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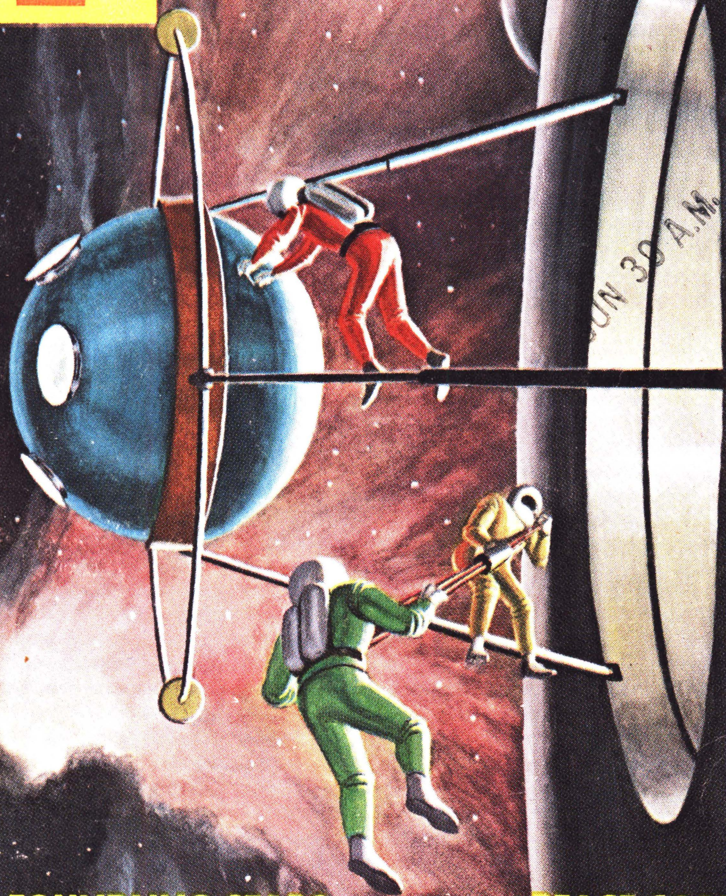
WORLDS OF IF SCIENCE FICTION



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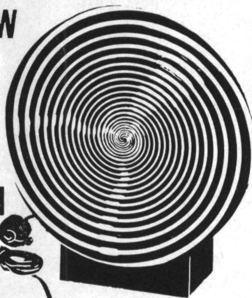

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WORLDS OF

SCIENCE FICTION

AUGUST, 1966
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ALL NEW STORIES

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Ah, Mars That Might Have Been

A year or so ago we ran a story called *Under Two Moons* which dealt with a notion concerning Mars's canals which struck us as new: that they did indeed contain water, but that the water was covered by some sort of surface film which prevented evaporation, explaining why water is so scarce in the Martian atmosphere and at the same time why no reflections from a liquid surface had ever been telescopically observed. (It happens to have been a story we wrote ourselves, which maybe explains how come we remember it so well.)

Now we've just learned of a Russian astronomer's theory which accomplishes the same end in a different way. Fellow's name is V. V. Davidov; and although he first suggested the idea in 1960, we have seen no account of it in the English language until just the other day, reading the new book by Patrick Moore and Francis Jackson called *Life on Mars* (Norton). Davidov starts with a suggestion made by another Russian scientist, O. Schmidt, that the proportion of hydrogen in a planet rises linearly with its distance from the Sun — it has to, said Schmidt, because of his theory of the formation of the planets. But what about Mars? It not only does not appear to have more hydrogen than Earth, it seems to have practically none at all, bar a faint smudge of ice at the poles.

Very simple, says Davidov. It's there . . . but it is frozen:

> Let us imagine our globe with its large oceans to be moving along in the orbit of Mars. The increased distance from the Sun would reduce the average yearly temperature below the present one of -40° Centigrade. All our oceans would freeze, and would be covered with the dust of centuries and the products of stone disintegration. The absolute humidity would approach zero, and observations from another planet would give the impression that there was no water on the Earth. The Earth's surface would appear similar to that of Mars. . . . There is a perfect analogy between the picture in this hypothesis and the present picture of the Martian canals.

True for Davidov! If only Mariner IV hadn't come along and spoiled the whole thing, what wonderful sf stories could have been written about his icy Martian oceans.

But Mariner IV did. And not only does it make trouble for Davidov's theory, it makes trouble for this otherwise very good book by Moore and Jackson, for the book appears to have been written in 1963, and there is not a word in it about craters or the new findings on atmosphereric pressure, etc. It's still worth reading — but it would have been far more so with Mariner IV's data included! - *The Editor*

A SPLIT SECOND IN ETERNITY

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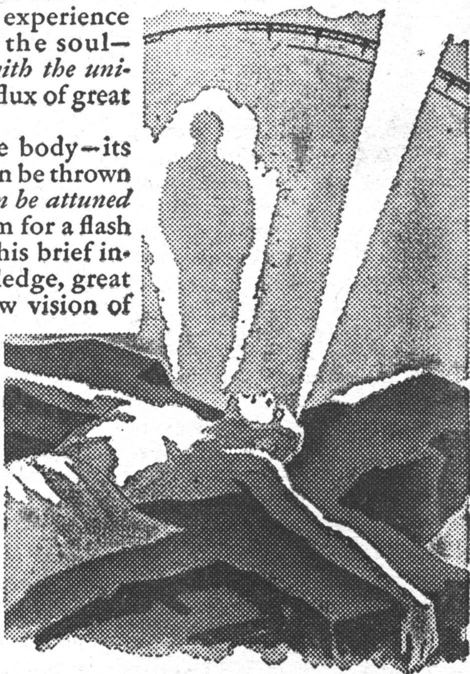

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THE FOUNDLING STARS

by HAL CLEMENT

Illustrated by McCLANE

They were running an experiment in the space between the stars — but they never knew the result!

"All right — perfect. You're the most nearly motionless thing in the universe."

Hoey's words were figurative, of course; whether they were accurate or not depended entirely on point of view. Rocco Luisi and his *Ymyrgar* were indeed at rest with respect to Hoey and the *Anfforddus,* after more than four hours of maddening effort, but neither machine was motionless with respect to much else. Both were travelling at about four kilometers a second, roughly galactic northward, with respect to their home port on Rhyddid, seventy-five parsecs away. They were moving at a much greater velocity with respect to the far more distant Solar System. With respect to each other, however, velocity had been whittled down to somewhat less than five centimeters a year.

How long this would last was problematical. An automatic tracker was now on duty in Hoey's ship, trying to hold steady the fringe pattern produced by combining two

ultraviolet laser beams, one originating in his own vessel and the other in Luisi's, in one of the most precise interferometers ever made. Since the crafts were about a light-hour apart, however, corrections tended to be late in time and, in spite of a computer's best efforts, erratic in amount and direction.

"Nineteen decimals" had been a proverbial standard of accuracy for well over a century; but achieving it on any but the atomic size and time scale was not yet standard art.

"That seems to be it," Hoey repeated. "That means that you and I stay strapped in our seats, with no more motion than we can help, for the next four hours or so. If either of the instrument platforms on our ships moves more than half a micron with respect to the other, a lot of time and money go down the drain."

"I know — I've had it hammered into me as often and as hard as you have." Luisi's voice was undistorted, and the responses instant, on the medium communicator.

"Sure you have," retorted Hoey, "only a lot of people wonder whether you really believe it."

"Well, it depends on what you mean by believe. I can figure as well as anyone where the center of mass of my ship would go if I stood up; I — "

"I know you can. Your trouble is that you can't believe it would make as much trouble as they say. Just remember that they were even concerned about tidal forces from Cinder over there — " he gestured, rather uselessly, at the grossly misnamed 06e star glaring at them from half a parsec away — "and even went to the trouble of finding a part of this neighborhood where the wind was steady — "

"Right there I break connection. Space is space. You only worry about wind when you're close to a sun, and then it's only a hard-radiation problem."

"True enough, as a rule. The trouble is that the usual run of stellar winds involves a mass density of around ten atoms to the cubic centimeter; here it's a couple of thousand. It turned out that even that much mass wouldn't accelerate the ships seriously unless the relative velocity were very high indeed, but it was something the planners had to check on. You see what I mean; so stay put. Let's cut the chatter. The sooner the folks in "Big Boy" can get to work, the sooner we can breathe comfortably. I'll call 'em."

Hoey's finger tensed on a button, replacing the microscopic crystal in the activity field of his communicator with another, whose twin was aboard "Big Boy" — more formally, the *Holiad*. He spoke without preamble, knowing that someone would be listening.

"We're in position, and my tracker says we're holding. Get the job going while the going's good."

"Right." The answer was terse, but not casual. The speaker, a heavy-set, middle-aged man with an almost fanatically intense stare in his blue eyes, leaned forward over the console in front of him and be-

gan punching buttons in an intricate sequence. He paused every second or two to interpret the patterns of light which winked at him from the board. After half a minute or so the pattern became fixed, and he leaned back, more relaxed.

"Program A is running." A younger man, seated at a similar console a few yards away, nodded at the words. At first he did not answer aloud; then he decided to speak, though for several seconds he was obviously trying to make up his mind what to say. It was easy to make the wrong remark to Elvin Toner.

"D'you think we'll get full time out of it?" he ventured at last. "Those pilots are good, but I still wish it had been possible to use robotships for the key stations. A man can't hold still forever."

"So do I." Toner answered without obvious irritation, and his eyes remained fixed on his console, to the younger man's relief. "I also wish," the director went on, "that it were possible to use the medium communicator system directly for automatic control of such things as distance, so as to get away from light-lag. But until some genius in your generation works out a way to measure the frequency, wavelength, and propagation velocity of medium waves — or at least, furnishes some evidence that a wave phenomenon is involved — we'll have to stick with electromagnetic radiation and, at times, with human beings. You may not like it, but by the time you reach my age you'll have learned to put up with it."

"I hope not," Ledermann couldn't help replying.

"Eh? Why not?" Toner's eyes almost flicked away from his instruments for a moment, but didn't quite.

"I mean that if I learn to put up with inconveniences, it'll be because I haven't been able to figure out anything else to do about them. Who wants to admit that?"

Toner grinned. "Nobody wants to, I suppose, but the honest people do anyway. Hold up; here comes the end of the first minute; any irregularities on your board?"

"Not so far. I don't know what that proves, though; all we are measuring is what's going into the generators. We can't touch what's coming out without changing it — "

"Of course." The older man made a gesture of impatience. "It's some relief, though to know that things are going in right. I don't know about you, Dick, but Program A is going to be the second longest couple of hours in my life."

"I know," replied Ledermann. It was the first time Toner had ever been so frank about his feelings — even though they were usually quite obvious from other evidence — and certainly the first time the assistant had felt much real sympathy for the director. Since the younger man was not a fast thinker, the remark left him once more unsure of what to say.

