heaven, it has been taken out of my hands."

"One of his own men shot him?"

"That's right," said the big FBI man. "We went into his apartment an instant too late. We found eight madmen and a near-corpse. We're not sure what happened, and we're not sure we want to know. Anything that can drive eight reasonably stable men off the deep end in less than an hour is nothing to meddle around with."

"I wonder what went wrong?" asked the Secretary of no one in particular.

* * * *

## SCHERZO-PRESTO

Paul Wendell, too, was wondering what went wrong.

Slowly, over a period of immeasurable time, memory seeped back into him. Bits of memory, here and there, crept in from nowhere, sometimes to be lost again, sometimes to remain. Once he found himself mentally humming an odd, rather funeral tune:

Now, though you'd have said that the head was dead, For its owner dead was he, It stood on its neck with a smile well-bred, And bowed three times to me. It was none of your impudent, off-hand nods....

Wendell stopped and wondered what the devil seemed so important about the song.

Slowly, slowly, memory returned.

When he suddenly realized, with crashing finality, where he was and what had happened to him, Paul Wendell went violently insane. Or he would have, if he could have become violent.

* * * *

MARCHE FUNEBRE-LENTO

"Open your mouth, Paul," said the pretty nurse. The hulking mass of not-quite-human gazed at her with vacuous eyes and opened its mouth. Dexterously, she spooned a mouthful of baby food into it. "Now swallow it, Paul. That's it. Now another."

"In pretty bad shape, isn't he?"

Nurse Peters turned to look at the man who had walked up behind her. It was Dr. Benwick, the new interne.

"He's worthless to himself and anyone else," she said. "It's a shame, too; he'd be rather nice looking if there were any personality behind that face." She shoveled another spoonful of mashed asparagus into the gaping mouth. "Now swallow it, Paul."

"How long has he been here?" Benwick asked, eyeing the scars that showed through the dark hair on the patient's head.

"Nearly six years," Miss Peters said.

"Hmmh! But they outlawed lobotomies back in the sixties."

"Open your mouth, Paul." Then, to Benwick: "This was an accident. Bullet in the head. You can see the scar on the other side of his head."

* * * *

The doctor moved around to look at the left temple. "Doesn't leave much of a human being, does it?"

"It doesn't even leave much of an animal," Miss Peters said. "He's alive, but that's the best you can say for him. (Now swallow, Paul. That's it.) Even an ameba can find food for itself."

"Yeah. Even a single cell is better off than he is. Chop out a man's forebrain and he's nothing. It's a case of the whole being less than the sum of its parts."

"I'm glad they outlawed the operation on mental patients," Miss Peters said, with a note of disgust in her voice.

Dr. Benwick said: "It's worse than it looks. Do you know why the anti-lobotomists managed to get the bill passed?"

"Let's drink some milk now, Paul. No, Doctor; I was only a little girl at that time."

"It was a matter of electro-encephalographic records. They showed that there was electrical activity in the prefrontal lobes even after the nerves had been severed, which could mean a lot of things; but the

A-L supporters said that it indicated that the forebrain was still capable of thinking."

Miss Peters looked a little ill. “Why-that's horrible! I wish you'd never told me.” She looked at the lump of vegetablized human sitting placidly at the table. “Do you suppose he's actually thinking, somewhere, deep inside?"

"Oh, I doubt it,” Benwick said hastily. “There's probably no real self-awareness, none at all. There couldn't be."

"I suppose not,” Miss Peters said, “but it's not pleasant to think of."

"That's why they outlawed it,” said Benwick.

* * * *

## RONDO-ANDANTE MA NON POCO

Insanity is a retreat from reality, an escape within the mind from the reality outside the mind. But what if there is no detectable reality outside the mind? What is there to escape from? Suicide-death in any form-is an escape from life. But if death does not come, and can not be self-inflicted, what then?

And when the pressure of nothingness becomes too great to bear, it becomes necessary to escape; a man under great enough pressure will take the easy way out. But if there is no easy way? Why, then a man must take the hard way.

For Paul Wendell, there was no escape from his dark, senseless Gehenna by way of death, and even insanity offered no retreat; insanity in itself is senseless, and senselessness was what he was trying to flee. The only insanity possible was the psychosis of regression, a fleeing into the past, into the crystallized, unchanging world of memory.

So Paul Wendell explored his past, every year, every hour, every second of it, searching to recall and savor every bit of sensation he had ever experienced. He tasted and smelled and touched and heard and analyzed each of them minutely. He searched through his own subjective thought processes, analyzing, checking and correlating them.

Know thyself. Time and time again, Wendell retreated from his own memories in confusion, or shame, or fear. But there was no retreat from himself, and eventually he had to go back and look again.

He had plenty of time-all the time in the world. How can subjective time be measured when there is no objective reality?

* * * *

Eventually, there came the time when there was nothing left to look at; nothing left to see; nothing to check and remember; nothing that he had not gone over in every detail. Again, boredom began to creep in. It was not the boredom of nothingness, but the boredom of the familiar. Imagination? What could he imagine, except combinations and permutations of his own memories? He didn't know-perhaps there might be more to it than that.

So he exercised his imagination. With a wealth of material to draw upon, he would build himself worlds where he could move around, walk, talk, and make love, eat, drink and feel the caress of sunshine and wind.

It was while he was engaged in this project that he touched another mind. He touched it, fused for a blinding second, and bounced away. He ran gibbering up and down the corridors of his own memory, mentally reeling from the shock of-identification!

* * * *

Who was he? Paul Wendell? Yes, he knew with incontrovertible certainty that he was Paul Wendell. But he also knew, with almost equal certainty, that he was Captain Sir Richard Francis Burton. He was living-had lived-in the latter half of the nineteenth century. But he knew nothing of the Captain other than the certainty of identity; nothing else of that blinding mind-touch remained.

Again he scoured his memory-Paul Wendell's memory-checking and rechecking the area just before that semi-fatal bullet had crashed through his brain.

And finally, at long last, he knew with certainty where his calculations had gone astray. He knew positively why eight men had gone insane.

Then he went again in search of other minds, and this time he knew he would not bounce.

* * * *

## QUASI UNA FANTASIA POCO ANDANTE PIANISSIMO

An old man sat quietly in his lawnchair, puffing contentedly on an expensive briar pipe and making corrections with a fountain pen on a thick sheaf of typewritten manuscript. Around him stretched an expanse of green lawn, dotted here and there with squat cycads that looked like overgrown pineapples; in the distance, screening the big house from the road, stood a row of stately palms, their fronds stirring lightly in the faint, warm California breeze.

The old man raised his head as a car pulled into the curving driveway. The warm hum of the turboelectric engine stopped, and a man climbed out of the vehicle. He walked with easy strides across the grass to where the elderly gentleman sat. He was lithe, of indeterminate age, but with a look of great determination. There was something in his face that made the old man vaguely uneasy-not with fear but with a sense of deep respect.

"What can I do for you, sir?"

"I have some news for you, Mr. President," the younger one said.

The old man smiled wryly. "I haven't been President for fourteen years. Most people call me 'Senator' or just plain 'Mister'."

* * * *

The younger man smiled back. "Very well, Senator. My name is Camberton, James Camberton. I brought some information that may possibly relieve your mind-or, again, it may not."

"You sound ominous, Mr. Camberton. I hope you'll remember that I've been retired from the political field for nearly five years. What is this shattering news?"

"Paul Wendell's body was buried yesterday."

The Senator looked blank for a second, then recognition came into his face. "Wendell, eh? After all this time. Poor chap; he'd have been better off if he'd died twenty years ago." Then he paused and looked

up. “But just who are you, Mr. Camberton? And what makes you think I would be particularly interested in Paul Wendell?"

"Mr. Wendell wants to tell you that he is very grateful to you for having saved his life, Senator. If it hadn't been for your orders, he would have been left to die."

