

The Immortality Seekers

John W. Campbell

I

THE SECOND METAL

TED PENTON, of the team of Penton and Blake, regarded his companion, Rod Blake, and grinned. In the great audience hall below, twelve hundred of Callisto's scientists were assembling to hear the message of the visitors from space.

"Plenty has happened to us since Earth kicked us out for taking off some of the three hundred square miles of territory spang in the center of Europe in an atomic explosion. It's their own fault if they can't find us—outlawing research on atomic[^]power. It was obvious when we developed atomic power that we'd be the first men to reach the other planets. And nobody can follow to bring us back unless they accepted the hated atomic power and used it."

"One," interrupted Rod Blake, ticking it off on his finger.

"I learned the Martian language under the able, if painful, hypnotic teaching of a Martian master, old Loshtu. Two," -a second finger-"I learned the Lanoor language on Ganymede by your hypnotic teaching. Yo" are not a master of Martian telepathy, and it was more racking. There, we are now on Callisto and I may be blown to the nine planets and twenty-odd moons of the Solar System before I let you teach me this language that way.

"Look at the scraps we've picked up for ourselves so far: an hour after we landed on Mars we were trying desperately to get away from Mars and their damned inhabitants, the thushol. Then we went to Ganymede, battled their glorious shleath and Lanoor, and got evicted. I won't go through that headache I always collect from learning a language via your hypnotism system if we are going to be here on Callisto a year or so. I can pick up the language normally in that time; so no hypnotism. Got it?"

Penton smiled beatifically.

"The Callistans will want a speech from you at that conference that is so swiftly assembling. Just because we've had bad luck on those last two trips-"

"If you think those Lanoor that were chasing us meant no more than bad luck when we left Ganymede, why did you exhibit such surprising speed? Me, with two sound legs, and I had all that I could do to keep up with a wounded one. They weren't wishing us bad luck; they were wishing to elongate the vertebrae connecting my cranium with the rest of me, or I'm badly mistaken. Very peevish about it, too."

"H-m-m, mildly so. But then, you must admit those shleath were enough to make anyone peevish," Penton pointed out judicially.

"No fault of ours. We were asked to overthrow the Sha-loor overlords, which we did. They should have had sense enough to keep those fifty-foot amoebas in check after that I'd have suggested turning that courtyard where they were into a sulphuric acid swimming pool, myself."

"No fault of ours, perhaps, but they wanted someone to blame, and we were handy. If the shleath had had the

decency to stay fifty-foot size something could be done. But now they are peeping their particularly unpleasant slime out of every rat-hole, crack and crevice in the whole city. Personally, I don't see what the Lanoor are going to do about it. The only cure I could see was to burn down the whole city-ray it out of existence. The damned things can go anywhere, through the tiniest crack; worst of all, no animal can fight them, they Just digest it."

Blake was staring down through the ornamental grille that separated their room from the great audience hall below. It was almost filled up.

"By the way, Penton, what are you going to tell that Callistan assembly?"

"Various things," Penton sighed. "I'll have to figure it out as I go along. I had a chance to talk with Tha Lagth, the old commander who brought us here, for only about five minutes. They have automobiles-we rode in one; wing-flapping, flying machines-we watched them as we came down in our spaceship. But what else they have, I can't make out. I know they don't have fire, since no normal fuel will burn in this atmosphere, so I brought some things to amuse them." Penton pulled some loose, metal scraps from a pouch he wore, and a small bottle filled with sticks of yellowish wax and a watery liquid.

"White phosphorous for one," guessed Blake, "but the metal has me stopped. Oh-magnesium. Yes, that would burn anywhere."

"Some of them may have seen a flame in a laboratory, under special lab conditions, but I don't think they saw any in open air. They do have ships-we saw them in the harbor down there-can see them now for that matter. Say, they must all be motor ships, but I wonder what kind of motors they use? This air wouldn't let even a Diesel engine run. Electric-but how do they generate power?"

"Anyway, that's the trouble. I want to find out what they know before I go spreading all my cards. Somehow, we have to stay here long enough to get a stock of edible food. I wish we hadn't been so bright, moving all the stuff from

the ship into that apartment our friend P'holkuun gave us back on Ganymede."

"Yes," Blake said ironically, "oh Ambassador Plenipotentiary of Earth. How in the name of the wavering worlds will you support that claim?"

"Well"-his friend grinned-"Earth gave us a royal send-off the last time we visited-all the big guns firing in our honor."

"Probably it was an accident they left the shells in when they fired 'em," Blake grunted. "I suppose you are playing on the fact that they can't check up on you?"

"But more immediately important, how about these Cal-listans? You swore up and down that they were ari honest, gentlemanly race. But how sure are you?"

Penton nodded toward the closet on one side of the room, where the shimmery bulk of his spacesuit hung.

"I discarded that suit. They don't understand mental telepathy any more than we did before the Martians gave us practical lessons-even if unpleasant ones. They can't mask their thoughts, therefore, and I know what sort of ideas old Tha Lagth had while meeting us and bringing us here. He's a nice, old fellow, and all that brusque, efficient, military air of his was due to the fact that he was half scared of doing the wrong thing.

"What is the proper formula for greeting the first ambassador of an alien planet? Who should attend to it? Using uncommon good sense, the old fellow figured visitors from a foreign world called for the whole constellation of scientists instead of politicians. More power to him. The premier will undoubtedly horn in, but I thank Tha Lagth for his kindly thoughts."

"I don't mind your discarding the spacesuits," Blake objected, "half so much as I regret that the only holsters we had for the UV guns and the disintegrator pistols were part of the spacesuits. I just like that nice, rhythmic, bump-bump-bump of a dis gun when I am on planets unknown. It makes me feel very much as though I really owned the

place. Which isn't so far from the truth when you have one of those ray guns on tap."

Penton shrugged.

"A dis gun puts that potential ownership in the realm of academic questions. If you have to prove it,

there is nothing but dust left to own when you reach the Q.E.D. stage. Anyway, prepare to meet the assembled bright-lights of the Cal-listans intellectual world. Here comes Tha Lagth."

Blake turned with a sigh.

"I'm glad you'll have to do all the talking as Earth's ambassador. But look, can't you do that thought-projecting stunt so I can follow, even if-"

"Even if you won't take the trouble to learn the language?" Penton grinned. "I suppose I'll have to."

"Welcome, Tha Lagth," said Penton, smoothly shifting into Callistan. "The scientists are assembled?"

"Yes, Earthmen. If you are ready-" The old warrior looked at them with friendly dignity.

Seated before that audience of twelve hundred Callistans, they found Penton's guess confirmed. The premier was an unusually tall man, even among the eight-foot Callistans, with gray-white hair and a jet-black beard clipped in a style strongly reminiscent of the ancient Assyrian custom.