As a matter of fact, there was probably nothing to say which would have been just right. Toner, like most middle-aged men, had developed a pretty firm personal philosophy

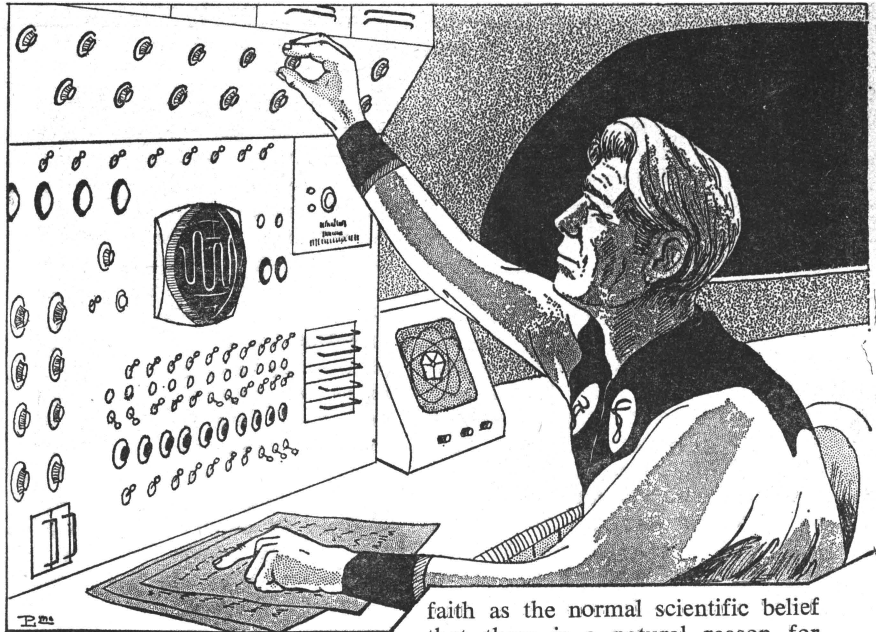
and a rather rigid set of fundamental beliefs. The present experiment involved very heavily one of those beliefs — one which Ledermann did not share.

Although, the assistant thought as he glanced through one of the *Holiad's* great view ports, this was a place where it was hard to feel sure and right about anything fundamental.

Space was not dark, though the nebular material which abounds in the Orion spur of the Milky Way system is never very bright even when no planetary atmosphere dims it. Getting closer to an extended light source, of course, doesn't make each square degree look any brighter; it merely increases the number of square degrees. From the *Holiad's* position, most of the sky is nebula-bright; and to a spaceman, anything resembling a cloud looks wrong in space. In some directions the stars blaze steadily, as they do from Earth's moon; other directions are blacked out by light-years of dust. Some of the dust itself is bright, for 41 Orionis, named "Cinder" by some humorist who had explored the region earlier, is only half a parsec away. Not only does its fierce ultraviolet radiation keep the nebular gases fluorescing, but its visible is quite enough to light up the dust for immense distances. Not counting its emission envelope, Cinder is only about five times the diameter of Sol, which means that it looks like a point from half a parsec away; but that point illuminated the *Holiad* almost as effectively as the full moon illuminates the earth. Several other O and B stars flame in the neighborhood; some look brighter than Venus as seen from Earth, some reveal themselves only by illuminating the surrounding dust clouds, some are invisible in the nebulosity. The Orion Spur is one of the cradles of the galaxy.

Unfortunately, the occupants of the cradle are foundlings. The general circumstances surrounding a star's birth are now fairly clear; ships prowling the cloudier regions of the spiral arms have found them in all stages of gestation, from gas and dust clouds half a light-year across and little denser than the interstellar background, through T Tauri variables hot enough to radiate visibly, to the vast population of main-sequence suns whose hydrogen fires are safely alight. Like foundlings, while an entire birth has never been observed in any one case, we know enough to picture the circumstances with some confidence.

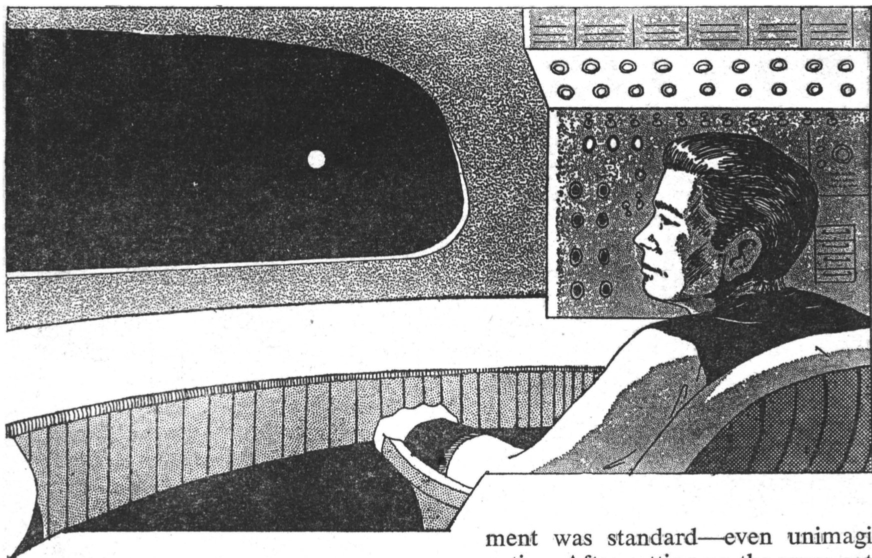
Also like foundlings, however, the precise details of a star's conception are somewhat obscure. It has been widely supposed for several decades that random variations in the density of the interstellar medium are the key factor—that the law of chance is the father. Dick Ledermann, young and conservative, had no trouble accepting this view. To him, it was obvious that the random "winds" of space must at times produce a gas concentration so dense that its gravity would override the disruptive tidal force of the rest of the galaxy—override it enough to produce a local potential well able



to trap at least the lower energy particles of the cloud.

Elvin Toner, nearly twenty years older, had strong reservations about the potency of unaided statistics. Like anyone with even a modest grounding in physical science, he realized the basically statistical nature of many of the universe's laws; he admitted that a star *could* come into existence by the concatenations of chance which most people took for granted; but he doubted seriously that the random motions of interstellar gas could set up the appropriate conditions often enough to account for the number of observed stars, even allowing for the fairly impressive lifetime of a star. He felt sure—it was as much an article of faith as the normal scientific belief that there is a natural reason for everything—that some specific, widespread, underlying process was operating to improve the chance of protostar formation.

He was able to prove that some such process was needed to account for the observed star density. Ledermann was able to prove that it was not. Both "proofs" were statistical, using the same "laws" of chance. They differed, of course, in the basic conditions which were assumed. Both sets of conditions were reasonable; the two hypotheses continued to survive because neither could be checked adequately. Elvin Toner had spent nearly thirty years acquiring a professional reputation impressive enough to interest a sufficiently wealthy foundation in do-



ing the checking. And now he had the chance.

It had taken wealth—or its equivalent — and a vast amount of human effort.

The basic check required detailed measurement of the positions, velocities and accelerations of all the particles, as exactly as Heisenberg allowed and as nearly simultaneously as possible, along a range of more than five astronomical units. Since electromagnetic energy had to be used, this meant that the best part of two hours would be needed merely to set up the web of standing waves which was to serve as the "framework" of the battery of measuring instruments, which were themselves force fields.

The basic design of the experiment was standard—even unimaginative. After setting up the wave pattern, a period would be spent measuring the initial vector quantities of the particles along the range. Fundamentally, the measuring process would be practically instantaneous, but scanning and recording would use up an hour as the chain of reading impulses travelled from the *Ymyrgar* along the wave web to the *Anfforddus,* from which the readings would be transferred by medium crystal to the mother ship.

This was "Program A" which was now in progress. Electromagnetic waves of almost five hundred different frequencies, ranging from the blue part of the visible spectrum to the output of a huge electromagnet fed by an alternating current source with a three-hundred-second period, were propagating away from the *Ymyrgar,* groping their way through the not-quite-empty billion kilom-

eters or so which separated the little tender from her sister. Some of the frequencies had been selected for their ability to interact with the atoms and ions known to occupy the space, some for the fact that they would not. Some would be absorbed and analyzed by the apparatus aboard the *Anfforddus*, some would be reflected back toward their source to create the standing-wave patterns needed for Program B. All would represent a waste of energy if the two tiny ships changed their relative positions by one part in ten billion billion.

Lights on the control consoles aboard the *Holaid* recorded the behavior, microsecond by microsecond, of each separate frequency generator; but the one which Toner never let out of his sight was that which kept track of the interferometer on the *Anfforddus*. This light shone yellow as long as the original pattern of fringes remained unchanged; a one-fringe shift one way would carry it into the red; a similar change in the other would turn it violet. So far, while there had been at times a suspicion of green or orange in its tint, it had held within the English language limits of yellow.

"I think you can relax a little," remarked Ledermann. "All the general run of disturbances should have had their licks by now; A has been cooking for over half an hour. Unless Hoey or Luisi has a fit, their ships can hardly move enough to make trouble."

"They both had EEG checks before they were hired." Toner was not joining in any levity, yet. "I'm not worried about that possibility."

"Then why not take it easy? Surely you're not worrying about a meteor."

"Well—comet nuclei are found pretty far from suns, but I really wasn't thinking of anything specific. It's just that so little need go wrong to wreck the whole works. Program A isn't so bad, in spite of the precision we need; but when B gets going it will really mean something. I can't keep my mind off that."

Ledermann nodded. Program B was the experiment itself—the check on the Toner hypothesis. In assuming that non-statistical forces existed which tended to start interstellar matter drawing together into protostars, the astronomer had not fallen back on mysticism. He had computed many combinations of electric and magnetic fields which should have such an effect, and which might reasonably—or at least conceivably—exist along the arms of the Milky Way. The wave patterns of Program B had been designed from these computations. Naturally, phenomena as complex as, say, the human nervous system or even the circuitry of a television set or the measuring patterns of Program A would be no improvement on pure chance as an explanation for star formation; such things were too improbable by any standards. Toner's fields were simple enough so that, in his opinion, they were more probable than random gas and dust concentrations. They were also complex and extensive

enough so that looking around for examples of them already in existence seemed impractical—so far. Of course, if Program B showed that such fields would, or could, produce the results Toner expected, he would have little trouble financing such a search.

If the program failed to give the results Toner hoped for, Ledermann was both unsure and uneasy about what to expect. Few men can abandon a favorite hypothesis abruptly and completely, and the need to do so can have painful effects.

Actually, Toner would not be forced to such an extreme at first; many more variations on the original theme would have to fail before the whole idea would have to be abandoned. What bothered Ledermann was the doubt that the foundation would go along with any such extension of the project and how Toner would react if it refused.

Actually he needn't have worried. The director was philosophical enough to take such a problem in his stride. Since the younger man had no way of knowing this, he watched his console with even more anxiety than his director—in spite of what they had both been saying.

But the green lights stared unwinkingly back at them, as the waves spread across space. No news, with the proverbial implication. The clock was the only instrument which showed change; the clock, that is, and two human nervous systems.

"Stuff coming in from Hoey's receivers," Ledermann reported abruptly. Toner nodded.

"On time," was his only answer. Neither bothered to ask, or to say, what sort of stuff was coming in; the data was no more meaningful to human senses than were the photons which carried the first Mariner pictures from Mars. The main thing was that news was coming in; it was being recorded; it could, in due time, be decoded; and—Program B was due to start.