The Senator felt strangely calm, although he knew he should feel shock. “That's ridiculous, sir! Mr. Wendell's brain was hopelessly damaged; he never recovered his sanity or control of his body. I know; I used to drop over to see him occasionally, until I finally realized that I was only making myself feel worse and doing him no good."

"Yes, sir. And Mr. Wendell wants you to know how much he appreciated those visits."

* * * *

The Senator grew red. “What the devil are you talking about? I just said that Wendell couldn't talk. How could he have said anything to you? What do you know about this?"

"I never said he spoke to me, Senator; he didn't. And as to what I know of this affair, evidently you don't remember my name. James Camberton."

The Senator frowned. “The name is familiar, but—” Then his eyes went wide. “Camberton! You were one of the eight men who-Why, you're the man who shot Wendell!"

Camberton pulled up an empty lawnchair and sat down. “That's right, Senator; but there's nothing to be afraid of. Would you like to hear about it?"

"I suppose I must.” The old man's voice was so low that it was scarcely audible. “Tell me-were the other seven released, too? Have-have you all regained your sanity? Do you remember—” He stopped.

"Do we remember the extra-sensory perception formula? Yes, we do; all eight of us remember it well. It was based on faulty premises, and incomplete, of course; but in its own way it was workable enough. We have something much better now."

The old man shook his head slowly. “I failed, then. Such an idea is as fatal to society as we know it as a virus plague. I tried to keep you men quarantined, but I failed. After all those years of insanity, now the chess game begins; the poker game is over."

"It's worse than that,” Camberton said, chuckling softly. “Or, actually, it's much better."

"I don't understand; explain it to me. I'm an old man, and I may not live to see my world collapse. I hope I don't."

Camberton said: “I'll try to explain in words, Senator. They're inadequate, but a fuller explanation will come later."

And he launched into the story of the two-decade search of Paul Wendell.

* * * *

## CODA-ANDANTINO

"Telepathy? Time travel?” After three hours of listening, the ex-President was still not sure he

understood.

"Think of it this way," Camberton said. "Think of the mind at any given instant as being surrounded by a shield-a shield of privacy-a shield which you, yourself have erected, though unconsciously. It's a perfect insulator against telepathic prying by others. You feel you have to have it in order to retain your privacy-your sense of identity, even. But here's the kicker: even though no one else can get in, you can't get out!

"You can call this shield 'self-consciousness'-perhaps shame is a better word. Everyone has it, to some degree; no telepathic thought can break through it. Occasionally, some people will relax it for a fraction of a second, but the instant they receive something, the barrier goes up again."

"Then how is telepathy possible? How can you go through it?" The Senator looked puzzled as he thoughtfully tamped tobacco into his briar.

"You don't go through it; you go around it."

* * * *

"Now wait a minute; that sounds like some of those fourth dimension stories I've read. I recall that when I was younger, I read a murder mystery-something about a morgue, I think. At any rate, the murder was committed inside a locked room; no one could possibly have gotten in or out. One of the characters suggested that the murderer traveled through the fourth dimension in order to get at the victim. He didn't go through the walls; he went around them." The Senator puffed a match flame into the bowl of his pipe, his eyes on the younger man. "Is that what you're driving at?"

"Exactly," agreed Camberton. "The fourth dimension. Time. You must go back in time to an instant when that wall did not exist. An infant has no shame, no modesty, no shield against the world. You must travel back down your own four-dimensional tube of memory in order to get outside it, and to do that, you have to know your own mind completely, and you must be sure you know it.

"For only if you know your own mind can you communicate with another mind. Because, at the 'instant' of contact, you become that person; you must enter his own memory at the beginning and go up the hyper-tube. You will have all his memories, his hopes, his fears, his sense of identity. Unless you know-beyond any trace of doubt-who you are, the result is insanity."

* * * *

The Senator puffed his pipe for a moment, then shook his head. "It sounds like Oriental mysticism to me. If you can travel in time, you'd be able to change the past."

"Not at all," Camberton said; "that's like saying that if you read a book, the author's words will change.

"Time isn't like that. Look, suppose you had a long trough filled with supercooled water. At one end, you drop in a piece of ice. Immediately the water begins to freeze; the crystallization front moves toward the other end of the trough. Behind that front, there is ice-frozen, immovable, unchangeable. Ahead of it there is water-fluid, mobile, changeable.

"The instant we call 'the present' is like that crystallization front. The past is unchangeable; the future is flexible. But they both exist."

"I see-at least, I think I do. And you can do all this?"

"Not yet," said Camberton; "not completely. My mind isn't as strong as Wendell's, nor as capable. I'm not the-shall we say-the superman he is; perhaps I never will be. But I'm learning-I'm learning. After all, it took Paul twenty years to do the trick under the most favorable circumstances imaginable."

"I see." The Senator smoked his pipe in silence for a long time. Camberton lit a cigaret and said nothing. After a time, the Senator took the briar from his mouth and began to tap the bowl gently on the heel of his palm. "Mr. Camberton, why do you tell me all this? I still have influence with the Senate; the present President is a protege of mine. It wouldn't be too difficult to get you men-ah-put away again. I have no desire to see our society ruined, our world destroyed. Why do you tell me?"

* * * *

Camberton smiled apologetically. "I'm afraid you might find it a little difficult to put us away again, sir; but that's not the point. You see, we need you. We have no desire to destroy our present culture until we have designed a better one to replace it.

"You are one of the greatest living statesmen, Senator; you have a wealth of knowledge and ability that can never be replaced; knowledge and ability that will help us to design a culture and a civilization that will be as far above this one as this one is above the wolf pack. We want you to come in with us, help us; we want you to be one of us."

"I? I'm an old man, Mr. Camberton. I will be dead before this civilization falls; how can I help build a new one? And how could I, at my age, be expected to learn this technique?"

"Paul Wendell says you can. He says you have one of the strongest minds now existing."

The Senator put his pipe in his jacket pocket. "You know, Camberton, you keep referring to Wendell in the present tense. I thought you said he was dead."

Again Camberton gave him the odd smile. "I didn't say that, Senator; I said they buried his body. That's quite a different thing. You see, before the poor, useless hulk that held his blasted brain died, Paul gave the eight of us his memories; he gave us himself. The mind is not the brain, Senator; we don't know what it is yet, but we do know what it isn't. Paul's poor, damaged brain is dead, but his memories, his thought processes, the very essence of all that was Paul Wendell is still very much with us.

"Do you begin to see now why we want you to come in with us? There are nine of us now, but we need the tenth-you. Will you come?"

"I-I'll have to think it over," the old statesman said in a voice that had a faint quaver. "I'll have to think it over."

But they both knew what his answer would be.

## THROUGH TIME AND SPACE WITH BENEDICT BREADFRUIT
## # 8

The peculiar religio-sexual practices of the inhabitants of Hoogaht VIII are known throughout the Galaxy. One day a group of Hoogahtu called upon Benedict Breadfruit.

"We are," said their spokesman, "planning to build an old-fashioned Earth-type house for our group. The living quarters for the males and females will be on the first and second floors. The Temple of Love,

as we call it, will occupy the top floor, just under the roof. Knowing your abilities with language, we would like for you to give us a name for our Temple."

"Orgiastic top floor, eh?" asked Breadfruit.

"That's right?"

"A hot-pants attic, as it were?" said Breadfruit.

"If you insist, yes," said the spokesman.

"A libidinous area just under the roof, one might say."

"That's what we said," agreed the Hoogahtu.

"In other words, a lewd loft?" persisted Breadfruit.

"Most emphatically," said the Hoogahtu spokesman.

Benedict Breadfruit shook his head, baffled for the first time in his life. "Gee, fellas, I just can't think of a damn thing."

## VIEWPOINT

A fearsome thing is a thing you're afraid of-and it has nothing whatever to do with whether others are afraid, nor with whether it is in fact dangerous. It's your view of the matter that counts!