He was pointing out the immense importance of this occasion-historic moment-two world's civilizations-the benefits of both. The director of the Sharl Technical University rose and explained the historic moment-two world's sciences- the benefits of both. Starn Druth, the most eminent scientist of Callisto, walked slowly up to the platform, an old, shaky man, his skin wrinkled with advanced age. But his speech was sharp, clever, and avoided the obvious. Penton listened with interest, and realized that the old body carried a keen, youthful mind.

Starn Druth remarked that inevitably the available supplies of chemical elements on two worlds would differ in important, perhaps vital, ways.

"There is," he pointed out, "an element which theory has

shown to be of immense importance. It exists in small quantities in the sun, but has never been found here, to our regret. Our planet is light, and has lost nearly all the hydrogen, the helium and the other light atoms it originally had when the worlds cooled from creation. The heavier worlds may well have retained these elements in small but available quantities. This-

At the back of the huge hall, a man stumbled in, a man in the green-blue uniform of the Air Force. He was panting for breath, wildly excited. Despite the efforts of the attendants who rose to stop him, he ran down the aisle shouting.

Tha Lagth rose to his feet and stepped forward sharply.

"Halt!" he roared. "What is the reason for this intrusion?"

"Commander-Commander-the ship. Their ship is made of the Second Metal!"

With a single, mighty roar, the assembly came to its feet. Tha Lagth stopped abruptly, and looked to old Starn Druth. The scientist stared in sudden triumph at his colleagues.

"I said it! The heavy world retained the Second Metal!" But no one heard his-voice in the clamorous shouting. Tha Lagth had taken up the gavel, and was pounding vigorously at the resonator on his desk. Slowly its sharp, piercing note struck out through the babble to quiet the hundreds of Cal-listans.

Gradually they relaxed in their seats.

"Now, messenger," said Tha Lagth at length, "what was found?"

"A micro-sample was scraped from the hull of the stranger's ship, and analysis performed. The chief components detected were , copper, cobalt, aluminum and magnesium. The bulk of the material definitely did not answer to any known test. The analysts took a second specimen and made spectroscopic tests. The scientists reported that it was definitely identified as the Second Metal. Eighty percent of the metal of the ship's hull-hundreds of tons-is the nonexistent metal!"

Starn Druth muttered something under his breath, his bright old eyes fixed on Tha Lagth. Then he spoke.

"I suggest that I explain to these strangers the importance

of this Second Metal to us." He looked toward Penton eagerly.

"Most of our industry and science has been based on the study of life, bio-chemistry. Within recent years, we have learned to synthesize life-forms from inorganic elements; we make living cells, and design them for certain functions. Gradually we have developed many different types of synthetic life-forms that supply us with food, and do our work.

"But by theoretical calculations it has been shown that the greatest triumph of all, intelligent micro-life, can be produced in only one way; we know the needed combinations of elements, of amino acids and carbohydrates. Many times we have gathered these things and put them together in the proper way, but the stimulating spark has not appeared. We lack the one thing which will start that life working.

"The lower forms of life we have used have been stirred from inorganic immobility to life by the flashing of the rays of radium. To procure more intelligent forms, even more powerful rays are needed, and some of our best results have been attained by the aid of immense X-ray tubes operating at nearly ten million volts. But to create the ultimate ideal, intelligent, obedient, microscopic life, we must have rays emanating from a fifteen billion volt source! Rays of a particular type.

"Our atomic theorists have proven that in all Universe, only one thing can supply just that ray; the disintegration of the atoms of the Second Metal."

Penton nodded slowly. "Huh. Beryllium. And we made the ship out of that. It's such a light element it probably all boiled away while your planet was cooling. It's enormously rare, even on Earth."

"We need it," Starn Druth explained softly, "because with intelligent, obedient life-forms of microscopic size, we can become immortal."

Penton started. "Immortality-how?"

"By directing those life-forms to make the repairs our bodies need, by ordering them to destroy malignant growths, by injecting billions of obedient defenders when infection

threatens. Our bodies naturally have certain forms of defending cells, but they act instinctively. Malignant tumors-cancer-they do not attack, because that is a growth of the body they defend. No instinct warns them. We cannot summon them to the attack when infection begins but must wait until their sluggish instinct at last warns them. With the synthetic life we know how to make, we can guarantee ourselves immunity to all disease, injury, or senile decline."

Penton looked at Starn Druth thoughtfully a moment. His racing thoughts sized up a situation that was rapidly becoming more than warm; the only beryllium on the planet was their ship. Penton and Blake were not wanted back on Earth, where further beryllium could be obtained.

It might be two years before their friends on Earth finally succeeded in convincing the government of Earth that the outlawed and vastly feared atomic motor would not blow up to destroy the planet-

"There are scattered, minute amounts of beryllium on Earth. In return for the knowledge of your technique of creating these intelligent forms of micro-life, I am sure that Earth can supply you with sufficient beryllium within one year."

Starn Druth looked toward him quizzically.

"We need beryllium within one month. Your ship could make the round trip very readily in that time."

"But beryllium is excessively rare-you know that. So finely scattered among so much rock-"

A scientist rose haltingly from the floor of the assembly.

"The beryllium atom, according to our calculations," he said, "would not blend in with ordinary rocks. Even when very rare, it should occur in small, but concentrated deposits. It is insoluble, and hence would not disperse."

Penton looked at him unhappily. Callistan science was most unfortunately advanced; the man was 100 percent right. "The ore is so rare," lied Penton, "that some of our most precious jewels are made of it. Emeralds-sapphires. It was only because the metal has the property of stopping

certain rays in space that we were forced to use the extremely expensive material-" Penton suggested hopefully.

It didn't go over. They might never have seen the metal, but they evidently knew plenty about its properties.

"Diamond is a rare form of a common element; certain of our jewels are a rare crystalline of aluminum oxide, a common material," said Starn Druth uneasily. "Beryllium is opaque to no known radiation, save ordinary light. What are these space-rays?" He looked toward Penton with an evident feeling that something was being concealed.

"If we return at once," said Penton finally, "I can assure you a sufficient supply, a ton or more, of beryllium within one year of my planet."

"If we use the metal of your spaceship," suggested Starn Druth softly, "we could arrange to have certain of the intelligent micro-life cells made to suit your body-chemistry. Both of you would be assured immortality. There would be much for you to learn here, and eventually we could duplicate your ship."

II

IMPERMANENT RESIDENCE

"THAT," explained Penton ironically, nodding toward the four, eight-foot Callistans pacing the corridors

from their room, "is a guard of honor. By no means let it be thought that they are warders of our confinement."

Blake looked at them morosely. "Shut up! This is one world we haven't been kicked out of yet. And is our ship guarded! The Lagth ordered only four rows of guards to surround it, while the scientists worked out refining methods. I wish they had put us back in that room where we first were. Our spacesuits are there."

"Man, those Callistans have heads on them. They knew more about; a metal they had never seen than I, who had built a ship of it. There was not a chance that they would forget and put us in with those suits again."

"When does it get dark here?" asked Blake suddenly. "From the looks of those shadows on the orange lawn out there, the sun hasn't moved an inch since we arrived here six hours ago."