Both men sat up a little straighter and stared more tensely at their consoles as the light patterns began to change.

Simultaneously—the word was as nearly truthful as it had ever been in human history—sets of electromagnetic fields began to grow around both the *Ymyrgar* and the *Anfforddus.*

Neither set was complete by itself, but their interference would produce something which Ledermann thought of as a huge lens. The analogy was a poor one geometrically, but has some excuse from a functional viewpoint. Drifting slowly with respect to the surrounding gases, many of whose atoms were ionized, it should—if Toner were right — tend to deflect their relative motions toward its own "optical axis." To that extent, Toner's idea was a simple one. The precise pattern of fields which should have the desired effect was somewhat less so, as any engineer who has been involved with an electron microscope would expect.

Each "lens" of the series making up the program was to be followed by a set of reading patterns similar to those of Program A, so that its

individual effect on the motion of the nebular particles could be measured. In principle, the whole thing was easy . . .

"Intervals seem to be right." Ledermann dredged a little good news out of his light pattern. "Four seconds, plus or minus ten to the minus tenth. Interlens distances are within tolerance, I'd say."

"If we haven't been too grossly off in computing the refractive index of the nebula—"

"Which is handled automatically by the original A measures, as I understood the plan. Calm down, Boss."

"All right. You're talking a little louder than usual yourself. I still wish you'd invent a method for using the communicator medium for direct viewing; we could *see* whether these things are building right, instead of having to infer from generator behavior — "

"*Maybe* we could. I'm a conservative; I still buy the Uncertainty Principle. Even if we could do anything with the medium which would make it react to something besides a communicator crystal, I bet it would affect the thing we were trying to measure."

"It doesn't affect the crystals—just the space around them."

"Not measurably. Has anyone tried to check on them, to within fifteen figures of what we're doing now?"

"Not as far as I know. I—Dick! What happened then?"

Ledermann didn't know either. At least, he didn't know in the sense that Toner wanted to. Like the director, he had seen every light on his console except the one indicating tender separation turn a solemn red for a full second, and then switch back to green. If they had been looking away for that second, the men would not have known that anything had ever been wrong; after the event, the lights stared back at them, apparently unchanged.

The first thought to occur to both men was that something had happened to the console circuits; the second, that something had happened to their own nervous systems. Three seconds of checking with test switches seemed to dispose of the first possibility; and since they had both seen the same thing, the second was very low on the probability list.

Toner frowned, and spoke very slowly.

"If that is to be taken at face value, everything in both tenders which was putting out program radiation stopped for about a second and then started up again—all together. That would cause a gap of about three hundred thousand kilometers in the wave pattern—at each end—with the gaps due to meet in half an hour; let's see—what would that do to the lenses?"

"If you can work that out in your head, especially with only estimated time data, you didn't need to set up this experiment at all. You must have put the universe together in the first place," retorted Ledermann. "There's no more chance of telling that than of telling which of my next half million coin tosses is going to be heads."

"True." For a man whose work was taking such a blow, Toner seemed remarkably detached. "That would suggest that we should cut off our generators, let the present set of patterns radiate out of the area, and start over."

"We'd have to do more than that. The gas in the area has prboably been affected by the part of B which has already gone out. We'd have to move the tenders to a different area altogether and set up the whole works again. Wouldn't it be better to let this program run itself through? We don't really know that the generators did stop; test circuits or no test circuits, I find it easier to believe that something messed up the indictators than that the whole set of generators went out and came back on again at once. If we let things run, the worst that can happen will be the loss of a couple of hours—and we *might* not have to start over, if this run is really all right."

"You're partly right. Letting it run won't cost us much time. But we will have to do it over anyway; we won't be able to tell if the first run was really okay until we get the data reduced, which we can't do here. We'll just have to do the whole thing twice."

And Ledermann slowly nodded his head.

Hoey's reaction, some hours later, was more impressive. He and Luisi were celebrating their release, to the accompaniment of an improvised song whose burden was the supreme difficulty of doing nothing at all, when Toner broke the news as gently as possible that the whole thing would have to be done over.

He wrapped the information in flattery, lubricated it with all the soft soap he could bring himself to use, and sweetened it with a respectable bonus offer; but neither pilot accepted the word at all philosophically. They were still visibly nettled sixty hours later when the tenders once more pulled away from the *Holiad*. This *may* have had something to do with the results.

They did calm down again, just a little, during the setup of the measuring line, however. Earlier practice may have helped, for it took them less than ninety minutes this time to get their little vessels "fixed" relative to each other.

"That's it, Doc!" Hoey's voice was almost jubilant. Toner, who had pretty well convinced himself by this time that the first run had really been all right, was able to answer in similar mood.

"Good going—that was very quick work. I'm starting the A tapes now. About how far are you from where the other run was made?"

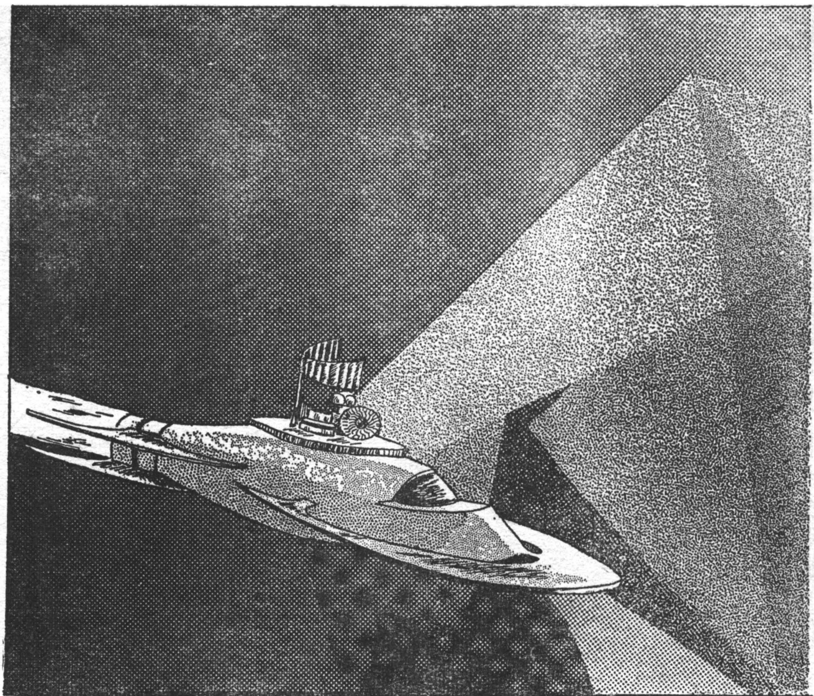
"A couple of flight-hours, I'd say; we didn't try to check it exactly. You didn't say it was necessary."

"It isn't. Relax. And I do mean *relax*."

"I know, Boss. We're getting used to it. Let things roll."

"They're rolling."

Even in the calmer atmosphere of the second run, tension built up a little during Program A. Even though this part had gone without a visible hitch the first time, there

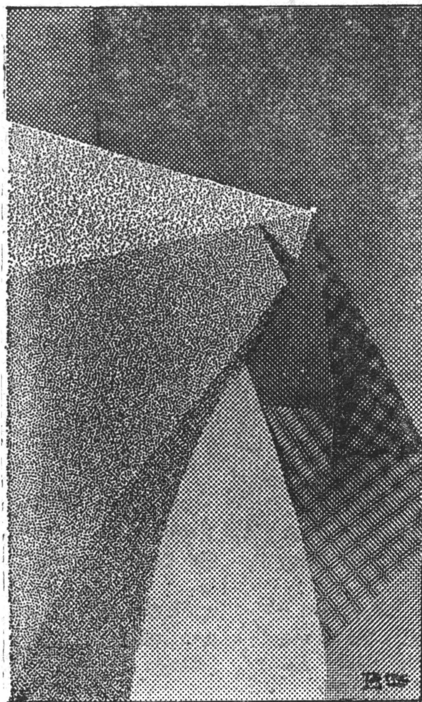


was no way of knowing whether the unknown interference had a preference for Program B.

Of course, it might have. The programs *were* different—and the word "unknown" certainly was a key one. No one is quite sure, yet.

Toner and Ledermann of course knew to the second just when the Program B interruption, if it had really been one, had occurred; Hoey and Luisi knew almost as well from the physicists' account of the affair. All four were watching clocks; and perhaps it was the tension wound up by the whirling clock hands which caused the trouble; perhaps not. No one was ever sure. Whatever the cause, six seconds before the critical moment, when both scientists were gripping their chair arms and staring frozenly at their consoles, Hoey sneezed.

It was quite a sneeze, and the fact that Toner heard it clearly through the medium communicator did not operate to lessen its effects. The pilot's head had been resting in the padded support which formed part of his seat—the support in which it



was supposed to remain through the experiment. The muscular convulsion of the sneeze snapped that head some twenty centimeters forward and down.

The *Anfforddus* had, roughly, a million times the mass of Hoey's head, so its center of mass moved only about a millionth as far. This amounted to about a fifth of a micron. The fact that this was within the set tolerances for the experiment did not at once dawn on Toner —for one thing, it would have taken him a moment to figure it out under any circumstances, and for another his reaction was reflexive rather than rational. He was like a confirmed anti-vivisectionist reacting to an account of a mechanical heart's being tested on a dog; he exploded. He jumped — much farther than Hoey, though fortunately it didn't matter how much the *Holiad* moved. He also began to talk, though just what he said is uncertain—Ledermann charitably wiped that part of the monitor tape, later. It took the younger man some thirty seconds to calm his superior down enough to listen to reason, and perhaps fifteen more to supply the reason. Another five seconds passed while Toner actually recovered control of himself, and started to apologize to Hoey.

But Hoey did not hear the apology—we think.

In the fifty seconds or so since his sneeze, radiation from his ship travelled some fifteen million kilometers. This is easy to compute; it is pretty certainly a fact. It may possibly be a useful one, though no one so far has put it to any real use.

The trouble is, of course, that there is no way to be sure whether the sneeze put any significant alteration into the radiation pattern which the *Anfforddus* was broadcasting. This, equally of course, is because no one can be sure just how big a change must be in order to be significant.

Toner had just started to talk in a normal tone when Ledermann gave an astonished yelp; and the

director, whose attention had shifted entirely to the screen of the medium communicator, looked back at his console.

Its lights were out. It was blank. So, when he turned back to it, was the medium screen. And so was Ledermann's console.

One hundred seconds later, after repeated calls to the tenders had proven futile, the *Holiad's* captain snapped her into irrelevance drive. Between four and five seconds later still, a hundredth of a parsec from where she had been lying, the research vessel halted again. Presumably she was within a few tens of thousands of kilometers of Hoey's tender, but no sign of the little ship could be detected by eye or instrument.

Calls continued to go unanswered. Searchers went out with detection and rescue equipment; the former gave no response, the latter went unused. Not a particle of solid matter could be found within light-minutes of either tender's former position; and it was not until much later, when the routine sample-bottles were being checked back on Rhyddid, that the slightly high count of aluminum atoms in that particular volume of space was noticed.