There was a dizzy, sickening whirl of mental blackness-not true blackness, but a mind-enveloping darkness that was filled with the multi-colored little sparks of thoughts and memories that scattered through the darkness like tiny glowing mice, fleeing from something unknown, fleeing outwards and away toward a somewhere that was equally unknown; scurrying, moving, changing-each half recognizable as it passed, but leaving only a vague impression behind.

Memories were shattered into their component data bits in that maelstrom of not-quite-darkness, and scattered throughout infinity and eternity. Then the pseudo-dark stopped its violent motion and became still, no longer scattering the fleeing memories, but merely blanketing them. And slowly-ever so slowly-the powerful cohesive forces that existed between the data-bits began pulling them back together again as the not-blackness faded. The associative powers of the mind began putting the frightened little things together as they drifted back in from vast distances, trying to fit them together again in an ordered whole. Like a vast jigsaw puzzle in five dimensions, little clots and patches formed as the bits were snuggled into place here and there.

The process was far from complete when Broom regained consciousness.

* * * *

Broom sat up abruptly and looked around him. The room was totally unfamiliar. For a moment, that seemed perfectly understandable. Why shouldn't the room look odd, after he had gone through—

What?

He rubbed his head and looked around more carefully. It was not just that the room itself was unfamiliar as a whole; the effect was greater than that. It was not the first time in his life he had regained consciousness in unfamiliar surroundings, but always before he had been aware that only the pattern was different, not the details.

He sat there on the floor and took stock of himself and his surroundings.

He was a big man-six feet tall when he stood up, and proportionately heavy, a big-boned frame covered with hard, well-trained muscles. His hair and beard were a dark blond, and rather shaggy because of the time he'd spent in prison.

Prison!

Yes, he'd been in prison. The rough clothing he was wearing was certainly nothing like the type of dress he was used to.

He tried to force his memory to give him the information he was looking for, but it wouldn't come. A face flickered in his mind for a moment, and a name. Contarini. He seemed to remember a startled look on the Italian's face, but he could neither remember the reason for it nor when it had been. But it would come back; he was sure of that.

Meanwhile, where the devil was he?

From where he was sitting, he could see that the room was fairly large, but not extraordinarily so. A door in one wall led into another room of about the same size. But they were like no other rooms he had ever seen before. He looked down at the floor. It was soft, almost as soft as a bed, covered with a thick, even, resilient layer of fine material of some kind. It was some sort of carpeting that covered the floor from wall to wall, but no carpet had ever felt like this.

He lifted himself gingerly to his feet. He wasn't hurt, at least. He felt fine, except for the gaps in his memory.

The room was well lit. The illumination came from the ceiling, which seemed to be made of some glowing, semitranslucent metal that cast a shadowless glow over everything. There was a large, bulky table near the wall away from the door; it looked almost normal, except that the objects on it were like nothing that had ever existed. Their purposes were unknown, and their shapes meaningless.

He jerked his head away, not wanting to look at the things on the table.

The walls, at least, looked familiar. They seemed to be paneled in some fine wood. He walked over and touched it.

And knew immediately that, no matter what it looked like, it wasn't wood. The illusion was there to the eye, but no wood ever had such a hard, smooth, glasslike surface as this. He jerked his fingertips away.

He recognized, then, the emotion that had made him turn away from the objects on the table and pull his hand away from the unnatural wall. It was fear.

Fear? Nonsense! He put his hand out suddenly and slapped the wall with his palm and held it there. There was nothing to be afraid of!

He laughed at himself softly. He'd faced death a hundred times during the war without showing fear; this was no time to start. What would his men think of him if they saw him getting shaky over the mere touch of a woodlike wall?

The memories were coming back. This time, he didn't try to probe for them; he just let them flow.

He turned around again and looked deliberately at the big, bulky table. There was a faint humming noise coming from it which had escaped his notice before. He walked over to it and looked at the queerly-shaped things that lay on its shining surface. He had already decided that the table was no more wood than the wall, and a touch of a finger to the surface verified the decision.

The only thing that looked at all familiar on the table was a sheaf of written material. He picked it up and glanced over the pages, noticing the neat characters, so unlike any that he knew. He couldn't read a word of it. He grinned and put the sheets back down on the smooth table top.

The humming appeared to be coming from a metal box on the other side of the table. He circled around and took a look at the thing. It had levers and knobs and other projections, but their functions were not immediately discernible. There were several rows of studs with various unrecognizable symbols on them.

This would certainly be something to tell in London-when and if he ever got back.

He reached out a tentative finger and touched one of the symbol-marked studs.

There was a loud click! in the stillness of the room, and he leaped back from the device. He watched it warily for a moment, but nothing more seemed to be forthcoming. Still, he decided it might be best to let things alone. There was no point in messing with things that undoubtedly controlled forces beyond his ability to cope with, or understand. After all, such a long time—

He stopped, Time? Time?

What had Contarini said about time? Something about its being like a river that flowed rapidly-that much he remembered. Oh, yes-and that it was almost impossible to try to swim backwards against the current or ... something else. What?

He shook his head. The more he tried to remember what his fellow prisoner had told him, the more elusive it became.

He had traveled in time, that much was certain, but how far, and in which direction? Toward the future, obviously; Contarini had made it plain that going into the past was impossible. Then could he, Broom, get back to his own time, or was he destined to stay in this-place? Wherever and whenever it was.

Evidently movement through the time-river had a tendency to disorganize a man's memories. Well, wasn't that obvious anyway? Even normal movement through time, at the rate of a day per day, made some memories fade. And some were lost entirely, while others remained clear and bright. What would a sudden jump of centuries do?

His memory was improving, though. If he just let it alone, most of it would come back, and he could orient himself. Meanwhile, he might as well explore his surroundings a little more. He resolved to keep his hands off anything that wasn't readily identifiable.

* * * *

There was a single oddly-shaped chair by the bulky table, and behind the chair was a heavy curtain which apparently covered a window. He could see a gleam of light coming through the division in the curtains.

Broom decided he might as well get a good look at whatever was outside the building he was in. He stepped over, parted the curtains, and—And gasped!

It was night time outside, and the sky was clear. He recognized the familiar constellations up there. But they were dimmed by the light from the city that stretched below him.

And what a city! At first, it was difficult for his eyes to convey their impressions intelligently to his brain. What they were recording was so unfamiliar that his brain could not decode the messages they sent.

There were broad, well-lit streets that stretched on and on, as far as he could see, and beyond them, flittering fairy bridges rose into the air and arched into the distance. And the buildings towered over everything. He forced himself to look down, and it made him dizzy. The building he was in was so high that it would have projected through the clouds if there had been any clouds.

Broom backed away from the window and let the curtain close. He'd had all of that he could take for right now. The inside of the building, his immediate surroundings, looked almost homey after seeing that monstrous, endless city outside.

He skirted the table with its still-humming machine and walked toward the door that led to the other room. A picture hanging on a nearby wall caught his eye, and he stopped. It was a portrait of a man in unfamiliar, outlandish clothing, but Broom had seen odder clothing in his travels. But the thing that had stopped him was the amazing reality of the picture. It was almost as if there were a mirror there, reflecting the face of a man who stood invisibly before it.

It wasn't, of course; it was only a painting. But the lifelike, somber eyes of the man were focused directly on him. Broom decided he didn't like the effect at all, and hurried into the next room.

There were several rows of the bulky tables in here, each with its own chair. Broom's footsteps sounded loud in the room, the echoes rebounding from the walls. He stopped and looked down. This floor wasn't covered with the soft carpeting; it had a square, mosaic pattern, as though it might be composed of tile of some kind. And yet, though it was harder than the carpet it had a kind of queer resiliency of its own.

The room itself was larger than the one he had just quitted, and not as well lit. For the first time, he thought of the possibility that there might be someone else here besides himself. He looked around, wishing that he had a weapon of some kind. Even a knife would have made him feel better.