"An inch, maybe. But not much more," Penton sighed. "This satellite always faces Jupiter with the same side, like Luna facing Earth. It takes sixteen days to go around, so it will be sixteen days before that blasted sun sets. No chance of waiting for night."

"Sixteen days? It wasn't dawn when we landed," Blake protested.

"Oh, bother, you figure it out. I count on my fingers and when I have rheumatism I make mistakes," Penton growled. "Man, next time when somebody wants something I say, 'Yes, sir. Right away, sir. You want the sun on your front steps? Oh, certainly. Just a moment.' I might have known that they wouldn't be in the mood for waiting. Reasonable enough. Old Starn Druth doesn't consider it advisable to wait a year or so while we get beryllium, and six months while they make and test that life-cell.

"Their president is just as old, and naturally most of the people that run the place are getting old, so it's not really remarkable that they want that beryllium in a hurry. If they can hold off for six months they live centuries more. If they die within that time-they lose immortality!"

"Somehow you don't seem interested in their offer of immortality yourself."

Penton looked at his friend.

"Do you think that anybody can figure out the entire life chemistry of a foreign life-form in a year, or ten years? They've studied their own for centuries, and now they don't know enough to control it, without invoking trick life forms. They don't know their own chemistry, and with no experimental animals to work on, they wouldn't know ours in less time than it took them to learn their own. They know damn well we are here to stay, because they can't do large-scale metal work. I learned that from Starn Druth while he was

thinking the problem over. All their major works are stone or wood, or plastics like bakelite.

"No fire except in laboratory lots; their electricity is derived from some sort of primary battery, since they don't have fires or steam engines, and their gravity is too light for hydro power in quantity. It'd take them fifty years, under our direction, to build up a smelting and refining industry even based on atomic power. They'd have to start from scratch."

"I have an overwhelming desire to go home," Blake commented. "How are we going to do it, though?"

"There is no use waiting for night. They have their guards planted, but not thoroughly worked out yet, so I've sort of an idea that if we just bounce out faster than they put us in, we'll catch them unprepared. Also, if we wait a few days here, there won't be enough of our ship left to worry about. Did you get the layout of the city?"

"Yes. It's a harbor city on an inland sea, more of a huge salt lake. The harbor is something like San Francisco on a miniature scale. Shaped like a Greek capital omega. We're on the left headland, in the governmental buildings, surrounded by nice, broad, orange parks. We'd be as conspicuous as a pair of zebras walking down Fifth Avenue arm in arm. The ship's at the airport on the opposite headland. The only way I can see to get there is to cross those parks, with their bright orange grass, in full daylight, and somehow get among those warehouses and docks along the waterfront.

"From there, we'd have to steal a car, and somehow get over to the port. Then we have to convince four lines of guardsmen that it's either bedtime, and they are sound asleep, or that we are just part of the scenery."

"It would help if their grass weren't quite such a vivid shade, or if we had orange clothes."

"God forbid; me in orange pants!"

"It's a good plan, Blake, only you need some details. Also, those swords the guards are wearing have such unpleasant

waves in the edge. They look as though the genius who designed 'em had an evil disposition."

"Huh. They have compressed air guns, too."

Penton looked thoughtfully down the hallway. Two guards cluttered up the doorway, conversing interestedly. Beryllium was big news, of course. Further down the corridor, two more were equally interested in the possibility of immortality. But they were very much awake.

"You know, my friend, I wonder what these birds would do if-" Penton went through his pockets and the pouch he was still wearing. He felt his flashlight, powered by a miniature atomic disintegrator. Too miniature to do any real damage. Two packs of cigarettes that wouldn't burn in this atmosphere, which was rich in carbon dioxide and nitrogen, but too poor in oxygen to support combustion came into view. Soap, water softener, odds and ends, some pieces of magnesium scrap, and finally a small bottle of waxy, white phosphorus. "We can but try," he sighed at last.

In full view of the guards, he sat down in the middle of the room. From the flashlight, he removed the lens, the bulb, and the reflector, baring the copper contacts. From the bottle of phosphorus he removed three white sticks. Then he built up a little pile of magnesium metal on the stone flooring.

The guards had stopped talking, and were watching him uneasily. Penton had found a length of copper wire in his pocket and Blake produced another. Rapidly Penton attached them to the contacts of the flashlight, so that they extended out about three feet, a supply wand of insulated copper wire, ending in two bare bits of metal. These he wrapped around two magnesium metal nuts he found. Briefly he pressed the button of the flashlight. The magnesium nuts flared magnificently for an instant, then died as the current was broken.

The guards were drawing closer, their swords unsheathed, but looking uncertain of themselves. "Huh." Penton nodded slowly. "They are trying to make it out. Never saw an electric arc, or fire. This, I think,

will be fun." He wrapped a bit of the phosphorus in a scrap of copper wire. Again the

atomic flash sent a burst of flame between the contacts. This time the phosphorus came away flaring red, while an enormous cloud of dense, dirty-white smoke rolled out.

Penton and Blake slapped handkerchiefs across their noses, and ran to the water-jar on one side of the room. In a moment the room was filled with one of the most impenetrably dense, white clouds known to man.

Penton sumbled his way through the whiteness, with the protecting mask across his mouth. Outside the room, the guards were calling; inside, one was choking, coughing, and upsetting the furniture. Penton bent over his pile of magnesium metal, and a moment later a terrific flare of blue-white light glared through the enveloping pall of phosphorus pentoxide smoke. The magnesium was burning beautifully. It made a perfect camouflage.

Sixty seconds later they moved rapidly down the silent corridor; far away, around many bends, they heard the shouts of alarmed guards.

"How the blazes do you fire these pop-guns?" demanded Blake, inspecting hastily his captured weapon.

"That stud there-it isn't a nut; it's a trigger." Penton coughed and swore. "That nose mask wasn't any too effective. And my mouth is beginning to itch from the acid."

They dodged down side corridors, past doors from which bewildered Callistans appeared, to be hurled out of the path of the two Terrestrials, muscled for a far heavier world. A door appeared at the side of a corridor, and Penton halted abruptly. He caught Blake, and looked at the lettering on the door a moment.

"Damn. Wish I'd learned their writing more consciously- I think that means exit." They tried it. At their feet, a corridor slanted downward, spiraling off to the right, and down. The steep slant made running dangerous; the thin air made running difficult.

Spaced lights gave the only illumination, doors appearing occasionally gave the only indication of altitude. Down-down till one of the doors burst open, and a troop of guardsmen faced them in blank surprise. The flashlight suddenly

flared with the incredible brilliance of burning magnesium, and Penton charged at the group. Blake's air gun soughed softly three times, then failed as the supply of compressed air gave out.

Stumbling over each other, the guards retreated from the weirdly flaming death Penton so evidently carried; some deadly radiation known only to these beings of another world, -no doubt- The Terrestrials followed their fleeing footsteps, but turned aside at the first window. Eighty feet beneath the aperture the orange lawn swaled off toward the shabby docks and warehouses.