Of course, this may not be a significant fact, either.

"And just who was that?" The query came in the growl which seems to be a distinguishing property of sergeants, whether their linear dimensions be two meters or two hundred astronomical units. It received no immediate answer. "Well? Who was it? It came from just about where you should be, VA741. Was it you?"

"I—I guess so."

"You *guess* so? A soldier lets out a yelp that can be heard half way across the spiral, and he only *guesses* that he did it?"

"I did it, I—I—"

"You did. Never mind the guessing. Why did you do it? You know why we're here?"

"Yes, Sergeant."

"You know what we're doing here?"

"Yes, Sergeant."

"In fact, up to now you've been helping to do it."

"Yes, Sergeant."

"And you know why we've been sweeping this stuff together."

"Yes, Sergeant. To clear a path for—"

"Shut up. How much use will the path be if the Flickers find it before our boys have a chance to come through?"

"Not much, I suppose, Sergeant."

"You suppose. Well, I suppose I should be glad it even occurred to you. Now that you've squealed like a stuck baby, how long do you suppose it will be before Flicker scouts are poking around this cloud?"

"I don't know, Sergeant."

"I don't know either, but I'll be very surprised if we drift a hundredth of the way around the spiral. If it were possible to travel faster than radiation, they'd be spearing you before you cleared another cubic parsec."

"They may show up anyway; we can't tell yet."

"That, soldier—I use the term loosely—is the only reason you're not under formal charges right now. If we're spotted in the next little while—say, before the cloud you're sweeping up right now starts to radiate -- I'll assume it wasn't your fault. But if we're found after that, when that squeal of yours has spread out a few hundred parsecs, you're in for it. What I ever did to be saddled with a—"

"But Sergeant, I couldn't help it. Something bit me."

"So something bit you. Let it bite! Since when—"

"But I really couldn't help it. It did something to my muscles, and I twitched so I thought someone might spot me anyway; but I relaxed and even damped out the spot with dope. I know how important it is not to make a disturbance. The sensation quit for a moment, but then it came back stronger than before, and before I could take another tranquilizer I cramped up tight all over. I couldn't help giving a little yelp—"

"Little? It was loud enough to—never mind. I hope you can produce whatever bit you; it may help in court. After all, I suppose anything which can interfere with even a sloppy soldier's self-control might be usable as a weapon. If we could breed more of 'em—that's an idea. See if you can catch it, without making too much noise."

"I'm afraid I didn't think of that in time, Sarge. We'll never catch that one. The whole business was just reflex, and I'm very sorry, but I swatted it without thinking."

In addition to their voice qualities, sergeants are sometimes known for a certain gift of rhetoric. This one, DA6641, of the 44th Company, 6261st Field Engineering Battalion, Army of the Republic of Whilth, was no exception.

If he had not been careful to use only short radiation in his remarks, they would have been audible back in Whilth, in the spiral arm of the Milky Way next outward from Sol's. Even with the short waves, he might possibly have made an impression on the *Holiad's* instruments; but of course the Holiad was no longer there.

Long before he had really made himself clear about just what sort of poor excuse for a soldier the unfortunate VA741 was, both Elvin Toner and Dick Ledermann were dead of old age.

END

HEAVENLY HOST
by Emil Petaja
TOM SWIFT AND THE SYNDICATE
by Sam Moskowitz
— and many other stories and features, including a discussion on Immortality Through Freezing by Frederik Pohl, R. C. W. Ettinger, Long John Nebel, Victor Borge and others — all in the August *Worlds of Tomorrow*, on sale now!

Slot Machine

by H. B. MICHEL

Easy come, easy go — what's a human being more or less?

He had been so absorbed in watching the machine that he hadn't noticed he was crushing the next human against the thorn on the center of his palm.

When the lights stopped flashing and the gears stopped clicking, he noticed, and he flung the mangled remains to the floor.

He glanced over at his wife, but she hadn't said anything yet. He knew she was thinking, *Dear, humans are scarce in times like these,* but she said:

"It's all right, dear. We can be extravagant now and then."

He wiped the human juices on his thick, moddled side and returned to the machine.

"We can be extravagant any time we please," he said, knowing it was a lie. He squinted closely at the gleaming contraption, trying to force his mind into its inner workings. He even whipped an eye over the top of the machine and scanned the back. But there was no clue to help him comprehend what was really happening. "Give me another human," he said.

She had been clutching the purse-box in her upper-left, and she hesitated reluctantly. It had rarely contained so many humans. "But we just got them," she said.

He didn't look at her, but reached out his upper-right. "Another human," he repeated.

"But can't we hold onto them a little longer?"

Without a word, he snatched the purse-box away. There was a group cry from within.

"Dear, you'll kill more of them!"

"I won't!" he said and reached into the box.

The first human was a female, naked and tiny. It cried. It seemed to have a broken arm.

"I'm been wondering," he said. "The females are supposed to be smarter, but the males are bigger and stronger. Which would work best?" He considered a moment and returned the female to the box, noting absently that the government serial number on her back indicated that she'd been issued just this year. She wouldn't be much good in the machine, though, with that broken arm. He'd try to get rid of her later, at a filling station maybe, as they left town.

He brought out a male. He could tell more by texture than anything else.

"Here goes nothing," he said and dropped it down the chute in the machine.

Almost immediately, lights started to flash, then wheels turned, picking up speed.

He felt his wife's upper left on his lower right. It was uncomfortably dry.

Suddenly the lights and the wheels stopped.

Silence.

He thought he heard a faint groan of humans in the machine.

Nothing.

"Maybe a female — " he said.

"Dear —"

"Just one more!" He confronted her. "We won't miss it."

She was silent.

"Anyway," he continued, "how many times do we come to this town? Never. We might never come back!"

"I just thought —" Dreams of getting an extra bill paid back home faded.

"We can't say we were here and didn't do anything!" he said.

He selected a female this time. It seemed to be healthy, but fairly limp. Perhaps from the banging around in the purse-box.

"Brains over brawn. We'll see." He deposited the female in the glistening metal box, and they waited again. The lights flashed and the wheels started up.

"What do they do in there?" his wife asked.

"I don't know exactly," he said. "Maybe we aren't supposed to know. But I've heard that a set of instructions drops down — a different combination each time — and the human has to perform a certain set of tasks."

Some new lights were flashing, and the wheels spun faster.

"Look at that! Maybe this time!"

The machine stopped.

They stared at it.

This time he knew he heard a groan from inside.

"We're closer," he said tightly, and reached into the purse-box.

"Dear, we can't. We have to have humans to get home."

"How many have we got left?" He felt around in the box. "Seven," he said triumphantly.

"And we only came in with six."

"Easy come, easy go," he said absently, trying to find a healthier female. There was none. Only the one with the broken arm, who screamed when he touched it.

"We'll need at least five for rocket fuel, Dear."

He was trying not to show his worry. "We'll have to use a male," he said. "I don't know. The first one we used, the one that worked, was a male. But we haven't had any luck with them since." He calculated.

"You don't have much choice." His wife was resigned. She only hoped he wouldn't use any more than this next one.

He shrugged and his dorsal spines quivered.

A male was randomly chosen.

"Here goes nothing!"

And there was nothing. At first. They waited, not respiring.

Then the lights flashed.

"Here we go!" he said.

The wheels were spinning.

They gazed at the machine, front, back and both sides.

"Dear?"

"What?"

"What would happen if they wouldn't — I don't mean couldn't — but *wouldn't* do the tasks?"

More lights were on.

He forced a chuckle. He wanted to show he wasn't nervous.

The machine was clattering.

"They *always* try to do them!" He was yelling now, over the jangle of bells. "Like on that first one we played. It's the only way to let the rest of them out!

"Bells!" he screamed.

"Another jackpot?"

The machine quit. The bells went silent and the lights went out. The wheels ground to a stop.

From inside the machine, a louder, more agonized groan, but not without hope.

Two cherries and a bell.

END

THE BODY BUILDERS
by Keith Laumer

THE PIPER OF DIS
by James Blish & Norman L. Knight

HERESIES OF THE HUGE GOD
by Brian W. Aldiss

HEISENBERG'S EYES
by Frank Herbert

— plus many other stories and features by Willy Ley, Algis Budrys and others, all in the August issue of *Galaxy* — on sale now!

PEACE CORPS

by ROBERT MOORE WILLIAMS

Illustrated by FINLAY

The enemy could not be seen — but it struck out of emptiness to destroy Earth's defenders!

I

He had reached Earth on a moonship which had set down with a great blowing of jets on the landing area in the sand of the Great American Desert in Utah.

Now he was riding the monorail train that would take him from the desert spaceport to Salt Lake City. From this point, he intended to take a jet jumper to the World Governments complex of buildings located on the high plains of Colorado near the old city of Denver, where he would report to his superior officer — if he lived long enough — on certain events he had personally witnessed on the moon. In his private book of odds, it was not at all

certain that he would live long to reach the individualized, personalized and completely unpublicized World Governments unit, which employed him as a completely willing slave.

His name was Jim Jiro.

Jiro often gave people the impression he was a skeleton that had put on clothes and had gone for a walk. He was that thin. But the impression that he was a skeleton was a delusion. His thinness resulted from a training program made necessary by his work. This training program did not leave an ounce of surplus fat anywhere on his body. Or in his brain! In his line of work the difference between life and death could be a little extra fat on the brain.

Sitting in the car on the monorail train, talking volubly to the man who shared the seat with him, Jim Jiro looked and talked like a salesman of special rock drills and their associated power equipment, like one of those men hardy enough and eager enough for sales to make the jump to the moon colony established on the satellite in 2210, now twenty years in the past. In his lap an elaborate sales brochure was open, showing how rock drills were tapered, how they were sharpened and how they were hardened. The fact that he had taken the sales brochure from the brief case of a dead salesman on the moon and had invented the sales pitch did not make him any less convincing in his talk.

The man to whom he was talking was also a salesman, a big fellow with a black mustache. Politely agreeing with everything Jiro said, it was obvious that he wanted to steer the conversation in a direction that would enable him to talk about *his* line.

"Some of that moon rock they're mining is tough, believe me," Jiro continued. "There's nothing like it on Earth. When they discovered those rich mineral deposits on the moon and started trying to mine them, they found that the rock was harder than the teeth of their power drills. The same was true of their giant mechanical diggers. My firm had to develop special drills to do the job. The only bit that will cut that rock had teeth like these."

Reaching into his brief case, he removed from it a small leather case. Opened, the case revealed three black stones about as big as pigeon eggs. Each was wrapped in gauze.

"Black diamonds," Jiro said, enthusiastically.

The other salesman stared politely at the round stones. "They don't look like diamonds," he said.

"That's what they are just the same," Jiro said.

"And they look too smooth to do much cutting," the salesman continued.

"That's because they've been used and the cutting facets have been ground off of them by that tough moon rock," Jiro explained. "I brought them back to show the company metallurgists.

"I'm with Allied Cutting Tools, you know. Biggest outfit of its kind in the world. Today, we are supply-

ing the drills that cut the rock on the moon. Tomorrow, we will be supplying drills for Mars and Venus. And I'll be there selling them. And after that, we will supply drills for the stars, only I won't be there selling them."