But there had been no chance of that, of course. Prisoners of war are hardly allowed to carry weapons with them, so none had been available.

He wondered what sort of men lived in this fantastic city. So far, he had seen no one. The streets below had been filled with moving vehicles of some kind, but it had been difficult to tell whether there had been anyone walking down there from this height.

Contarini had said that it would be ... how had he said it? “Like sleeping for hundreds of years and waking up in a strange world."

Well, it was that, all right.

Did anyone know he was here? He had the uneasy feeling that hidden, unseen eyes were watching his every move, and yet he could detect nothing. There was no sound except the faint humming from the device in the room behind him, and a deeper, almost inaudible, rushing, rumbling sound that seemed to come from far below.

His wish for a weapon came back, stronger than before. The very fact that he had seen no one set his nerves on edge even more than the sight of a known enemy would have done.

He was suddenly no longer interested in his surroundings. He felt trapped in this strange, silent room. He could see a light shining through a door at the far end of the room-perhaps it was a way out. He walked toward it, trying to keep his footsteps as silent as possible as he moved.

The door had a pane of translucent glass in it, and there were more of the unreadable characters on it. He wished fervently that he could decipher them; they might tell him where he was.

Carefully, he grasped the handle of the door, twisted it, and pulled. And, careful as he had been, the door swung inward with surprising rapidity. It was a great deal thinner and lighter than he had supposed.

He looked down at it, wondering if there were any way the door could be locked. There was a tiny vertical slit set in a small metal panel in the door, but it was much too tiny to be a keyhole. Still—

It didn't matter. If necessary, he could smash the glass to get through the door. He stepped out into what was obviously a hallway beyond the door.

* * * *

The hallway stretched away to either side, lined with doors similar to the one he had just come through. How did a man get out of this place, anyway? The door behind him was pressing against his hand with a patient insistence, as though it wanted to close itself. He almost let it close, but, at the last second, he changed his mind.

Better the devil we know than the devil we don't, he thought to himself.

He went back into the office and looked around for something to prop the door open. He found a small, beautifully formed porcelain dish on one of the desks, picked it up, and went back to the door. The dish held the door open an inch or so. That was good enough. If someone locked the door, he could still smash in the glass if he wanted to, but the absence of the dish when he returned would tell him that he was not alone in this mysterious place.

He started down the hallway to his right, checking the doors as he went. They were all locked. He knew that he could break into any of them, but he had a feeling that he would find no exit through any of them. They all looked as though they concealed more of the big rooms.

None of them had any lights behind them. Only the one door that he had come through showed the telltale glow from the other side. Why?

He had the terrible feeling that he had been drawn across time to this place for a purpose, and yet he could think of no rational reason for believing so.

He stopped as another memory came back. He remembered being in the stone-walled dungeon, with its smelly straw beds, lit only by the faint shaft of sunlight that came from the barred window high overhead.

Contarini, the short, wiry little Italian who was in the next cell, looked at him through the narrow opening. “I still think it can be done, my friend. It is the mind and the mind alone that sees the flow of time. The body experiences, but does not see. Only the soul is capable of knowing eternity."

Broom outranked the little Italian, but prison can make brothers of all men. “You think it's possible then, to get out of a place like this, simply by thinking about it?"

Contarini nodded. “Why not? Did not the saints do so? And what was that? Contemplation of the Eternal, my comrade; contemplation of the Eternal."

Broom held back a grin. “Then why, my Venetian friend, have you not left this place long since?"

"I try,” Contarini had said simply, “but I cannot do it. You wish to know why? It is because I am afraid."

"Afraid?” Broom raised an eyebrow. He had seen Contarini on the battlefield, dealing death in hand-to-hand combat, and the Italian hadn't impressed him as a coward.

"Yes,” said the Venetian. “Afraid. Oh, I am not afraid of men. I fight. Some day, I may die-will die. This does not frighten me, death. I am not afraid of what men may do to me.” He stopped and frowned. “But, of this, I have a great fear. Only a saint can handle such things, and I am no saint."

"I hope, my dear Contarini,” Broom said dryly, “that you are not under the impression that I am a saint."

"No, perhaps not,” Contarini said. “Perhaps not. But you are braver than I. I am not afraid of any man living. But you are afraid of neither the living nor the dead, nor of man nor devil-which is a great deal more than I can say for myself. Besides, there is the blood of kings in your veins. And has not a king protection that even a man of noble blood such as myself does not have? I think so.

"Oh, I have no doubt that you could do it, if you but would. And then, perhaps, when you are free, you would free me-for teaching you all I know to accomplish this. My fear holds me chained here, but you have no chains of fear."

Broom had thought that over for a moment, then grinned. “All right, my friend; I'll try it. What's your first lesson?"

The memory faded from Broom's mind. Had he really moved through some segment of Eternity to reach this ... this place? Had he—

He felt a chill run through him. What was he doing here? How could he have taken it all so calmly. Afraid of man or devil, no-but this was neither. He had to get back. The utter alienness of this bright, shining, lifeless wonderland was too much for him.

Instinctively, he turned and ran back toward the room he had left. If he got back to the place where he had appeared in this world, perhaps-somehow-some force would return him to where he belonged.

* * * *

The door was as he had left it, the porcelain dish still in place. He scooped up the dish in one big hand and ran on into the room, letting the door shut itself behind him. He ran on, through the large room with its many tables, into the brightly lighted room beyond.

He stopped. What could he do now? He tried to remember the things that the Italian had told him to do, and he could not for the life of him remember them. His memory still had gaps in it-gaps he did not know were there because he had not yet probed for them. He closed his eyes in concentration, trying to bring back a memory that would not come.

He did not hear the intruder until the man's voice echoed in the room.

Broom's eyes opened, and instantly every muscle and nerve in his hard-trained body tensed for action. There was a man standing in the doorway of the office.

He was not a particularly impressive man, in spite of the queer cut of his clothes. He was not as tall as Broom, and he looked soft and overfed. His paunch protruded roundly from the open front of the short coat, and there was a fleshiness about his face that betrayed too much good living.

And he looked even more frightened than Broom had been a few minutes before.

He was saying something in a language that Broom did not understand, and the tenseness in his voice betrayed his fear. Broom relaxed. He had nothing to fear from this little man.

"I won't hurt you," Broom said. "I had no intention of intruding on your property, but all I ask is help."

The little man was blinking and backing away, as though he were going to turn and bolt at any moment.

Broom laughed. "You have nothing to fear from me, little man. Permit me to introduce myself. I am Richard Broom, known as—" He stopped, and his eyes widened. Total memory flooded over him as he realized fully who he was and where he belonged.

And the fear hit him again in a raging flood, sweeping over his mind and blotting it out. Again, the darkness came.

* * * *

This time, the blackness faded quickly. There was a face, a worried face, looking at him through an aperture in the stone wall. The surroundings were so familiar, that the bits of memory which had been scattered again during the passage through centuries of time came back more quickly and settled back into their accustomed pattern more easily.

The face was that of the Italian, Contarini. He was looking both worried and disappointed.

"You were not gone long, my lord king," he said. "But you were gone. Of that there can be no doubt. Why did you return?"

Richard Broom sat up on his palette of straw. The scene in the strange building already seemed dreamlike, but the fear was still there. "I couldn't remember," he said softly. "I couldn't remember who I was nor why I had gone to that ... that place. And when I remembered, I came back."

Contarini nodded sadly. "It is as I have heard. The memory ties one too strongly to the past-to one's own time. One must return as soon as the mind had adjusted. I am sorry, my friend; I had hoped we could escape. But now it appears that we must wait until our ransoms are paid. And I much fear that mine will never be paid."

"Nor mine," said the big man dully. "My faithful Blondin found me, but he may not have returned to

London. And even if he has, my brother John may be reluctant to raise the money."