"Let's go," said Penton. "We can stand an eighty foot drop-I hope."

III PIPELINE

THEY STOOD STILL, panting, two minutes later, lost in a maze of crated, baled goods, as the platoon of guards thundered across the broad lawn after them, running in great strides behind the Earthmen's crazy leaps. The masses of goods imported from unknown ports of this strange sea piled about them in an ordered confusion. Somewhere workmen were shouting, calling to the guards as Blake scurried

around a great heap of crated fruit of some kind. Each crate was fully six feet square, and he halted abruptly.

"Penton, we need a residence. Catch hold." Blake swung at one of the bulky crates; it lifted easily to his Earth-strength. Five minutes later the guards deployed through the building, seeking, shouting, ordering. In a four-foot by six closet, completely surrounded by the friendly and uncommunicative fruit, Penton grinned thoughtfully.

"Here we are, hidden in this crate, walled in on every side by provisions, and with somewhat collapsed gastric regions, yet not taking advantage of the situation. Shall we eat?"

Blake looked at the fruit in the surrounding crates. They were about the size of lemons, with a horny-looking shell of bright purple with yellow-green spots.

"I don't know. I'm sensitive to color, and if they taste anything like they look, we'll be most remarkably ill."

"I'm not affected by color, but I am affected by food. They smell good, so I'll experiment. The soldiers seem to have missed us." Penton opened his pouch, and pawed through its contents. "Soap-I'm a cleanly individual but-say, it will grease the knife, though, whep we cut this wood. Borax water softener-no help. Another scrap of magnesium-ah, here we are. The knife."

Carefully soaping the blade, he cut at the soft wood of the crate. Presently he had an opening large enough to admit his fingers, and a moment later gently extracted one of the weird looking things. Cautiously he wiped the remaining soap from the knife blade, and attacked the horny coating. It was thin, and almost at once gave way, to allow a dark, purplish jelly to ooze forth. Skeptically Penton tested a bit of it on the point of his knife, tasted a larger amount, and smiled approval.

"Hm-m," said Blake, sampling Penton's offering. "Quite fairish. Have you any knowledge, plucked from Tha Lagth's mind as to-"

Abruptly there was a frantic scratching at the case near them, and a thunderbolt of peculiarly active flesh forced its way inward. Frantically Penton and Blake backed away in their tiny closet, beating at the furry thing half seen in the dimness. The creature, whatever it was, made a terrific leap at Penton, gripped, and sank its teeth with an unpleasant grating sound of power into the folds of the pouch he was carrying, tearing the tough fabric open instantly, to release a tinkling deluge of miscellaneous items onto the floor.

Instantly it forgot all about the men to paw frantically, with little whimpering sounds, among the wreckage. With an air of supreme triumph it came up with a small, square package, which it immediately crushed between its teeth,

to consume with every evidence of the most complete satisfaction.

"My god-that was borax!" gasped Penton. "That's going to be one sick animal in a sweet short time."

Paper and package vanished as the animal gulped heavily once. Its dimly seen head turned, and gleaming, violet eyes looked up at Penton.

"Borax," it remarked pleasantly, very happily in fact. The word echoed clearly, precisely in Penton's mind, in Blake's mind, too.

Penton sat down heavily. Blake looked blankly at the animal, now sufficiently motionless for observation. It was long, two feet long. It was low, not more than six inches at the shoulder, and it had a doglike head, with rather friendly, violet eyes. But it had six short, stubby legs, each armed with four sharp claws. It was smiling, more or less, in a friendly sort of way, and displaying a set of teeth that started with glistening, grayish fangs, almost metallic in their luster, and ranged backward to a group of opposed molars as broad as a man's thumb-nail. It had a soft, gray-brown coat of fur, and a long, gently wagging tail.

"More borax?" it amended.

"I think," said Blake faintly, "that it likes borax, hard as that may be to believe. In fact, I think it's a mind-reading, broadcasting pooch that came because it smelled our borax."

"Like borax," mentally agreed the animal, wagging a friendly tail.

"It looks like the result of mixing a d.t.'s nightmare with a dachshund," Penton decided. "I'm glad, at least, that it doesn't like me."

"Like you," insisted the animal. "Gkrthps likes you . . . More borax?" The mental impressions were somewhat slurred, accented, so to speak, as the utterances of a parrot are accented by the peculiar limitations of the parrot's anatomy.

"Gk-anyway, that must be its name," Blake said. "I think we had better call it Pipeline. With all those legs, tails and heads sticking out of that unnecessarily elongated body, I think it resembles a complete network of pipes," Penton

sighed. "I think-and hope-that it means it approves of me in a personal way; that is, that its liking for me and its appreciation of borax differ fundamentally. Anyway, it looks friendly."

"More borax?" telepathized the animal plaintively.

"No, Pipeline, not here. You'll have to visit us some day when we get back to the ship. There is about fifty pounds of it there."

Pipeline almost danced.

"Visit the ship . . . Go back to the ship."

"Hm-m, we'd like to, too, but can't just now. Say, Penton, how far do you think this creature's mental impressions reach out? Is he broadcasting our conferences here like an animated telepathic microphone? Did the Callistans send him here for that purpose?"

"Not far. I was just becoming aware of a sensation of a pleasant odor, which must have been, actually, my picking up his thoughts as he caught the scent of borax-sweet satellites, what a delicacy for any animal-when he burst in here. It doesn't radiate far. But-I have a suspicion it has a memory."

"Memory," agreed Pipeline proudly. "Remember, they must be in here . . . Watch the exits . . . No, guard the ship . . . You're a fool, watch the exits . . . You're an infernal, insubordinate, unripe idiot . . . You're a blistering under-captain, trying to tell a general his duty . . . Get out of here before I stamp my initials permanently in your liver . . . Watch the ship, you blithering, blasting, blowing, brainless aberration! What did they escape for? . . . They want the ship . . . Go to the ship, visit the ship. Borax-more

borax-visit the ship . . . They went to the ship, so why hunt the city-they'll go to the ship . . . Watch the ship."

Blake sighed.

"Disconnected, perhaps," he said, leaning back against a crate, "but intelligent. Highly intelligent. You are a remarkable animal, Pipeline, and you get a full pound of borax for that, the minute we reach the ship, though what you want it for, and how you live on it beats me. You seem to have a

remarkable faculty for phonographic-or telepathic-recording."

He turned aside to Penton.

"I think I know how Pipeline works. His mind, I mean. Whenever we think of something, he broadcasts all he has ever heard pertaining to that subject. He's like an intelligent phonograph record-doesn't know where to stop or begin."

"Live on borax," chortled Pipeline pleasantly. "Borax necessary for this peculiar form of life ... This specimen I have obtained from the watchman of a local warehouse, who reports that it was given to him, together with its mate, by a sailor returning from Stakquerl . . . The dissections have demonstrated the remarkable anatomy of this beast, which, unlike other life-forms, bases its fundamental life chemistry on fifty pounds of borax in the ship.