Wonder and sadness mingled in his voice, wonder at the thought of men going outward to the stars, sadness because this could not happen in his lifetime.

Closing the little leather case, he carefully slipped it back into his brief case.

"If I don't make it, get these to the boss," he said, maintaining the same calm tone.

"Sure thing," the salesman answered, equally calm.

"Salt Lake City in ten minutes," a speaker announced from the front of the car.

"So soon?" Jiro said, startled. "Well. It was good to talk to you. My name is Jim Jiro. What's your line, sir?"

The second salesman seemed to have been waiting for this opportunity. Now that it had come, he grabbed it.

"My name is Calkins. I just got in from the moon too. I handle drugs, cosmetics and associated items."

"Did you do well up there?" Jiro asked.

The ends of the black mustache drooped as Calkins put on an unhappy face.

"The moon is simply not in the supermarket category yet. I'll be lucky if I met expenses. Before I left, I tried to tell my company that there simply weren't enough people living on the moon as yet to make our line profitable up there, but they insisted I go anyhow to lay a foundation for the future. They're always talking about the future, and I think — " he glanced sideways at Jiro. "I think they're dreaming of the days, when they can sell cosmetics on Mars! They don't seem to give a damn how hard these moon hops are on a salesman's nerves."

Calkins glowered to himself at the memory of the trip just finished. "Of course, if I don't meet expenses, the company uses the loss as a tax write-off, so they don't give a damn about the cost. But I can't take a tax deduction for the strain on my nerves."

"Too bad," Jiro said sympathetically. "Moon hops are rough on some people. Me, I loved it. Didn't bother me a bit."

"Maybe it's easier for skinny people," Calkins answered. "But I'm not going to starve myself so I can make space hops for my company. I'll take an Earth job first." Defiance sounded in his voice.

"Well, good luck, whichever way you go," Jiro said. Closing the sales brochure, he slipped it into his brief case, then rose to his feet. "I want to check everything out before we stop. See you later, Calkins."

Nodding to the other passengers and smiling, Jiro made his way along the aisle and entered the washroom in the front of the car. Inside, he closed and locked the door.

Once the door was locked, a startling change came over his face. Instantly it lost its salesman's expression of pleasant agreeableness, of sauve urbanity, of easy-going tolerance and became the face of a man in stark terror. His cheeks were already thin. Now they showed signs of becoming almost haggard. His eyes had been smiling. They lost all traces of the smile they had worn, and the pupils began to widen.

Reaching quickly into an inner jacket pocket, he touched the strange little gun holstered there. His fingers went on from the gun to a small metal flask. Pulling it from under his jacket, he pressed a button on its top. The resultant spray he directed to the surface of the metal mirror over the washbasin. As the spray struck the mirror, it turned a deep blue color which merged into and finally became a deep indigo hue.

Losing its ability to reflect light, to function in the range of the visible spectrum, the mirror seemed to reach out into some dimension, into some other universe, perhaps into some other frequency range and to become an indigo pool that looked a little like a hole into another world.

Jiro could no longer see his face in the mirror, but he studied the indigo pool that looked a little like a hole into another universe as if he was desperately afraid of what he might see there.

When he realized that nothing was visible in the pool of indigo, he took a deep breath and sighed in relief.

"Whew!" he whispered. "Well, that helps!"

As he spoke, the indigo dye had already begun to fade. Quickly the metal became a mirror once more. Now it reflected his face again, lean and gaunt and wary.

Washing his face and hands, Jiro made his hair neat. When he left the washroom, he was whistling cheerfully, an air from the current hit, *The Pink Mill.*

Calkins, the cosmetics salesman, was waiting outside the washroom.

"You're next," Jiro said, pleasantly. His voice was again that of a salesman, suave, friendly and urbane.

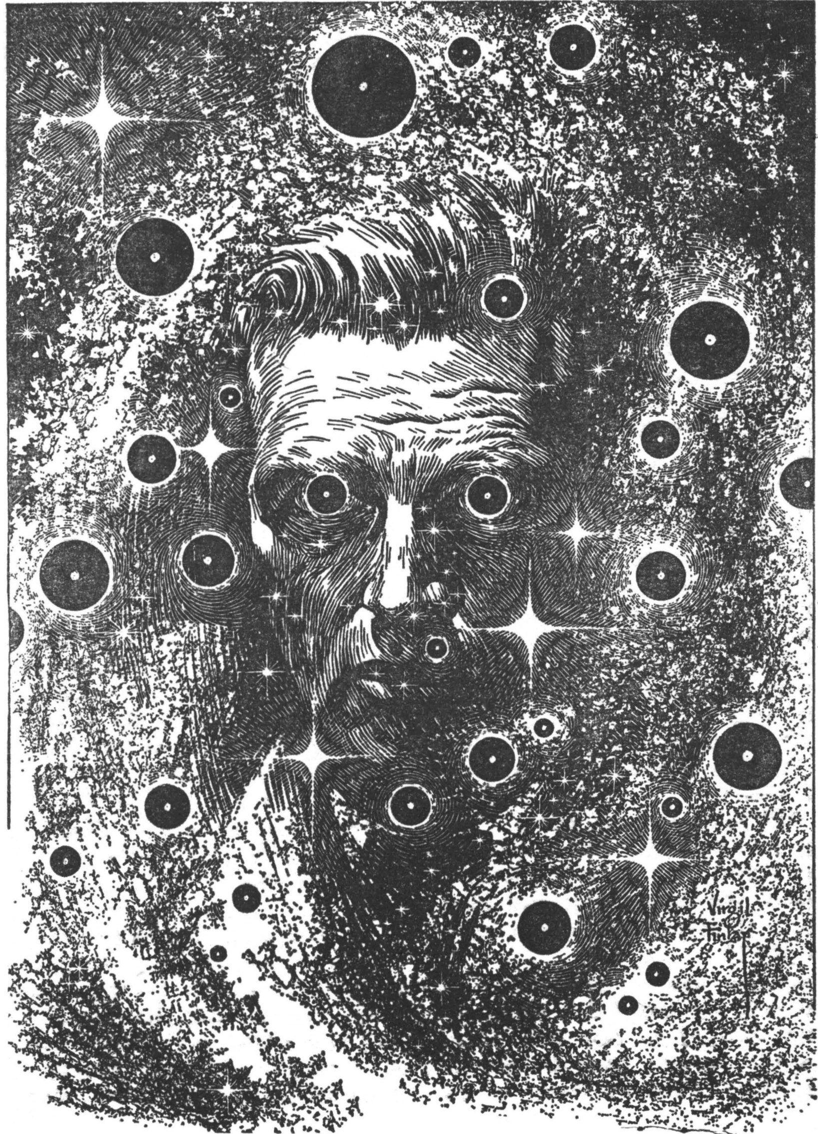
"I found everything in order in there," he nodded toward the washroom. "I left it the same way."

"I'll do the same," Calkins said. He looked relieved.

Moving along the aisle, Jiro heard the washroom door snap shut behind Calkins. He moved to his seat.

Now nearing the Salt Lake City terminal, the train was rapidly losing its 120 mile per hour speed. Through the windows, Jiro caught glimpses of desert country giving way to patches of cultivated land. Then tracts of small homes were flashing past, and in the distance the towers of the city seemed to be rising out of the land like miracles created by some fantastic genii transplanted from Arabia to the New World.

Picking up his bag, Jiro moved to the front and waited for the train to stop. All of the passengers had come in on the same moon-


Virgil Finlay

rocket. Most looked as if they were very glad to be back on Earth again. Only when a man had been to the moon could he fully appreciate his home planet. Up there, gravity was different, radiations from space were different and life itself was different. On the moon, human life existed only in plastiskin domes or in underground shelters. The kind of life that existed outside the domes, whether native to the moon or coming from elsewhere, no one knew much about.

Those in the know on Earth, high government officials, some few scientists and those who job it was to make friends with this life or to destroy it, knew that life existed on the moon.

They did not talk about what they knew.

The monorail train slid to a halt beside an elevated station. Jiro, suddenly very polite, made way for the other passengers to go ahead of him. When he reached the door of the washroom, he was last in line. Hesitating there, he rapped softly on the door.

There was no answer.

"Calkins, we're at the station," he called.

Still there was no answer. Trying the knob, he found the door was locked from the inside. Leaning against the door, he pushed hard. The lock gave way. The door opened inward.

Calkins was sitting against the far wall. He had fallen there. His head drooped to one side. Blood was still dripping from the ends of the black mustache down to the floor, where it was forming a red pool.

The salesman's throat had been slashed from ear to ear by an instrument sharp enough to cut through muscles, through cartilege and through arteries.

Jiro took one look at the body.

"Oh, pardon me," he said. "I thought the room was empty." His manner was that of a man apologizing for intruding on another man in the privacy of the toilet.

Backing out of the washroom, Jiro closed the door, then went quickly out of the car and down the steps to the station platform. By the time he reached the bottom steps, sweat had formed on his face. A porter was waiting there, to help those in need of assistance. Waving aside the help, Jiro smiled at the porter and said it was hot out here in the desert. As the porter was politely agreeing, Jiro moved toward the bank of escalators that led downward to the concourse of the monorail station. A young woman dressed in skintight slacks — a fashion that came again every few years — walked ahead of him. She had a tiny radio glued to her ear and seemed to be engrossed in what she was hearing. Having other things on his mind, Jim Jiro hardly noticed the young woman.

Bag in one hand, briefcase in the other, he took the down escalator. Sweat was flowing freely from his face now. He turned to look behind him, saw nothing, looked down the escalator, turned to look behind again, looked down

the escalator and was starting to turn again to look behind when he realized what he was doing.

"Do you want to drop down dead right here, Jim Jiro?" he said, fiercely but silently, to himself. "If you don't want to drop down dead, start acting like a salesman who has just arrived in this station and who has nothing more important on his mind than a call to his sales manager."

He put a smile on his face. It was an effort, but he made his face obey his mental orders to smile. He forced his lips to whistle. He forced his eyes to regard approvingly the bottom of the young woman in the skintight slacks. Smiling, he walked directly to a row of coin-operated storage lockers. Unlocked now, the receptacles needed only the insertion of a coin in a slot to become effective for safe storage. Jiro's bag went into one locker, the brief case went into a second and, in a slight of hand movement so deftly done that only a keen eye could have detected it, the little case that contained the black diamonds went into a third locker.

Signs on the lockers said: *Fifty Cents for twelve hours. Contents of Lockers will be removed to Lost and Found Department when paid time has expired.*

Jiro's hand went into his pocket for coins. It came out with a scattering of dimes and one lone quarter but with no half dollars.

He remember a change booth now out of sight at the bottom of the escalator. Deftly, he slapped imaginary coins in each locker, then went quickly to the change booth. The young woman in the skintight slacks was getting change too, with the radio still in her ear. Ignoring her, Jiro changed a bill. Returning to the bank of lockers, he slipped six half dollars in each of the three lockers, paying up for 72 hours, then removed the keys.

His expression was that of a man who had gotten a load off his mind. Turning, he strode straight to the automatic vendor of stamped envelopes.