"What? Would England hesitate to ransom the brave king who has fought so gallantly in the Holy Crusades? Never! You will be free, my friend."

But Richard Plantagenet just stared at the little dish that he still held in his hand, the fear still in his heart. Men would still call him "Lion-hearted," but he knew that he would never again deserve the title.

* * * *

And, nearly eight centuries away in time and thousands of miles away in space, a Mr. Edward Jasperson was speaking hurriedly into the telephone that stood by the electric typewriter on his desk.

"That's right, Officer; Suite 8601, Empire State Building. I was working late, and I left the lights on in my office when I went out to get a cup of coffee. When I came back, he was here-a big, bearded man, wearing a thing that looked like a monk's robe made out of gunny sack. What? No, I locked the door when I left. What? Well, the only thing that's missing as far as I can tell is a ceramic ash tray from one of the desks; he was holding that in his hand when I saw him. What? Oh. Where did he go?" Mr. Jasperson paused in his rush of words. "Well, I must have gotten a little dizzy-I was pretty shocked, you know. To be honest, I didn't see where he went. I must have fainted.

"But I think you can pick him up if you hurry. With that getup on, he can't get very far away. All right. Thank you, Officer."

He cradled the phone, pulled a handkerchief from his pocket, and dabbed at his damp forehead. He was a very frightened little man, but he knew he'd get over it by morning.

**Through Time and Space with Benedict Breadfruit—Special Key to # 8**

[Publisher's Note: The very fact that Benedict Breadfruit was unable to think of a name for the Hoogaht's Temple of Love on the top floor under the eves is in itself a significant clue that the author expects the reader to be able to solve the puzzle of which science fiction writer's name the pun would involve. When one remembers that the dimunative of Randall is Randy, the answer becomes clear.]

## WITH NO STRINGS ATTATCHED

The United States Submarine Ambitious Brill slid smoothly into her berth in the Brooklyn Navy Yard after far too many weeks at sea, as far as her crew were concerned. After all the necessary preliminaries had been waded through, the majority of that happy crew went ashore to enjoy a well-earned and long-anticipated leave in the depths of the brick-and-glass canyons of Gomorrah-on-the-Hudson.

The trip had been uneventful, in so far as nothing really dangerous or exciting had happened. Nothing, indeed, that could even be called out-of-the-way-except that there was more brass aboard than usual, and that the entire trip had been made underwater with the exception of one surfacing for a careful position check, in order to make sure that the ship's instruments gave the same position as the stars gave. They had. All was well.

That is not to say that the crew of the Ambitious Brill were entirely satisfied in their own minds about certain questions that had been puzzling them. They weren't. But they knew better than to ask questions,

even among themselves. And they said nothing whatever when they got ashore. But even the novices among submarine crews know that while the nuclear-powered subs like George Washington, Patrick Henry, or Benjamin Franklin are perfectly capable of circumnavigating the globe without coming up for air, such performances are decidedly rare in a presumably Diesel-electric vessel such as the U.S.S. Ambitious Brill. And those few members of the crew who had seen what went on in the battery room were the most secretive and the most puzzled of all. They, and they alone, knew that some of the cells of the big battery that drove the ship's electric motors had been removed to make room for a big, steel-clad box hardly bigger than a foot locker, and that the rest of the battery hadn't been used at all.

With no one aboard but the duty watch, and no one in the battery room at all, Captain Dean Lacey felt no compunction whatever in saying, as he gazed at the steel-clad, sealed box: “What a battery!"

The vessel's captain, Lieutenant Commander Newton Wayne, looked up from the box into the Pentagon representative's face. “Yes, sir, it is.” His voice sounded as though his brain were trying to catch up with it and hadn't quite succeeded. “This certainly puts us well ahead of the Russians."

Captain Lacey returned the look. “How right you are, commander. This means we can convert every ship in the Navy in a tenth the time we had figured."

Then they both looked at the third man, a civilian.

He nodded complacently. “And at a tenth the cost, gentlemen,” he said mildly. “North American Carbide & Metals can produce these units cheaply, and at a rate that will enable us to convert every ship in the Navy within the year."

Captain Lacey shot a glance at Lieutenant Commander Wayne. “All this is strictly Top Secret you understand."

"Yes, sir; I understand,” said Wayne.

"Very well.” He looked back at the civilian. “Are we ready, Mr. Thorn?"

"Anytime you are, captain,” the civilian said.

"Fine. You have your instructions, commander. Carry on."

"Aye, aye, sir,” said Lieutenant Commander Wayne.

* * * *

A little less than an hour later, Captain Lacey and Mr. Thorn were in the dining room of one of the most exclusive clubs in New York. Most clubs in New York are labeled as “exclusive” because they exclude certain people who do not measure up to their standards of wealth. A man who makes less than, say, one hundred thousand dollars a year would not even qualify for scrutiny by the Executive Committee. There is one club in Manhattan which reaches what is probably close to the limit on that kind of exclusiveness: Members must be white, Anglo-Saxon, Protestant Americans who can trace their ancestry as white, Anglo-Saxon, Protestant Americans back at least as far as the American Revolution without exception, and who are worth at least ten millions, and who can show that the fortune came into the family at least four generations back. No others need apply. It is said that this club is not a very congenial one because the two members hate each other.

The club in which Lacey and Thorn ate their dinner is not of that sort. It is composed of military and

naval officers and certain civilian career men in the United States Government. These men are professionals. Not one of them would ever resign from government service. They are dedicated, heart, body, and soul to the United States of America. The life, public and private, of every man Jack of them is an open book to every other member. Of the three living men who have held-and the one who at present holds-the title of President of the United States, only one was a member of the club before he held that high office.

As an exclusive club, they rank well above England's House of Peers and just a shade below the College of Cardinals of the Roman Catholic Church.

Captain Lacey was a member. Mr. Richard Thorn was not, but he was among those few who qualify to be invited as guests. The carefully guarded precincts of the club were among the very few in which these two men could talk openly and at ease.

After the duck came the brandy, both men having declined dessert. And over the brandy-that ultra-rare Five Star Hennessy which is procurable only by certain people and is believed by many not to exist at all-Captain Lacey finally asked the question that had been bothering him for so long.

"Thorn," he said, "three months ago that battery didn't exist. I know it and you know it. Who was the genius who invented it?"

Thorn smiled, and there was a subtle wryness in the smile. "Genius is the word, I suppose. Now that the contracts with the Navy have been signed, I can give you the straight story. But you're wrong in saying that the thing didn't exist three months ago. It did. We just didn't know about it, that's all."

Lacey raised his bushy, iron-gray eyebrows. "Oh? And how did it come to the attention of North American Carbide & Metals?"

Thorn puffed out his cheeks and blew out his breath softly before he began talking, as though he were composing his beginning sentences in his mind. Then he said: "The first I heard about it was four months ago. Considering what's happened since then, it seems a lot longer." He inhaled deeply from his brandy snifter before continuing. "As head of the development labs for NAC&M, I was asked to take part as a witness to a demonstration that had been arranged through some of the other officers of the company. It was to take place out on Salt Lake Flats, where—"

* * * *

It was to take place out on Salt Lake Flats, where there was no chance of hanky-panky. Richard Thorn-who held a Ph.D. from one of the finest technological colleges in the East, but who preferred to be addressed as "Mister"-was in a bad mood. He had flown all the way out to Salt Lake City after being given only a few hours notice, and then had been bundled into a jeep furnished by the local sales office of NAC&M and scooted off to the blinding gray-white glare of the Salt Flats. It was hot and it was much too sunshiny for Thorn. But he had made the arrangements for the test himself, so he couldn't argue or complain too loudly. He could only complain mildly to himself that the business office of the company, which had made the final arrangements, had, in his opinion, been a little too much in a hurry to get the thing over with. Thorn himself felt that the test could have at least waited until the weather cooled off. The only consolation he had was that, out here, the humidity was so low that he could stay fairly comfortable in spite of the heat as long as there was plenty of drinking water. He had made sure to bring plenty.