"This type of life occurs in only that one region of our planet, and is quite common there, being represented by a complete type of evolution. This is its highest representative, capable of receiving telepathic impressions direct from the mind of one man, and regenerating those thoughts in the mind of another, while only to a very limited extent understanding the material so repeated . . . It's a mind-reading, broadcasting pooch that came because it smelled borax . . . More borax?"

"Man, what a college education you got somewhere, even if you did get it a little mixed up. So you have a girlfriend, eh?"

"Girlfriend of my own." Pipeline sat down suddenly with the last two sets of legs, and stood up in front. Then lugubriously the animal lay down with the front legs, and stood up in back, while remaining seated in the middle. "No girlfriend of my own . . . But I have Thkrub ..."

"Oh, I begin to understand. I suspect you have it the wrong way around, Ted. This is the female of the species," Blake derided.

"Female of the species bears from fifteen to fifty young at a time; the mating season is practically continuous . . . The male and female mate for life, and at practically any time

that fifty pounds of borax in the ship is available young are produced . . . The lack of more borax alone prevents this extremely fecund species from overrunning the planet . . . They have, you observe, a series of exceedingly powerful molars, capable, in fact, of crushing minerals for digestion . . . The animal is capable of ingesting and utilizing inorganic boron . . . Let's visit the ship . . . They supply their energy needs, however, from the combustion of carbon compounds, as we do, being omnivorous in this respect . . . They make highly entertaining pets where the owner can find or procure the expensive boron compounds necessary for their life."

"Brief Me history. I bet Pipeline-or is it Pipeliness-has heard that lecture a dozen times. Can you suggest

a way of turning her off?"

"Turn me off, that's it... After all these years I've slaved to help you, slaved for your children, scrimped and saved so that you could have a good time, you brute . . . Now you turn me off for some flighty, giddy-headed-more boraxP'

"No, Pipeliness, no family quarrels. You'll get borax when we get to the ship. And then only if you stay quiet until we arrive, or we ask questions. Where's your mate, Pipeliness?"

For an animal born of a small world, Pipeliness could develop speed. Penton thought this time of a male mate, and Pipeliness went to fetch him. Before either Blake or Penton could move, the animal had vanished with a soft scurry of claws.

W STRAGATH

To NEVER HAVE suspected speed like that in such short legs," said Blake softly. "Do you think she'll be back?"

"More borax," sighed Penton. "Fifty pounds of borax in the ship. Man, you couldn't lose that critter now to save you. All the repressed mother-love of the last five years or so is

probably welling up in her under-slung bosom. I image, from the lecture she just delivered, that friend watchman of the domestic difficulties can't feed her the boron she wants, and evidently she needs a sufficient supply of boron to have young. At any rate I need a supply of carbon compounds. She interrupted my eating rather abruptly."

"There seems to be enough jellyfruit here to keep any two people going. Tastes funny, doesn't it? Rather like a cross between orange juice and beef gravy, unpleasant as that sounds."

"It sounds omnivorous, but isn't," Penton objected. "I have a curious desire to consume some sort of meat food. They must have some kind of-what ho! They have. Or at least that certainly looks like a local substitute for the old, familiar of seashore, quick lunches."

Blake looked at the contents of the case Penton indicated. Like the one they had first raided, it was addressed to a wholesale grocer, but this contained some item that closely resembled a seven-inch hot dog.

"Even their hot dogs are skinny. Sort of in proportion," Blake pointed out. "The thing's only half as thick as it should be, and half again as long."

Penton was quietly carving at the boards of the case. Delicately he reached in, and pulled out one of the things. His brow furrowed in deep thought.

"I know what these darned things are, but for the life of me, I can't recall the name, nor the properties. I wasn't trying to learn foods when I read Tha Lagth's mind. Yes- they're food, all right. I remember that much-seems I remember eating them as is. Well here goes!"

Penton put a very small portion of the Callistan delicacy in his mouth, and bit on it gently. Blake stared. Abruptly, Penton's face froze in an expression of horrified surprise, his eyebrows climbed frantically to join his hair, then his eyes popped very wide open. He sat in frozen astonishment, while the right eyebrow slid slowly downward, and a slow, dawning comprehension spread over him. His hand, gripping the

strange food, gripped tighter, and he swallowed,

while his eyes closed desperately. Very slowly his Adam's apple crawled: up, took hold, and slid down his windpipe with a special delivery package for his stomach.

His eyes opened, and he looked at Blake. A beatific smile spread over his face. The remainder of the thing vanished in three large gulps. Penton sat very still for a moment, as though concentrating on inner voices of surpassing beauty. Finally he looked again at Blake.

"Remarkable," he said in a falsetto voice. "Er-eh, I mean remarkable. You must try one." He pulled forth another and handed it to Blake.

Rod Blake looked at him with deep suspicion. "Judging from the struggle you went through," he said at length, "I don't know that I'm so keen on it. Just what, my friend, was the matter with you?"

"I-I was trying to remember it. For a moment I thought I had. You see, there's a thing called stragth that is a kind of red sea worm, very poisonous; it stings. These are stragath, popularly so-called because they somewhat resemble that worm. Oh, they aren't, of course, but that's what had me scared. Try it-it's really delicious."

Blake took the thing in two fingers, very cautiously. Very cautiously, he put his teeth to a minute scrap and bit-Instantly he dropped the thing, and jumped up. It curled violently in his grip; a thin, squealing wail of anger chattered from it through his teeth. Violently the far end of it curled up to swipe forcefully against his nose. Squealing angrily, it flopped about on the floor as Blake looked at it in undisguised horror.

Smilingly, Penton reached out and pinched the far end. It lay still-and almost simultaneously disappeared as Pipe-liness darted through the crack by which she had entered before, to gobble it down in a single motion.

"More stragath?" she asked brightly. "More stragath for Thkrub?"

Behind her a somewhat larger edition scurried in, to sniff in a friendly fashion at Penton, with a wagging, silky tail.

Violet eyes in a broad, mahogany-brown head looked up at him.

"Borax," said the newcomer.

Penton fished another stragath out of the crate, and tossed it toward the animal. "I take it you are-well, Pipeline. We won't attempt that name of yours." The bit of food was caught expertly, and vanished instantly.

"Fifty pounds of borax in the ship . . . Let's visit the ship," suggested Pipeline, not to be swayed from an important purpose.

"Let's change the tune, Pipeline. We have about ten kilograms of boric acid, too."

"Ten kilograms of boric acid. Let's visit the ship." Pipeli-ness danced happily. Abruptly her nose went up, and she trotted over to the case.

"I wondered how she made those six legs work together," Blake sighed. "Every time she's moved

before, she's gone so fast they just blurred. I'm beginning to get it."