Sweat was on his face. He let it stay there.

"If you can stay alive for the next five minutes, maybe you can make it until tomorrow," he said to himself.

From the automatic vending machine, he got what appeared to be one sheet of stamped paper, gummed so that it could be folded into an envelope with a message written on the inside of the paper. Only a watchful eye could have discerned that two coins had actually gone into the machine and that it had spat out two stamped sheets of paper.

At the writing table, he scribbled a hasty note which was addressed to Sales Manager, Allied Cutting Tool Company, New York, N. Y., folded the sheet of paper, made a mess of the fold and had to do it a second time; then, after this was finished, he seemed suddenly to remember that he had forgotten a return address. Correcting this deficiency, he went to the mail slot, where he dropped the envelope.

Checking the collection time, he saw that it was only five minutes away.

Only a keen eye could have detected that two envelopes had gone into the slot and that the second envelope contained the key to the locker which held the three black diamonds.

As if he had mailed a sales report which contained huge orders, Jiro put a happy smile on his face and turned toward the visaphone booths. The expression on his face was that of a man about to turn from business to pleasure. There were dozens of visaphone booths, all in a row. He selected the one in the middle. It had solid walls on three sides. The only glass in it was in the door.

It was a pay visaphone, with a four-inch square glass tube that would light up to show the person at the other end of the connection. Pushing a coin into a slot, he got an operator and told her he wanted to make a collect long-distance call, giving her the number he wanted.

"Right away, sir," she told him.

While he was waiting for the connection, he seemed suddenly to recollect that his image would be seen by the person to whom he would be talking. As if he wished to make the best possible impression on that person, he reached hastily into his inside jacket pocket for the little atomizer. He sprayed his face with this. Carelessly, he also sprayed the glass front of the telephone picture tube.

The glass turned an indigo blue.

As if his life depended on what he saw in the indigo pool — or on what he did not see — Jiro studied the blue hole that seemed to look out onto another universe.

Nothing moved there. Or nothing that he could see. As he realized the blue pool was a blue pool and was nothing else, he let out his breath in a sigh of pure relief.

"Yes," a deep bass voice said from the visaphone speaker.

"I'm home, boss," Jiro said.

"Jim!" The deep boss voice rang like a happy bell shouting with good news of the return of a prodigal, then caught its happiness. "Are — "

"I'm all right, I think," Jiro said.

"Good! I was plenty worried." The bell rang with happiness and with relief. "Is it all right to talk?"

"I think so. I sprayed the blue dye on the picture tube. The phone booth is clean. But the washroom was clean too, I thought, before Calkins went in — "

"What?" the bass voice lost all of its recent happiness. "Where is Calkins?"

"He's dead," Jiro said. "His body is in the washroom of the middle car of the monorail train that brought us in from the space port, unless it has been found and removed."

"I'll take care of it," the bass voice said. "What happened."

Jiro explained. "Either the dye didn't work, or something followed him into the washroom."

"Uh! Were you followed?"

"If so, I don't know it," Jiro said. He waited for the bass voice to continue.

The voice was silent. The indigo blue was fading from the picture tube. As the dye faded, the round, ruddy face of a completely bald man appeared on the little screen. The face had hot gray eyes. For an instant, as the baldheaded man faced the fact of death to someone under his command, the hot eyes were very sad.

The sad eyes looked at Jiro. "You couldn't make friends with them, eh?" the bass voice asked.

"No, sir," Jiro said. "I couldn't even set up communications with them."

The bald-headed man nodded. "All right, then it's war," he said.

As he was speaking, his voice was picking up the throat-rumbling growl of the Great Dane, a rumbling, rolling, roaring sound that came up from his middle regions and promised to utterly destroy any enemy it faced. "We tried for peace and we failed. And I've got a dead man in the washroom of a monorail train. Tell me what happened?"

"I don't know what happened," Jiro said. "I think we were followed from the moon. I think they came right along with us in the same ship. I think when we boarded the monorail train, they got on board with us — "

"How many — "

"How would I know?" Jiro answered. "I don't have a clear impression of their size, I don't even know if they can be measured in terms of feet and inches, in meters and in millimeters."

"Jim!"

"Size is relative," Jiro answered. "I brought three things that look like black diamonds with me. They're in a locker in the station here. I mailed the key to myself, general delivery, main post office, Salt Lake City. Have one of our local men pick up the key and get these things out of that locker, fast. I want them put into an incubator."

"What?" the baldheaded man shouted.

"I think they're eggs, and I want to find out if they will hatch," Jiro said.

"Jim — " the rumbling voice was suddenly soft.

"I'm in what is left of my right mind. I think those black diamonds are eggs and I want them put into an incubator and I want them watched day and night, and if they hatch — I know this sounds silly, but play it my way."

"All right, all right, all right," the bald-headed man agreed. "Now I've got a job I want you to take over. I want you to get lost in Salt Lake City. I want you to stay lost until you are sure you are not being followed. Then I want you to take a jet to Chicago and get lost again. When you are sure you are not being followed, you may either report to me via phone or you may come on here to Denver and report to me in person. Got it, Jim?"

"Yes, Mr. Urban," Jiro said.

"Get lost, Jim. Stay lost. And Jim — " The voice of the Great Dane caught again.

"Yes, sir," Jiro said.

"Stay alive, Jim. You're the best

man this section ever had. We need you, Jim, we need you."

"You don't need me any more than I need to stay alive," Jiro answered.

"Out, Jim," Urban said.

In front of Jiro's eyes, the face of the bald-headed man faded from the little screen.

Jiro went out of the passenger terminal to the helicopter taxi landing area. A whirlybird lifted him to the top of the newest department store. Going downstairs, he entered the men's room and tested the mirror there.

The glass stayed a pool of indigo.

Leaving the department store, he took a street-level taxi to the jet port. Testing the mirror here, he found it revealed nothing.

"If I'm being followed, it's staying out of sight," he thought.

There was little comfort in the thought. If the creature that had killed Calkins was following him, it could very well remain hidden in invisibility.

Using his credit card, he bought a ticket to Chicago. The big, fast jet had hardly jumped off the ground before he went to the men's room. Again the mirror revealed nothing.

For the first time, he felt a little safe. Not really safe, not permanently safe, not safe enough to trust himself in deep sleep, but safe enough to trust himself to nap with one eye open.

Not that having one eye open would save his life, if something as sharp as the edge of a razor wanted to cut his throat, but having an eye open did make him feel a little better.

When the big jet touched down at the Chicago airport, he was still alive.

II

In the washroom of the Chicago airport, Jiro again sprayed a mirror with the indigo dye. The pool that opened into another universe revealed nothing. Feeling really safe at last, he went into a restaurant and ate. The rocket had landed at dawn; it was now midafternoon. Most of the fatigue had gone out of him. Sitting in the restaurant over black coffee, he suddenly realized how good it was to be back on the Home Planet.

The moon was a weird place, a haunted land of shadows as black as midnight in one place and, a hundred yards away, of sunlight blazing brighter and hotter than that of the African Sahara. The eye of a human did not like this violent contrast of shadow and of light. The moon was Earth's nearest neighbor in space, but in spite of its nearness, it was an alien world.

And a horrible one.

But the ores were there, the rich ores, the fine ores. The deep craters were natural shafts leading downward to the rich veins of mineral wealth. Metal-hungry Earth needed those ores. Founded on iron, civilization still existed on steel, though all the other metals were needed. Without them in plentiful

supply, the Home Planet would begin to decay.

Military-minded Earth, the politicians, the rock-jawed admirals of the space fleet under the control of World Governments, was and always had been interested in military control of the moon, which was a perfect launching platform for rockets aimed at any nation on the Home World. As a result of a truce among the great powers, the battle for military control of the moon was in abeyance at the moment.

Politically-minded Earth needed the vast publicity of moon exploration and development as a help in the always-coming next election. Scientifically-minded Earth needed moon exploration to keep the subsidies and the grants coming from the various governments.

All of these were pressures forcing exploration and development of the satellite. But there was another pressure. Intangible and subtle, it was nevertheless very real and very strong. It expressed itself in the idea that the human race was going somewhere. Exactly where the race was going, no one knew for sure. One point was clear to everybody — the moon was not the end. No! It was only a steppingstone into the solar system.

And after the solar system, the stars would stretch on forever to lure men toward them.

If other forms of life were encountered — and this was certain to happen — the plan of World Governments was to make friends with it, if this was possible. If it was not possible, then the rock-jawed admirals of the space fleet had specific instructions to use such warheads and such laser beams as might be necessary in their judgment to facilitate the outward-flowing wave of human exploration.

At least one — possibly other — form of life had once existed on the moon. The scientists were sure of the evidence for this, said evidence being in the form of vast nets that looked a little like webs spun by strange spiders in some of the craters of the satellite. The creatures that had spun these slowly vanished from sight. Perhaps they had gone into hibernation in caverns beneath the moon's surface. Perhaps they had died and had disappeared. The webs were falling into ruin now, and the creatures that had spun them in the almost airless craters were gone.

At least this was what the public thought, what the public had been told, perhaps what the public wished to believe. Thinking how much more there was to the story, remembering how blood had dripped from the ends of Calkins' long mustache, Jim Jiro suddenly lost his appetite. Getting to his feet, he paid the tab. Perhaps a walk through the thronged concourse of the airport would clear the feeling of horror from his mind.

Just as the feeling of horror was dissolving, he discovered he was being followed. Instantly, a charge of adrenalin was squirted into the bloodstream by the suspicious subconscious mind. Then, as he real-

ized that what was following him was human, the subconscious mind cut the switches it had closed. However, adrenalin had already gone into the bloodstream, and Jiro had to fight the impulse to flee from this danger his subconscious mind had discovered.

The danger was only a mild, inoffensive-appearing little man who had a face vaguely like that of a mole. Wearing a hearing aid hidden in steel-rimmed spectacles, Mole-face appeared to be studying a racing form as he made his way through the crowds. Only occasional glances over his steel-rimmed spectacles revealed his interest in the slender man.

One glance at Mole-face told Jiro that he could handle him physically, if this became necessary. The man himself was not disturbing. The fact of his presence was.

Since he must have been waiting at the airport for Jiro's arrival, this could only mean that he had known Jiro was coming. This in its turn could only mean that somebody had known when Jiro left Salt Lake City and where he had been going.

As he realized the meaning of the shadow's presence Jiro began to look at the empty air around him. His manner was that of a man who suspects the existence of invisible demons. He turned quickly to look behind him, then turned again, then realized what he was doing. Instantly, he caught himself and resumed his stroll.

As he turned, something struck him from in front. He had the vague impression that he had run into an elephant. Then he realized that the elephant was actually a huge fat woman carrying a net shopping bag in one hand and an umbrella in the other.

"Sorry, madam," Jiro said.

Eyes the size and color of those of a small pig glared at him from a puffy face.

"Why didn't you watch where you were going?" she shouted at him.

"I said I was sorry — "

"Being sorry ain't enough, you fool!" Lifting the umbrella, she bopped him over the head with it.

Jiro's hand was on the weapon inside his coat before he realized what he was about to do. He took his hand away from the gun.

"I almost acted before I thought," he said.