The cavalcade of vehicles arrived at the appointed spot-umpteen miles from nowhere-and pulled up in a circle.

Thorn climbed out wearily and saw the man who called himself Sorensen climb out of the second jeep.

From the first time he had seen him, Thorn had tagged Sorensen as an Angry Old Man. Not that he was really getting old; he was still somewhere on the brisk side of fifty. But he wore a perpetual scowl on his face that looked as though it had been etched there by too many years of frustration, and his voice always seemed to have an acid edge to it, like that of an old man who has decided, after decades of observation, that all men are fools. And yet Thorn thought he occasionally caught a glimpse of mocking humor in the pale blue eyes. He was lean and rather tall, with white hair that still showed traces of blond, and he looked as Scandinavian as his name sounded. His accent was pure Minnesota American.

As he climbed out of the jeep, Sorensen brought with him the Black Suitcase.

Ever since he had first seen it, Thorn had thought of it as "the Black Suitcase," and after he had seen some of the preliminary tests, he had subconsciously put capitals to the words. But Richard Thorn was no fool. Too many men had been suckered before, and he, Richard Thorn, did not intend to be another sucker, no matter how impressed he might be by the performance of an invention.

If this was a con game, it was going to have to be a good one to get by Richard Thorn, Ph.D.

He walked across the few feet of hard, salt-white ground that separated him from Sorensen standing beside the second jeep with the Black Suitcase in his hand. It was obvious to anyone who watched the way Sorensen handled the thing that it was heavy-seventy-five pounds or better.

"Need any help?" Thorn asked, knowing what the answer would be.

"Nope," Sorensen said. "I can handle it."

The suitcase wasn't really black. It was a dark cordovan brown, made even darker by long usage, which had added oily stains to the well-used leather. But Thorn thought of it as the Black Suitcase simply because it was the perfect example of the proverbial Little Black Box-the box that Did Things. As a test question in an examination, the Little Black Box performs a useful function. The examiner draws a symbolic electronic circuit. Somewhere in the circuit, instead of drawing the component that is supposed to be there, he draws a Little Black Box. Then he defines the wave-form, voltage, and amperage entering the circuit and defines whatever is coming out. Question: What is in the Little Black Box?

Except in the simplest of cases, there is never an absolute answer. The question is counted as correct if the student puts into the Little Black Box a component or subcircuit which will produce the effect desired. The value of the answer depends on the simplicity and relative controllability of the component drawn in the place of the Little Black Box.

Sorensen's Black Suitcase was still a problem to Thorn. He couldn't quite figure out what was in it.

"Hotter'n Billy Blue Blazes!" Sorensen said as he put the Black Suitcase down on the gleaming white ground. He grinned a little, which dispelled for a moment his Angry Old Man expression, and said: "You ready to go, Mr. Thorn?"

"I'm ready any time you are," Thorn said grumpily.

Sorensen looked at the NAC&M scientist sideways. "You don't sound any happier'n I am, Mr. Thorn."

Thorn looked at him and thought he could see that flash of odd humor in his light blue eyes. Thorn

exhaled a heavy breath. “I'm no happier than you are to be out in this heat. Let's get on with it."

Sorensen's chuckle sounded so out of place that Thorn was almost startled. “You know the difference between you and me, Mr. Thorn?” Sorensen asked. He didn't wait for an answer. “You think this test is probably a waste of time. Me, on the other hand, I know it is."

"Let's get on with it,” Thorn repeated.

* * * *

It took two hours to set up the equipment, in spite of the fact that a lot of the circuits had been prefabricated before the caravan had come out from Salt Lake City. But Richard Thorn wanted to make certain that all his data was both correct and recorded. Sorensen had nothing to do but watch. He had no hand in setting up the equipment. He had brought the Black Suitcase, and that was all he was going to be allowed to do.

From the top of the Black Suitcase projected two one-inch copper electrodes, fourteen inches apart. The North American Carbide & Metals technicians set up the circuits that were connected to the electrodes without any help from Sorensen.

But just before they started to work, Sorensen said: “There's just one thing I think you ought to warn those men about, Mr. Thorn."

"What's that?” Thorn asked.

"If any of ‘em tries to open that suitcase, they're likely to get blown sky high. And I don't want ‘em getting funny with me, either."

He had his hand in his trouser pocket, and Thorn was suddenly quite certain that the man was holding a revolver. He could see the outlines against the cloth.

Thorn sighed. “Don't worry, Mr. Sorensen. We don't have any ulterior designs on your invention.” He did not add that the investigators of NAC&M had already assumed that anyone who was asking one million dollars for an invention which was, in effect, a pig in a poke, would be expected to take drastic methods to protect his gadget. But there would be no point in telling Sorensen that his protective efforts had already been anticipated and that the technicians had already been warned against touching the Black Suitcase any more than necessary to connect the leads. Giving Sorensen that information might make him even more touchy.

Thorn only hoped that the bomb, or whatever it was that Sorensen had put in the suitcase, was well built, properly fused, and provided with adequate safeties.

When everything was set up, Sorensen walked over to his device and turned it on by shoving the blade of a heavy-duty switch into place. “O.K.,” he said.

One of the technicians began flipping other switches, and a bank of ordinary incandescent light bulbs came on, four at a time. Finally there were one hundred of them burning, each one a hundred-watt bulb that glowed brightly but did not appear to be contributing much to the general brightness of the Utah sun. The technicians checked their recording voltmeters and ammeters and reported that, sure enough, some ten kilowatts of power at a little less than one hundred fifteen volts D.C. was coming from the Black Suitcase.

Sorensen and Thorn sat in the tent which had been erected to ward off the sun's rays. They watched the lights shine.

* * * *

One of the technicians came in, wiping his forehead with a big blue bandana. “Well, there she goes. Mr. Sorensen, if that thing is dangerous, hadn't we better back off a little way from it?"

"It isn't dangerous,” Sorensen said. “Nothing's going to happen."

The technician looked unhappy. “Then I don't see why we couldn't've tested the thing back in the shop. Would've been a lot easier there. To say nothing of more comfortable."

Thorn lit a cigarette in silence.

Sorensen nodded and said, “Yes, Mr. Siegel, it would've been."

Siegel sat down on one of the camp stools and lit a cigarette. “Mr. Sorensen,” he asked in all innocence, “have you got a patent on that battery?"

The humorous glint returned to Sorensen's eyes as he said, “Nope. I didn't patent the battery in that suitcase. That's why I don't want anybody fooling around with it."

"How come you don't patent it?” Siegel asked. “Nobody could steal it if you patented it."

"Couldn't they?” Sorensen asked with a touch of acid in his voice. “Do you know anything about batteries, Mr. Siegel?"

"A little. I'm not an expert on ‘em, or anything like that. I'm an electrician. But I know a little bit about ‘em."

Sorensen nodded. “Then you should know, Mr. Siegel, that battery-making is an art, not a science. You don't just stick a couple of electrodes into a solution of electrolyte and consider that your work is done. With the same two metals and the same electrolyte, you could make batteries that would run the gamut from terrible to excellent. Some of ‘em, maybe, wouldn't hold a charge more than an hour, while others would have a shelf-life, fully charged, of as much as a year. Batteries don't work according to theory. If they did, potassium chlorate would be a better depolarizer than manganese dioxide, instead of the other way around. What you get out of a voltaic cell depends on the composition and strength of the electrolyte, the kind of depolarizer used, the shape of the electrodes, the kind of surface they have, their arrangement and spacing, and a hundred other little things."

"I've heard that,” Siegel said.

* * * *

Thorn smoked in silence. He had heard Sorensen's arguments before. Sorensen didn't mind discussing his battery in the abstract, but he was awfully close-mouthed when it came to talking about it in concrete terms. He would talk about batteries-in-general, but not about this-battery-in-particular.