"This animal," Pipeline stated, dogmatically, following his mate, "is as are all members of this system of evolution, equipped with six pedal members . . . These six limbs are normally operated in the manner of a pacer, those on one side moving in unison . . . However, some members of the species vary this gait in almost any possible combination . . . Very good stragath."

Pipeliness sat down on her rearmost legs, on her middle legs stood up, and reached up the case with her forelegs. Long, retractile claws reached out and with an expert flip she snared a stragath. The thing shot through the air to be snapped up instantly by her mate. Five more followed in machine gun-like succession before she sent a stream toward her own swift-acting jaws.

"Efficient, Pipeliness, efficient. Could you send some our way?" suggested Penton. The animal glanced at him, her tail wagged briefly, and almost immediately Penton was bombarded by a rapid-fire stream of arriving stragath. Not quite as quick as the animals, he failed to catch all of them, and several fell to the floor. They squeaked instantly, dou-

bled themselves the instant they hit the ground with an amazing vigor. They bounced into the air to strike hollowly against the crates above. Long before they hit the floor again, Pipeline solved the difficulty by consuming them.

Pipeliness turned violet eyes on Penton.

"Penton want stragath?" she asked. There was a distinct note of reproach in her communication. Penton juggled frantically with suddenly animated stragath, while Blake grappled with two he had caught.

"What in blazes are these? Are they food or are they animals?" The angry squawling squeak of the things was mounting rapidly as they became thoroughly aroused. Blake dropped his load to the silencing, and waiting Pipeline.

"Stragath," Pipeline said, "the latest triumph of modern science. . . . These remarkable growths are developed by the magnificent cooperation of thousands of research workers. . . . I'll bet they ain't got a dozen and the damn things probably aren't fit to eat. . . . Research workers combine in the ultimately perfect proportions every item of diet needed by man. . . . Most important of all, the stragath soon to be marketed by Thrail Stran and Company will bring to you in delicious form these important elements in living, vital form. . . . These advertising humbugs make me sick. . . . I hear the damn things are alive enough so that when you jar them too much they start moving. . . . Swell time I'll have with them chasing all around that blasted blistering warehouse. . . . May be eaten as they naturally occur. . . . At low temperatures they may be kept indefinitely without spoilage since they are liviing and hence destroy all destructive molds or bacteria. . . . They won't smell anyway, maybe; well, you won't bring any of those things into my house, Grag Kuolp."

Penton sighed and sat down. He had finally succeeded in pulling Pipeliness away from the hole in the crate and had seated himself in front of it. The last of the visible stragath had been consumed, but still there was a persistent, faint squawling.

"Damn squealing, squawling brutes getting ready to pop

. . . you clumsy oaf, pick up that crate," Pipeliness commented, licking a scrap of meat from her paw.

"So that's what they are," Blake said angrily. "You might have had the decency to warn me they'd kick

my nose."

Penton started. "They're moving in the crate now." The squealing grew suddenly louder, much louder. It became a rapidly rising howl that, they realized, must be echoing through the whole, vast warehouse.

"They're over here." Somewhere outside a voice shouted. The heavy rhythmic tread of running guards drew nearer. Blake rose, looking at Penton.

"I think we'll have to go somewhere else."

Penton rose with his hands above his head. The crate overhead balanced on his hands, he suddenly heaved with all his power. The crate, bulky as it was, flew into the air to land with a tremendous crash somewhere beyond. Instantly, a terrific howling, squealing riot of sound started. Blake followed the crate with another, full of the quiescent stragath. The shock of landing broke the crate and aroused the contents.

The two Callistan dogs were incredibly active, but the stragath were ten thousand to one. In rapid succession, Pen-ton crashed open four more crates.

"That may divert them," he said mildly, watching the results take form.

Penton and Blake set out hastily, entirely obscured from the sight of approaching guards by a mad, inverted snowstorm of tens of thousands of bouncing, bounding, madly cavorting stragath. Behind them, guards stepping on the weird things were falling in the resultant slippery mess. Blithely, the Terrestrials dodged through mountainous heaps of goods, down a long lane, finally to a small locked door. In unison, they charged it, their Earth-born strength proving too great for the frame of the exit.

"They don't look as though they could possibly carry that load," said Penton, nodding toward the great lumbering trucks rolling down the broad traffic-choked artery that

paralleled the harbor and docks. Immense trucks, almost lost under the vast heaps of merchandise loading them, rumbled by on wheels seemingly impossibly fragile. "That light gravity makes heavy loads light, and hence bulky. Bulky loads, my friend, suggest loads on which we can hide remarkably well. Won't you join me?"

A huge truckload of bagged goods of some type paused momentarily in the exigencies of traffic. A moment later it started on again. Penton and Blake pulled the huge bags of some granular, sticky substance over them.

"Must you pick sticky stuff?" grunted Blake. "Wonder how-hey, for the-hey, Ted-"

"Sh-h-" his friend clapped a restraining hand over his mouth. "I told you they wouldn't be lost easily. They just jumped on the-hey, stop it, Pipeline. My face is clean- at any rate cleaner than your tongue. What happened, couldn't you hold any more stragath?"

"More borax," suggested Pipeline. "More borax for Pipeliness."

For half an hour the truck rumbled on slowly, stopped and started in the slow-moving, choked traffic. Finally the truck turned, stopped a moment while something rattled noisily near them, then started again with a smooth, soundless pull of acceleration. Abruptly, the traffic noises changed, and echoing reverberations surrounded them. A Callistan called cheerily outside, and another answered him from the

truck.

"It's all out," said Penton hastily. "This is the delivery point, I imagine. We'll have to put these fellows to sleep for a while, and go on—we're inside a building of some kind—phew! Must be some sort of chemical plant." Penton stirred, the sticky bag that had covered him moved, and he stood upright. Beside him, Blake rose simultaneously, and together they leaped to the ground. Four Callistans started at them in startled amazement—and slumped soundlessly to the ground after none-too-gentle taps.

They stood on the floor of an immense single room. Reaching up a hundred feet above them, and spread out

three hundred feet in each direction, it was as large as three football fields, under one roof. But huge as it was, it was filled with enormous wooden tanks coated inside and out with some dark plastic material.

From the tanks, thick silvery metal pipes reached up, interconnecting in a network of conduits leading across the room. Other pipes of plastic material led to each tank from a single huge reservoir at one end of the room. Somewhere, huge blowers were whistling softly.

"Where do we go from here?" asked Blake.

"Mind your step, you blithering idiot. . . . Grag Kuolp, some day you'll learn what I mean. . . . Touch one of those conduits, and by the Gods of Space, electricity will tie you in knots of a hundred unpleasant varieties. . . . Mind your step," chanted Pipeliness. "Mind your step, visit us at the fifty pounds of borax and ten kilograms of boric acid."

Penton whistled and looked into the animal's violet eyes.

"You can repeat only thoughts think near you, Pipeliness, but I take it you have an editorial ability—you repeat appropriate ones that make sense. You mean, I take it, that if we don't watch our steps, we won't visit the ship. Yes, you may be—Wavering Worlds, Blake—keep away from those metal things!" Penton was suddenly leaping up the wooden stairs that climbed the side of the nearest of the tanks.