"You damned fool — " the fat woman began.

"Let's hope you are never again so close to death," Jiro said.

As she caught his meaning, her face turned gray. "Mister—" Caught between fear and anger, she could only stutter.

"Get lost!" Jiro said.

Turning quickly, she waddled away. As the crowd closed around her, she was running.

Jiro felt his head where the umbrella had struck. Coming when it had, the blow had startled him, but it had done no physical damage. He turned to look for Mole-face.

The little man wearing the hearing aid in the steel spectacles had disappeared in the crowd.

Jiro liked his absence even less than his presence. As long as Moleface was around, he was a known shadow. When he disappeared, this meant that another — and unknown — shadow had probably taken his place.

Skinny Jim Jiro wasted no time looking for the second shadow. His orders had been to lose himself. So far, he had failed to obey them. This was an error which had to be corrected, immediately.

Going to the helicopter landing area, Jiro boarded a waiting whirly-bird. "The Loop!' he shouted to the pilot.

"Right away, sir," the pilot answered.

If somebody picked up the number of the sky-cab and phoned it ahead, there was no better place on Earth to lose a shadow than in the thronging thousands of Chicago's old midtown Loop section.

The helicopter set Jiro down on a landing area at sidewalk level. He went through gates that barred the public from the area and kept the stupid and the curious from getting their heads chopped off by spinning vanes. Ignoring the shouts of warning from the security man, Jiro merged into the throng on the moving sidewalk. Riding for half a block, he stepped from the moving walk to the ordinary concrete sidewalk. After walking another block, he entered a department store. Going through it, he hailed a steam-powered street level taxicab, gave the driver an address on the near North Side and was whisked up the north bound ramp of the expressway.

So far as he could tell, he was not being followed. No other cab had come into the pattern behind him, but before he reached the North Side, he changed his destination.

In response, the cab left the expressway and dived headlong into an area of old homes that had once been mansions in some wonderful world of the past. While the stately old homes still managed to hold their own against the encroaching high-rise apartment buildings that surrounded them, they had not been able to maintain their original aristocratic manner.

Once, the intrusion of a man like Jim Jiro into one of these homes would have been sufficient reason to summon the police.

Now he could walk into any of them he pleased and could stay as long as he could pay the rent.

The wonderful world of the past had changed, and the stately old homes had become rooming houses.

At random, Jiro selected a huge old house with a sign ROOM FOR RENT in the window.

Paying off his taxicab driver, he went inside, where a hatchet-faced landlady with greedy eyes stared suspiciously at him.

"Ye'll have to pay in advance, mister," she told him.

"That's all right," Jiro said. "Show me a room. Good but inexpensive."

She sniffed at his requirements. He followed her along a creak-

ing hallway to a room at the rear that overlooked a backlot and an alley and a garage where kids were playing noisily.

Jiro said he liked the view, which made the landlady more suspicious than ever; but what he really liked was the creaking hallway, though he did not mention this.

"I'll take it," he said.

The price, which had not as yet been stated, jumped fifty per cent at these words. Jiro didn't care about the price. In the long run, World Gorvernments was paying for the room, a fact which he did not mention either.

"The bathroom is down the hall. Ye'll find towels in the closet," the landlady told him. Jiro listened to the boards creak as she went down the hall.

Going into the bathroom, he sprayed the cracked mirror that he found there with the little atomizer which he carried in an inside pocket. Again he stared into the indigo pool. Theory said that if any invisible thing was present in the bathroom, the indigo dye sprayed over the mirror would reveal its reflection.

After what had happened to Calkins, Jiro was not sure that this theory was any good, but it was the best the boys in the laboratories had been able to do so far. Perhaps in the future — if there was a future — they would be able to do better.

Studied from every angle, the indigo pool that seemed to open out into another universe revealed nothing. There were no suspicious light swirls, no face that looked like a cross between a bird and a spider, no points of ice-picks, no lines of light trying to become razor edges. Slowly, the dye faded.

"Negative again," Jim Jiro thought. "What if the spray had lost its strength — "

He put the thought out of his mind. A man in his position who started thinking about the *what ifs* was taking a short cut to the madhouse. He was also following the pattern of men who had feared the unknown since the time when the race was young. *What if* a tiger lurked beside the waterhole today? *What if* a devil wearing green came out of a mound and devoured all of us? *What if* a tire blew when you were doing ninety on the freeway?

Man had a heritage of *what ifs* gleaned from centuries of bitter experience. Jim Jiro knew better than to let the anxieties of these centuries come up like screaming ghosts from his subconscious mind. Going back to the bedroom along the creaky hall, he locked the door and laid down on the bed.

Shouts of the children at play came from the back yard. With a quarter of his mind, Jim Jiro listened to their happy noise. *What if* a horde of invisible devils came from the moon? If this happened, would kids continue to play in the backyards of America?

Jim Jiro did not know the answer to this question. He did not even like to think about it.

Sliding the little gun out of its holster, he checked to make cer-

tain it was in working order. Oddly shaped, an inexperienced observer would have had difficulty in deciding that it was actually a weapon.

It had three barrels. No barrel was over an inch long. The barrel on the left would emit a spurt of gas which would render a human helpless in a matter of seconds and would make him unconscious in less than a minute. The barrel on the right was the size of a pin. It fired a needle which was coated with a fast-acting anaesthetic. The needle was effective at a greater distance than the gas.

The third barrel was under the other two. It fired a tiny pointed slug which looked like a flattened pea. Only two slugs were kept in the little weapon, one in the chamber ready to be fired, and one in a magazine in reserve.

If it reached its target, one slug was all that was needed. The pea-sized pellets exploded with such violence that one would blow off a man's head. If a slug struck his heart, this organ would be blown out of the rib cage. If it struck his intestinal tract, no surgeon would ever succeed in putting him back together again.

Yet in spite of its versatility and power, the whole weapon was so small it could fit into the palm of a man's hand.

These weapons were WGI — World Governments Issue — to men who served this organization in the grim unit euphemistically called *The Peace Corps.*

Looking at the powerful little weapon, Jiro felt like throwing it out of the window. It hadn't saved Calkin's life. But Calkins had not had a chance to use it. Or had he? Exactly what had happened in that locked washroom? Had something followed Calkins into the room or had it been there waiting? If it had been waiting there, why had it attacked Calkins instead of Jim Jiro.

Jim Jiro shrugged such questions out of his mind. He had no way to answer them. Outside, the children had stopped yelling happily and had begun to scream in anger. Rising, Jiro slipped the little weapon back into its holster. Going to the window, he looked out.

A car had come into the back yard and had stopped in the middle of what the children had thought was a baseball diamond. A limousine, sleek and powerful, the car had been built to hold eight passengers. It was a steam job, one of those marvelously improved steam turbine powered cars that now were the rage.

The driver of the limousine was a round-faced youth with the newest in haircut styles. Bland and smiling, he was probably considered by his associates to be a cool cat. Just looking at the driver, Jiro detested him. Was it for the kids like this that he risked his life? As Jiro was thinking about this problem, his gaze went on the man sitting beside the driver.

The man was Mole-face! This was a man he had seen at the airport!

In spite of every precaution Jiro had taken, he knew he had been fol-

lowed through the thronging Loop district to this shabby rooming house on the north side of Chicago.

How had this been done?

He did not know .

The kids had fled into the garage when the car had appeared. Coming out again, they were now jeering at the occupants of the car, inviting them to get the limousine off of their baseball diamond.

"Get lost!" the driver shouted at them.

They fled back to the garage, then, from the doorway, began to shout again. There were perhaps fifteen of them, ranging in ages from nine or ten down to a toddler who was hardly out of training pants.

The toddler was at an age level where verbal taunts do not completely satisfy. Imitating his older companions, he was shouting at the occupants of the car, but was being ignored. To make certain they noticed him, he picked up a piece of broken brick and threw it at the car. It struck the windshield and caused a slight scratch in the shatter-proof glass.

Mole-face opened the door on his side. Leaning out, he tossed something over the top of the car. It sailed in an arc toward the open door of the garage.

The kids scattered from it. The toddler tried to run but slipped and fell. The object Mole-face had thrown struck in the open door of the garage and directly in front of the toddler. It exploded softly. A green mist puffed from it. The mist struck the toddler as he got to his feet, engulfing him.

The toddler fell a second time. For an instant, he seemed to have forgotten how to get to his feet. As if he were trying to swim on the concrete slab, his arms and legs thrashed wildly. Then this motion ceased. He seemed to sigh and to stretch out. As the green mist went into his lungs, it was as if he'd gotten tired and had decided to lie down and take a little nap.

It was a nap that would never end.

The green mist flowed into the garage where the kids had fled. Silence followed it.

The kids in there were also taking little naps.

Jiro did not know how the gun got into his hand. It seemed to appear there as if by magic. Never in his life had he wanted to kill anybody as badly as he wanted to kill the man who had tossed the small but very deadly gas bomb over the top of the car and into the door of the garage. He did not in the least doubt that the bland-faced youth sitting behind the wheel deserved the same as his companion. The bottom barrel of the little weapon would do the job. Probably the windshield of the big limousine was made of bullet-proof glass, but one of the pellets from the bottom barrel would knock the windshield out of the car and would shatter the vehicle and its occupants.

Jiro did not fire the shot. Killing the two occupants of the car would not bring the toddler back to life nor would it lift the pall of silence that hung over the garage.

At this moment, Jiro told himself, his job was not vengeance — this would have to wait for another time, perhaps for other hands — his job was to stay alive long enough to report what he had seen happen here, to say that another and hitherto unknown gang of human killers seemed to have made an alliance with the death that was coming from the moon.

Perhaps Urban already knew this, perhaps he did not.

Slipping the little weapon back into its holster, Jiro turned to the door and jerked it open.

The fat woman who had hit him over the head with her umbrella was standing on the other side of the door. While he had been engrossed in watching the horror in the back yard, she had come along the creaking hallway without him noticing the noise she was making. Her little pig eyes glared at him from the puffy skin of her greasy face. In her hand, she held something that looked like a nasal spray.

As he opened the door, mist from the nasal spray was already spurting upward. It puffed around his face, stinging the skin tissues there, a pink mist that went into his lungs. Before he had time to get the gun into his hand again, he was falling.

As he fell, he recognized the fat woman.

Her name was Nellie Moll.

She was the leader of the most vicious, depraved, violent gang of wanted criminals that ever existed. She ruled this gang by being the most vicious, depraved, and violent member of all.

III

Jiro slowly realized he was hearing a voice, which was calling him sweet names, was telling him what a nice boy he was, and was asking him a question.

"Where are they, baby?" the voice asked him, over and over again. "Be a nice boy and tell mama where they are, sweetheart."

Jiro thought his throat and his lungs were on fire. Remembering what had happened to the toddler when the green gas had hit the child, he decided he was lucky to be alive at all. He knew his eyes were open, but he also knew he was not seeing out of them. The gas had blocked off his optic nerve somewhere, and his vision was cut off. In one way, he rather suspected this was a blessing. He did not think he would like what he would be seeing if he could see.