Not that Thorn blamed him in the least. Sorensen was absolutely correct in his statements about the state of the art of making voltaic cells. If Sorensen had something new-and Thorn was almost totally convinced that he did-then he was playing it smart by not trying to patent it.

"Now then," Sorensen went on, "let's suppose that my battery is made up of lead and lead dioxide plates in a sulfuric acid solution, except that I've added a couple of trifling things and made a few small changes in the physical structure of the plates. I'm not saying that's what the battery is, mind you; I'm saying 'suppose'."

"O.K., suppose," said Siegel. "Couldn't you patent it?"

"What's to patent? The Pb-PbO2-H2SO4 cell is about half as old as the United States Patent Office itself. Can't patent that. Copper oxide, maybe, as a depolarizer? Old hat; can't patent that. Laminated plates, maybe? Nope. Can't patent that, either."

Siegel looked out at the hundred glowing light bulbs. "You mean you can't patent it, even if it works a hundred times better than an ordinary battery?"

"Hell, man," Sorensen said, "you can't patent performance! You've got to patent something solid and concrete! Oh, I'll grant that a top-notch patent attorney might be able to get me some kind of patent on it, but I wouldn't trust its standing up in court if I had to try to quash an infringement.

"Besides, even if I had an iron-bound patent, what good would it do me? Ever hear of a patent pool?"

"No," said Siegel. "What's a patent pool?"

"I'll give you an example. If all the manufacturers of a single product get together and agree to form a patent pool, it means that if one company buys a patent, all of them can use it. Say the automobile companies have one. That means that if you invent a radical new design for an engine-one, maybe that would save them millions of dollars-you'll be offered a few measly thousand for it. Why should they offer more? Where else are you going to sell it? If one company gets it, they all get it. There's no competition, and if you refuse to sell it at all, they just wait a few years until the patent runs out and use it for free. That may take a little time, but a big industry has plenty of time. They have a longer life span than human beings."

"North American Carbide & Metals," said Thorn quietly, "is not a member of any patent pool, Mr. Sorensen."

"I know," Sorensen said agreeably. "Battery patents are trickier than automotive machinery patents. That's why I'm doing this my way. I'm not selling the gadget as such. I'm selling results. For one million dollars, tax paid, I will agree to show your company how to build a device that will turn out electric power at such-and-such a rate and that will have so-and-so characteristics, just like it says in the contract you read. I guarantee that it can be made at the price I quote. That's all."

He looked back out at the bank of light bulbs. They were still burning. They kept burning—

"...They kept burning for ten solid hours," said Thorn. "Then he went out and shut off his battery."

Captain Lacey was scowling. "That's damned funny," he muttered.

"What is?" asked Thorn, wondering why the naval officer had interrupted his story.

"What you've been telling me," Lacey said. "I'll swear I've heard—" He stopped and snapped his fingers suddenly. "Sure! By golly!" He stood up from the table. "Would you excuse me for a minute? I want to see if a friend of mine is here. If he is, he has a story you ought to hear. Damned funny coincidence." And

he was off in a hurry, leaving Thorn staring somewhat blankly after him.

Three minutes later, while Thorn was busily pouring himself a second helping of Five-Star Hennessy, Captain Lacey returned to the table with an army officer wearing the insignia of a bird colonel.

"Colonel Dower," the captain said, "I'd like you to meet a friend of mine-Mr. Richard Thorn, the top research man with North American Carbide & Metals. Mr. Thorn, this is Colonel Edward Dower." The men shook hands. A third brandy snifter was brought and a gentleman's potation was poured for the colonel.

"Ed," said Captain Lacey as soon as his fellow officer had inhaled a goodly lungful of the heady fumes, "do you remember you were telling me a couple of years ago about some test you were in on out in the Mojave Desert?"

Colonel Dower frowned. "Test? Something to do with cars?"

"No, not that one. Something to do with a power supply."

"Power supply. Oh!" His frown faded and became a smile. "You mean the crackpot with his little suitcase."

Thorn looked startled, and Captain Lacey said: "That's the one."

"Sure I remember," said the colonel. "What about it?"

"Oh, nothing," Lacey said with elaborate unconcern, "I just thought Mr. Thorn, here, might like to hear the story-that is, if it isn't classified."

Colonel Dower chuckled. "Nothing classified about it. Just another crackpot inventor. Had a little suitcase that he claimed was a marvelous new power source. Wanted a million dollars cash for it, tax free, no strings attached, but he wouldn't show us what was in it. Not really very interesting."

"Go ahead, colonel," said Thorn. "I'm interested. Really I am."

"Well, as I said, there's nothing much to it," the colonel said. "He showed us a lot of impressive-looking stuff in his laboratory, but it didn't mean a thing. He had this suitcase, as I told you. There were a couple of thick copper electrodes coming out of the side of it, and he claimed that they could be tapped for tremendous amounts of power. Well, we listened, and we watched his demonstrations in the lab. He ran some heavy-duty motors off it and a few other things like that. I don't remember what all."

"And he wanted to sell it to you sight-unseen?" Thorn asked.

"That's right," said the colonel. "Well, actually, he wasn't trying to sell it to the Army. As you know, we don't buy ideas; all we buy is hardware, the equipment itself, or the components. But the company he was trying to sell his gadget to wanted me to take a look at it as an observer. I've had experience with that sort of thing, and they wanted my opinion."

"I see," Thorn said. "What happened?"

"Well," said the colonel, "we wanted him to give us a demonstration out in the Mojave Desert—"

* * * *

"...Out in the Mojave Desert?" the inventor asked. "Whatever for, Colonel Dower?"

"We just want to make sure you haven't got any hidden power sources hooked up to that suitcase of yours. We know a place out in the Mojave where there aren't any power lines for miles. We'll pick the place."

The inventor frowned at him out of pale blue eyes. "Look." He gestured at the suitcase sitting on the laboratory table. "You can see there's nothing faked about that."

Colonel Dower shook his head. "You won't tell us what's in that suitcase. All we know is that it's supposed to produce power. From what? How? You won't tell us. Did you ever hear of the Keely Motor?"

"No. What was the Keely Motor?"

"Something along the lines of what you have here," the colonel said dryly, "except that Keely at least had an explanation for where he was getting his power. Back around 1874, a man named John Keely claimed he had invented a wonderful new power source. He called it a breakthrough in the field of perpetual motion. An undiscovered source of power, he said, controlled by harmony. He had a machine in his lab which would begin to turn a flywheel when he blew a chord on a harmonica. He could stop it by blowing a sour note. He claimed that this power was all around, but that it was easiest to get it out of water. He claimed that a pint of his charged water would run a train from Philadelphia to New York and back and only cost a tenth as much as coal."

The inventor folded his arms across his chest and looked grimly at Colonel Dower. "I see. Go on."

"Well, he got some wealthy men interested. A lot of them invested money-big money-in the Keely Motor Company. Every so often, he'd bring them down to his lab and show them what progress he was making and then tell them how much more money he needed. He always got them to shell out, and he was living pretty high on the hog. He kept at it for years. Finally, in the late nineties, The Scientific American exposed the whole hoax. Keely died, and his lab was given a thorough going over. It turned out that all his marvelous machines were run by compressed air cleverly channeled through the floor and the legs of tables."

"I see," repeated the inventor, narrowing his eyes. "And I suppose my invention is run by compressed air?"

"I didn't say your invention was a phony," Colonel Dower said placatingly. "I merely mentioned the Keely Motor to show you why we want to test it out somewhere away from your laboratory. Are you willing to go?"

"Any time you are, colonel."

A week or so later, they went out into the Mojave and set up the test. The suitcase—

* * * *

"...The suitcase," said the colonel, "was connected up to a hundred hundred-watt light bulbs. He let the thing run for ten hours before he shut it off." He chuckled. "He never would let us look into that suitcase. Naturally, we wouldn't buy a pig in a poke, as the saying goes. We told him that any time we could be allowed to look at his invention, we'd be glad to see him again. He left in a huff, and that was the last we

saw of him."