Blake followed him swiftly, to pause as he neared the top. An overpowering odor of rank animal life assailed his nostrils; an odor, he realized suddenly, the great blowers had been dissipating near the lower levels. Faltering, he reached the edge of the tank and, not breathing the foul odor, looked down.

A titanic mass of warm, steaming flesh lay there, an immense, quivering vat of raw meat. Into it the silvery pipes plunged, dividing into ten thousand tendrils. Into it, the plastic tube fed a constant stream of frothy, bubbling liquid. From that another plastic tube drew a constant stream of putrid-smelling fluid. Nauseated, Blake stumbled away, down the wooden steps. A moment later, Penton, his face greenish in hue, followed him. But the latter immediately

started off across the great room to a small space on one side, where men had evidently been intended to work.

Blake found him staring at a clear, glassy panel, some ten by ten feet, connected with the silvery tubes and the maze of plastic tubes, fitted with dials, valves, gauges, and wheel-controls.

"By the Nine Gods of the Nine Worlds, and the multiple deities of space!" Penton breathed. "These men—Blake, my lad, do you know what that is?" Penton bent forward, looked at bars, pipes, instruments and sighed. He turned around, gaping in awe. "That, my boy, is a power house. It generates power at

about 1000 volts D.C."

"Which can, of course, be raised by the addition of further cells in series," interrupted the beast at their side. "The greatest difficulty is the size required to obtain practical amperages. . . . This can be done, however. . . . Take that animal out, if you will, Purthal. . . . That's the third time it's wandered in here. . . . It belongs in Farg Thorun's lecture room. . . . This can be done, as I was saying, now blast you, stay where you belong before I throttle you," Pipeline concluded.

Blake stared. "Electric eels-they have 'em trained!"

"No, those aren't animals-they're synthetic life made to serve the function. This is where they get the power for the electric mechanism of half the city. I imagine, for such services as electric controls, telephones, radio, telegraph.

"But look, Blake. The operator of this plant must be a well paid technician, and should, I imagine, have a private car. It must be in the building somewhere. I'll look down near the door the truck came in; you see if it's toward the back." Penton started toward the doorway as Blake trotted toward the dim-lit rear of the huge room. Pipeline and his mate looked at them uncertainly, then split, each following one of the two men.

Penton found the vehicle, a small, smooth-lined sedan-type car, parked between two of the giant, wooden tanks.

"Blake-" he called out. Faintly, from the far end of the room he heard his friend's answer.

"Rod, look over that switchboard, and figure out which are the mains lending the power out to the city, and open those switches. I wouldn't cut off the blowers, or the circulating pumps. That electric-flesh stuff might get peevd and climb out. I'll look over the car."

V

MUSCLEMOBILE

FIVE MINUTES LATER Blake found him sitting on the door ledge of the car with Pipeline before him. He looked up at Blake and shook his head. "These Callistans are the super-past-masters of the grand craft of life-molding. Take a look at the engine." Blake glanced at the car, and noted that it was evidently rear-engined. A moment later he had the hood up and was looking at the mass of mechanism.

"Looks like a six-cylinder radial type, equipped with a supercharger-but it's made out of plastics. Something like the one we rode in-and wrecked-on Ganymede."

"Huh," grunted Penton. "Almost the whole car is. It's got a metal frame, but on a fireless world metal is costly. Plastics, weight for weight, are nearly as strong. This isn't painted blue; it is blue."

"The engine isn't. It looks like green glass."

"I think I pointed out that even a Diesel couldn't work in this air? That, my boy, is not an engine. That is an animal, a nice, synthetic animal."

"Animal! A six-cylinder animal? With a gear-box and ignition system?" _

"No, six-muscle animal. The supercharger is not a supercharger; it's a blower, a mechanical lung. The fuel tank contains not gasoline, but a sugar solution. I tasted it. The ignition system, on the other hand, is made up of synthetic nervous tissue, and a few, miniature electric cells for stimulation. Muscles, my friend, don't need a high oxygen con-

centration; they repair themselves, renew themselves, and grow stronger with use.

"I didn't have time to look, but I suspect that the animal engine also has a series of synthetic kidneys to remove waste products, and probably some oil-secreting cells, like the oil glands in your elbow, to supply lubrication. Six muscles pulling on tendons connected to a slip-ring-probably made of non-poisoning silver-a metal crankshaft geared direct to the wheels. The speedometer reads to the equivalent of eighty miles an hour; about the speed of a greyhound in good training."

Blake looked thoughtfully at the streamlined vehicle.

"I wonder, would it answer to the name of Rover, do you suppose?"

"No, but it would answer to the controls, which consist of nerve tissue stimulated by small levers. The steering mechanism consists of four muscles working the front wheels." Penton sighed. "Rod, we Terrestrials never began to guess what life could be made to do. A muscle is three times as efficient as a gas engine, and so far as weight per horsepower goes-your thigh muscle weighs ten pounds, works at the wrong end of a 10 to 1 lever, and can still lift three hundred pounds. I've seen you do it. That's a pull of 3000 pounds from a ten-pound lump of watery, almost substance-less jelly." "

"But, oh, my friend, how tired that muscle can get. And it doesn't move me any eighty miles an hour-even when PTiolkun and his whole tribe were after me, and I was entreating it to do so," Blake pointed out.

"What you need is a mechanical lung with plenty of capacity, like that blower, and a plastic heart, like that centrifugal pump I noticed. The muscles of your heart work indefinitely without stopping because their blood supply is adequate. Even a gasoline engine gets tired if you stick a potato in the exhaust pipe and clog it up with waste products.

"But the important point is this: If you feel convinced you can walk faster than this thing can go, walk-I'm riding.

You can, however, do the driving, if you like. Your legs are longer, and I must admit that this was designed for an eight-footer. I'll show you the system." Penton paused a moment. Sounds were floating through the still-open door through which the truck had brought them. "Hm-m-m-I think you must have upset the traffic light system from the sound."

"There did seem to be an argument among the truck drivers as I came over here. I wondered about that. Of course, we don't mind an accident or two, but even this muscle-bound leaping Lena won't crawl over those trucks. Just how did you plan to help us make speed across the city by plugging traffic hopelessly?"

"Get in, and we'll start. I'll show you what I had in mind." Penton grinned. Pipeline and Pipeliness tumbled over Penton as he climbed in after Blake. Cautiously Blake tested the controls, a little lever running back and forth in a slot, a transverse bar that controlled direction, a single foot pedal that applied a friction brake. The car moved forward with a steady, smooth thrust as he advanced the lever in the slot.

The wheels turned, and they were driving out through the great door. Trucks, blocks of huge trucks

stood in the street, bleating feebly on high-pitched horns that echoed unhappily in the thin air. The soft whine -of the blower under them Was scarcely audible.