"How do you explain," Thorn said carefully, "the fact that his suitcase did run all those lights?"

The colonel chuckled again. "Hell, we had that figured out. He just had a battery of some kind in the suitcase. No fancy gimmick for deriving power from perpetual motion or anything like that. Nope. Just a battery, that's all."

Captain Dean Lacey was grinning hugely.

Thorn said: "Tell me, colonel-what was this fellow's name?"

"Oh, I don't recall. Big, blond chap. Had a Swedish name-or maybe Norwegian. Sanderson? No. Something like that, though."

"Sorensen?" Thorn asked.

"That's it! Sorensen! Do you know him?"

"We've done business with him," said Thorn dryly.

"He didn't palm his phony machine off on you, did he?" the colonel asked with a light laugh.

"No, no," Thorn said. "Nobody sold us a battery disguised as a perpetual motion device. Our relations with him have been quite profitable, thank you."

"I'd say you still ought to watch him," said Colonel Dower. "Once a con man, always a con man, is my belief."

Captain Lacey rubbed his hands together. "Ed, tell me something. Didn't it ever occur to you that a battery which would do all that-a battery which would hold a hundred kilowatt-hours of energy in a suitcase would be worth the million he was asking for it?"

Colonel Dower looked startled. "Why ... why, no. The man was obviously a phony. He wouldn't tell us what the power source was. He—" Colonel Dower stopped. Then he set his jaw and went on. "Besides, if it were a battery, why didn't he say so? A phony like that shouldn't be—" He stopped again, looking at the naval officer.

Lacey was still grinning. "We have discovered, Ed," he said in an almost sweet voice, "that Sorensen's battery will run a submarine."

"With all due respect to your rank and ability, captain," Thorn said, "I have a feeling that you'd have been skeptical about any such story, too."

"Oh, I'll admit that," Lacey said. "But I still would have been impressed by the performance." Then he looked thoughtful. "But I must admit that it lowers my opinion of your inventor to hear that he tells all these cock-and-bull stories. Why not just come out with the truth?"

"Evidently he'd learned something," Thorn said. "Let me tell you what happened after the contracts had been signed—"

* * * *

...The contracts had been signed after a week of negotiation. Thorn was, he admitted to himself, a little nervous. As soon as he had seen the test out on Salt Flats, he had realized that Sorensen had developed a battery that was worth every cent he had asked for it. Thorn himself had pushed for the negotiations to get them through without too much friction. A million bucks was a lot of loot, but there was no chance of losing it, really. As Sorensen said, the contract did not call for the delivery of a specific device, it called for a device that would produce specific results. If Sorensen's device didn't produce those results, or if they couldn't be duplicated by Thorn after having had the device explained to him, then the contract wasn't fulfilled, and the ambitious Mr. Sorensen wouldn't get any million dollars.

Now the time had come to see what was inside that mysterious Little Black Suitcase. Sorensen had obligingly brought the suitcase to the main testing and development laboratory of North American Carbide & Metals.

Sorensen put it on the lab table, but he didn't open it right away. "Now I want you to understand, Mr. Thorn," he began, "that I, myself, don't exactly know how this thing works. That is, I don't completely understand what's going on inside there. I've built several of them, and I can show you how to build them, but that doesn't mean I understand them completely."

"That's not unusual in battery work," Thorn said. "We don't completely understand what's going on in a lot of cells. As long as the thing works according to the specifications in the contract, we'll be satisfied."

"All right. Fine. But you're going to be surprised when you see what's in here."

"I probably will. I've been expecting a surprise," Thorn said.

What he got was a real surprise.

There was a small pressure tank of hydrogen inside-one of the little ones that are sometimes used to fill toy balloons. There was a small batch of electronic circuitry that looked as though it might be the insides of an FM-AM radio.

All of the rest of the space was taken up by batteries.

And every single one of the cells was a familiar little cannister. They were small, rechargeable nickel-cadmium cells, and every one bore the trademark of North American Carbide & Metals!

One of the other men in the lab said: "What kind of a joke is this?"

"Do you mean, Mr. Sorensen," Thorn asked with controlled precision, "that your million-dollar process is merely some kind of gimmickry with our own batteries?"

"No," said Sorensen. "It's—"

"Wait a minute," said one of the others, "is it some kind of hydrogen fuel cell?"

"In a way," Sorensen said. "Yes, in a way. It isn't as efficient as I'd like, but it gets its power by converting hydrogen to helium. I need those batteries to start the thing. After it gets going, these leads here from the reactor cell keep the batteries charged. The—"

He was interrupted by five different voices all trying to speak at once. He could hardly—

* * * *

"...He could hardly get a word in edgewise at first," said Thorn. He was enjoying the look of shocked amazement on Colonel Dower's face. "When Sorensen finally did get it explained, we still didn't know much. But we built another one, and it worked as well as the one he had. And the contract didn't specifically call for a battery. He had us good, he did."

"Now wait—" Colonel Dower said. "You mean to say it wasn't a battery after all?"

"Of course not."

"Then why all the folderol?"

"Colonel," Thorn said, "Sorensen patented that device nine years ago. It only has eight years to run. But he couldn't get anyone at all to believe that it would do what he said it would do. After years of beating his head against a stone wall, years of trying to convince people who wouldn't even look twice at his gadget, he decided to get smart.

"He began to realize that 'everybody knew' that hydrogen fusion wasn't that simple. It was his theory that no one would listen to. As soon as he told anyone that he had a hydrogen fusion device that could be started with a handful of batteries and could be packed into a suitcase, he was instantly dismissed as a nut.

"I did a little investigating after he gave us the full information on what he had done. (Incidentally, he signed over the patent to us, which was more than the contract called for, in return for a job with our outfit, so that he could help develop the fusion device.)

"As I said, he finally got smart. If the theory was what was making people give him the cold shoulder, he'd tell them nothing.

"You know the results of that, Colonel Dower. At least he got somebody to test the machine. He managed to get somebody to look at what it would do.

"But that wasn't enough. He didn't have, apparently, any legitimate excuse for keeping it under wraps that way, so everyone was suspicious."

"But why tell you it was a battery?" asked Captain Lacey.

"That was probably suggested by Colonel Dower's reaction to the tests he saw," Thorn said. "Somebody-I think it was George Gamow, but I'm not certain-once said that just having a theory isn't enough; the theory has to make sense.

"Well, Sorensen's theory of hydrogen fusion producing electric current didn't make sense. It was true, but it didn't make sense.

"So he came up with a theory that did make sense. If everyone wanted to think it was 'nothing but a battery', then, by Heaven, he'd sell it as a battery. And that, gentlemen, was a theory we were perfectly willing to believe. It wasn't true, but it did make sense.

"As far as I was concerned, it was perfectly natural for a man who had invented a new type of battery to keep it under wraps that way.

"Naturally, after we had invested a million dollars in the thing, we had to investigate it. It worked, and we had to find out why and how."

"Naturally," said Colonel Dower, looking somewhat uncomfortable. "I presume this is all under wraps, eh? What about the Russians? Couldn't they get hold of the patent papers?"

"They could have," Thorn admitted, "but they didn't. They dismissed him as a crackpot, too, if they heard about him at all. Certainly they never requested a copy of his patent. The patent number is now top secret, of course, and if anyone does write in for a copy, the Patent Office will reply that there are temporarily no copies available. And the FBI will find out who is making the request."

"Well," said Colonel Dower, "at least I'm glad to hear that I was not the only one who didn't believe him."

Captain Lacey chuckled. "And Mr. Thorn here believed a lie."

"Only because it made more sense than the truth," Thorn said. "And," he added, "you shouldn't laugh, captain. Remember, we suckered the Navy in almost the same way."

THE END

---