"You can get through with this small car where those bulky things can't-er, wiggle a muscle. Turn right when you get out of this drive, and make time."

Five small cars loaded with uniformed guards were weaving through the lines of stalled trucks, sirens howling angrily. A path was opening up slowly, with much backing, twisting and turning on the part of the trucks.

"I think I'll park," suggested Blake, pulling to the curb.

The guards rushed by them, heading, very evidently, for the power house. More guards were rushing up from the opposite direction. Several more carloads, in fact.

"Nice of them." Blake grinned, putting the car in motion

again with a smooth, soundless rush. "They've opened a path for us."

"I hoped they would." Penton nodded. "Keep-"

"Hey-Ted-" Blake slowed the car savagely, cursing bitterly. "You back-handed idiot, we're headed the wrong way. That's the Assembly Building we just got out of up there."

"I was worried for a minute. Get going. Naturally it is; how did you hope to get through four successive lines of guardsmen? Four, very alert, very thoroughly organized lines? This place here, I hope, and suspect, is not guarded. Did you happen to recall that this is the one place on the planet where they know they won't find us? And that the failure of the power plant called all the guards available at headquarters for soothing innumerable traffic snarls, and other duties.

"And do you suppose they stopped to remember that we had two ultra-violet guns and two dis-guns in those space-suits? Not so, my lad. And forty lines of alert guardsmen won't argue with four weapons like that.

"You may drop me at the window there. Sure-the fence is ornamental and made of wood-I know. I haven't yet had a chance to get out all the splinters that remind me that I didn't quite jump over it."

Blake, smiling broadly, swung the car. The light wooden fence surrounding the broad, parked lawn dissolved in a hail of flying splinters as the car shot up the rise to the white stone building, its wheels skidding on slippery, crushed grass. It paused a moment under the huge windows, twenty feet from the ground, while Penton stepped out.

Four guardsmen stepped out of a door two hundred feet away, to see Penton flying upward in a leap that brought him to the window ledge. The guards retreated before the angry charge of a half ton of automobile. Their compressed air guns sent slugs that rebounded uselessly from the tough, thick plastic of its windows.

"The most recent weapon of civil defense," stated Pipeline dogmatically, "is expected to end the reign of automobile

bandits. This vehicle, made entirely of hard metals instead of plastics, is mounted on six wheels, each

individually powered by its own motor of nine muscles. . . . Capable of a speed of nearly one hundred and fifty kilometers an hour it won't do any good. . . . Those bandits haven't got any respect for life at all and they'll probably hold up your warehouse one of these days. . . . Get up. ... I have to-"

Blake noted the cause of these remarks. It was made of metal, gray, hard metal. It had six smaller thick windows, and six large heavy wheels, under humped, bulging motors. Muscles or not, they drove the thing at a crazy pace, straight for the little car. Blake dodged desperately. The charging behemoth swerved angrily, its heavy, protruding ram held toward him steadily.

Six nine-muscled motors gave it acceleration almost equal to that of the light vehicle; a Callistan driver in a Cal-listan vehicle gave it the needed edge. Desperately Blake streaked along the wall of the building, almost in front of the heavy, armored car. Avoiding the dangerous, direct attack that Blake had hoped would pile it against the stout, stone wall, it paralleled his track, to squeeze him against the wall. Desperately he braked, hoping it would overshoot. The light car swerved, wagged almost, on slippery grass, front wheels locked far to the right. The heavier car tore through the slippery surface to gravel beneath; it held parallel to him exactly. Brakes off, and with the control at full speed ahead, the blower whined in sudden speed. The wheels slipped, gripped, and Blake's car leaped forward. Six-wheel drive gave the heavier car the edge, and only Earth-trained quickness of perception enabled Blake to reverse, slew completely around, and start madly back from the trap before the other was after him. Desperately he tore off across the lawn, glancing at the rear-vision mirror. Speed-perhaps in speed-There was an enormous black mushroom sprouting there on the lawn. Blake slowed gently and turned around. An enormous mushroom of impalpable dust, settling very slowly in even this thin air. And a huge cavity, twenty feet across

and unguessably deep where the armored car had been. Slowly Blake drove back toward the neat, round hole that had appeared in the wall of the Assembly Building. Penton climbed into the car.

"They have the telephones working again," he said cheerfully. "I don't think you did a very good job on the power plant. Here are your guns." Penton adjusted his somewhat, and put the blunt, heavily insulated muzzle against the windshield. A neat, round hole appeared, large enough to allow the gun's passage. Presently a duplicate port graced the side window. "But it's not all to the bad. As it is the airport officials will know what the disintegrator did to that armored car. I don't think they'll argue."

"The telephones working, eh?"

"Yes, somebody in a pink jacket with pale blue pants was yelling into one that all the guards were blind. I gave 'em a light dose of UV. They'll be all right in an hour. He was getting an answer, too."

Blake looked down. Callistans were slowly filtering back to the airport they had so recently and hastily deserted. The vast traffic snarl of the city was slowly straightening out as the power plant went back into operation, and signal lights, telephones and radios went back to work.

"They've formed what guards can still see around that ' metal you left," he reported. "I hope they are grateful."

"I know. We didn't have to leave it, but on the other hand, why not? We had those spare plates, about five hundred pounds of beryllium. They can get started, and treat older people, the sick, with the life-cells they can create with that. And-somehow, Rod, I want to keep friendly with those people. When we do get back to Earth, the things they can teach us will be worth knowing, and they are, fundamentally, a pretty decent bunch."

"Pretty decent bunch," agreed Pipeline, very proudly.

Only Blake could turn around; Penton was busy at the controls. He was silent for some seconds, then he spoke softly.

"Ted, my friend, we better make time for Ganymede."

"Ganymede? P'holkuun-" Penton started.

"And the shleath. No, we weren't popular. But we will be, we will be. Did you happen to think that no shleath could possibly digest Pipeline? Pipeline is made of boron. But Pipeline, on the other hand, would probably enjoy a meal of-"

"More borax?" hopefully suggested Pipeline.

"God forbid!" said Blake hastily. "Shleath, lots more shleath."

Penton looked up at Blake suddenly, and grinned.

"You are right, by Jupiter, they can! A shleath can't digest boron, of course, and they can destroy the shleath-but they can't! There are thousands of shleath, more-"

"Borax," pleaded Pipeliness. Somehow it sounded weak, and very satisfied.

"You," said Blake very softly, "don't know. The prof on Callisto said they were a very fecund race. If I had known, had I guessed what he meant, they would have got no borax on this ship. As it is-all I can suggest is that we hurry. Two Pipelines in this ship are pleasant, but-"

Slowly Penton looked down. Pipeliness was sitting proudly, if somewhat crampedly among some fifty, three-inch-long, six-legged, furry animals.

Fifty minute, friendly tails waved in pleasure.

"Borax?" suggested fifty small, very friendly, mental voices.

"No," said Penton softly, but very definitely. "Not, my friends, by a damn sight. Not until we hit Ganymede."