Certainly he did not like what he was hearing. Usually the words *"baby"* and *"sweetheart"* were used in a tender situation, as part of the love act. They were not being used that way now. As he was hearing them, they sounded as if they had been soaked in vinegar and then dissolved in hydrochloric acid. Venom, bitterness and hate oozed from each word.

Abruptly, the blockage was dissolved from his optic nerve, and he could see again. He saw instantly that he had been right in thinking he would not like what he would see. Nellie Moll was bending over him. As she realized he was conscious, she smile fondly at him

and sat down in a chair beside the bed where he was lying.

"Nice, nice," she said. "Mama is so glad to see you have come back to life."

She was smoking a small cigar with an ivory tip. A heavy net bag was in her lap. The room was poorly lighted, and his vision was not good, but Jiro could make out, dimly, in the background, the sharp nose of Mole-face and the square shoulders of Hair-cut, who had been driving the limousine that had stopped the ball game of the kids, permanently. Did they think they could get away with that kind of murder?

On second thought, Jiro could see why they might think they could get away with it. The killing was unmotivated and, except for him, unwitnessed. As he realized he was probably the only witness of this wanton murder, Jiro decided that he would not mention it.

Not that he thought that he had much chance of getting out of this basement alive, anyhow.

He was lying on his back on a bed. Pain was in his wrists, in both shoulders and in his ankles. He tried to roll over, to relieve the pain, and discovered that he was lying with his hands tied together above his head. They were then tied to the head of the bed. His ankles were also tied together and to the foot of the bed.

Wire had been used to tie him. It was cutting into his skin.

He tried to speak. The effort brought on a violent spasm of coughing. His throat was burning. The cough seemed to make it worse.

"Water," he whispered.

The fat woman beamed fondly at him. A baby speaking its first word would not have received greater encouragement from its doting mother than he did from Nellie Moll at this moment. Her little pig eyes radiated pleasure.

"My boys wants water," she said to Mole-face and Hair-cut.

"Do you want I should get him a drink, Miss Nell?" Mole-face asked.

"Please do," she said, gently.

Mole-face went to a washbasin on the far side of the room. The sound of splashing water followed. Jim Jiro thought he had never heard a more pleasant sound in his life. Mole-face returned with a paper cup with bright drops of water rolling down its side.

Nellie Moll took the cup away from Mole-face.

"Do you want a drink, sweetheart?" she cooed to Jiro.

Skinny Jim Jiro had never wanted anything as much as he wanted this drink of water. Nellie Moll leaned over and moved the cup toward his face. He lifted his head as much as he could.

She threw the water in his face.

He sank back on the bed.

"You'll get a drink when you talk!" she screamed.

If he could have gotten his hands on her, he would have gladly choked her to death. Drops of the water were still on his lips, and he reached out his tongue trying his best to lick them off.

She thrust the lighted end of the cigar on his tongue.

He heard the hiss of burning coal on flesh as red-hot pain shot through his tongue. She put the cigar back into her mouth, puffed it until the end was again a glowing coal and stood beaming fondly at him. Gagging and choking, he made up his mind that he would kill this fat woman some day.

"Get him another drink of water, please," he heard her say.

Mole-face obeyed. Taking the cup of water, Nellie Moll offered it to Jiro, who refused to open his mouth. At her orders, Hair-cut came around the bed and drove his thumbs into the corners of Jim's jaws. Jiro was forced to open his mouth. Mole-face lifted his head.

As gently as a nurse giving nourishment to a bed-ridden hospital patient Nellie Moll gave Jiro a drink. This made the burned spot on his tongue hurt even worse than ever.

"See how nice I can be, baby," Nellie Moll said, beaming at him from her little pig eyes.

"I'll remember how nice you have been, when I meet you in hell," Jiro said.

Even though his words were poorly pronounced, Nellie Moll understood his meaning perfectly.

"Maybe you'll remember, sweetheart. And maybe you won't remember anything at all!" She shook her head at the meaning of her words. "It seems such a shame to lose a man right in the prime of his life, with a good brain and a good future." She shook her head at the prospect she saw unfolding before her mind's eye. "But sometimes it can't be helped."

"I suppose you will go into deep mourning because of it," Jiro muttered. A throbbing sensation had been added to the burning feeling in his tongue, and he could not talk clearly. However, the fire from the pink gas he had inhaled had gone from his throat and from his lungs. More important, his head was clearing and physical strength was coming back into his body. Not enough strength to break the wires that bound his wrists and his ankles, but enough to face his tormentors, perhaps enough to face the idea that he had to die.

He had no illusions that he would not be killed. This was certain. But why was Nellie Moll delaying? What did she want to know?

"Where are they, baby?" she asked.

"Where is what?" Jira answered.

"Them black things you put into the locker in Salt Lake City."

Jim Jiro did not have to act surprised. He really was surprised, that she knew enough to be able to ask this question and at the meaning back of the question.

"Aren't they there?" he answered. "That's where I put them. I don't know what happened after I left — I mean — "

"No, they were not in the locker," Nellie Moll answered. She smiled fondly at him. "I'm glad to see you are smart enough not to try to pretend they were only black diamonds. I'm real glad to see this. It makes things so much easier."

"I didn't mean to make anything easy," Jiro said. "It's just that, well, I was so surprised to learn they are not in the locker. How do you know they aren't there?"

"Because we sent somebody to look," Nellie Moll said. "And I'm real glad you are not trying to lie to me. It makes things a lot easier, for you."

"Um," Jiro said. This had overtones he did not like. "How'd you manage to follow me here?"

She smiled fondly at him. He was such a bright child! "I don't mind telling you, sweetheart. Do you remember when I bopped you with my umbrella?"

"I'll never forget it — "

"There was a little piece of radioactive dust on that umbrella. Some of it got wiped off on your hat when I hit you." She chuckled to herself over some private joke.

"So you succeeded in putting radioactive dust on my hat, then you followed me with a good detector," Jira said. "Yes, that is possible. It makes sense." He nodded to himself.

"No, sweetheart," she denied. "Nothing like that."

"Hunh? Then how?"

She nodded toward the ceiling of the room. "George did it. George can see radioactivity a mile away, maybe more."

"Eh? George? What — "

"You haven't met George yet, honey. Not officially, that is. George has met you but you haven't met him." Again she chuckled at her own private joke. "You'll like George. Sort of, that is."

Her chuckle became a laugh. She looked at her two followers, for confirmation of her joke. They were trying to laugh too. In each case, they were failing.

"Real cute, George is, in some ways," she continued. "Real well trained too."

"What the hell — "

"He may not be real smart in all ways but he knows enough to stay away from mirrors, 'specially when they are turning blue," Nellie Moll continued.

Her grunting laughter was the most horrible sound Jim Jiro had ever heard. Furtively, he tried to pull at his wrists, to gain a little slack there, knowing that even if he got his hands free, it would gain him nothing. Then, as another thought struck his mind, he gasped a question.

"Did George kill Calkins?"

Nellie Moll showed real interest in this question. "Who?" she asked.

Jiro knew he had revealed too much in asking this question. He tried to cover up.

"I — found a man in the washroom of the monorail train that brought us from Salt Lake City from the moonport in the desert. Since you knew about the locker, I thought perhaps that George had come in on that train. I just caught a glimpse of the dead man — "

"But you knew his name, baby. You call him Calkins." Alarm crossed Nellie Moll's fat face. "Was there more than one of you on that moonship?"

"I — "

"And one of you was killed?"

"Yes," Jiro said. There was no point in denying what she had correctly guessed.

"How was he killed?"

"His throat was cut."

"Then more of them came in than I was told about!" There was no mistaking her alarm now. It made great wrinkles in the fat flesh of her face.

"Baby, if you are lying to me—"

Jiro found the fat face less than six inches from his nose. He saw that her eyes were green and were filled now with fear and hatred that he had never seen in the eyes of any other human. Even when she had been young, Nellie Moll had not been pretty. At this moment, she looked like something dredged up from the depths of hell.

She even had the smell of hell on her breath. It was a mixture of cheap whiskey, strong tobacco and some kind of dope that he could not identify.

"Baby, if you are lying to me, I'll just naturally tear your eyes right out of your head with my own hands." To prove what she meant, she exhibited her fingernails. They were broken and dirty.

Sweat was on Jim Jiro's face and on his body. "I'm not lying," he said.

Oddly, she seemed to believe him. Sitting down again, she thrust one fat hand into the depths of the net bag that she was carrying. Rummaging among its varied contents, she came out with what looked like a specially made walkie-talkie. From the top of it, she carefully pulled out an aerial about the thickness of a human hair and no more than a quarter of an inch long. Flicking on the transmitter, she spoke a single word.

"George!"

From somewhere near the ceiling, bird whistles answered her. At this sound, Jim Jiro felt his skin begin to crawl all over his body. Intuitively, he knew the source of these sounds. The whistles were like those of no bird that Jiro had ever heard, but there was a shrillness about them that was similar to the sharp whistling of a bird. At one and the same time, they were both faint and clear, as if this bird were both far and near at the same time. As the bird sounds came from the tiny speaker on the little compact radio set, Mole-face and Haircut showed distinct signs of growing uneasiness.

Nellie Moll showed no such uneasiness. Her face revealed that in her mind she thought she owned this bird that was whistling near the ceiling. It took orders from her, her face said. Looking up toward the ceiling, she whistled into the transmitter, then listened to the whistles that came back in answer. She looked at Jiro.

"George says that one of his pals probably got hungry and made a meal off of this fellow you mentioned," she said to Jiro. "He says not to worry about it."

She beamed at Jiro as if she suddenly loved him again.

"I was afraid somebody else had got him a tame devil and was try-

ing to cut in," she said. Taking a puff from the cigar, she settled it firmly in the corner of her mouth. At this moment, she looked like a fat sow that was learning how to to smoke.

"George says you are almost ripe," she continued, beaming at Jiro.

"*Ripe?* What the hell — "

"Don't ask me, baby. I don't understand it, but George says he lives on something like starlight."

"Like starlight?" Jiro whispered.

"I think he means there is energy in it," Nellie Moll explained. "And that this is his natural food when he can get it. But he can't get it often enough. Fortunately, for him, human beings when they're scared give off some kind of radiation that is pretty close to the starlight that is his natural food.

"When he says a human is *ripe,* he means that the human is scared and is almost ready to eat. The worst scared a man is, the better George eats. He says that just after he cuts their throat, or slips an icepick past an eyeball, they really get ripe."

She laughed, a burst of sound that had no merriment in it, and glanced around at her two cohorts. "Hey, boys? Ain't that right, boys?"

They nodded, weakly.

Jiro felt nausea beating at his stomach. Was it possible that a creature could exist which lived on radiant energy? All life used energy in some form. Plants took radiant energy from the sun. But to live on the radiations given off by a human being when he was afraid — Jiro gave up trying to grasp all the implications involved in this statement. His problem was much simpler. It was how to stay alive.

This was not a problem he had much chance of solving, he thought.

"Now, baby," Nellie Moll said, beaming fondly at Jiro. "Just tell me what happened to them black things you stuck into the locker in Salt Lake City."

"I — " Jiro began.

"George is very interested in what you say," she interrupted, looking up toward the ceiling. "Very, very interested."

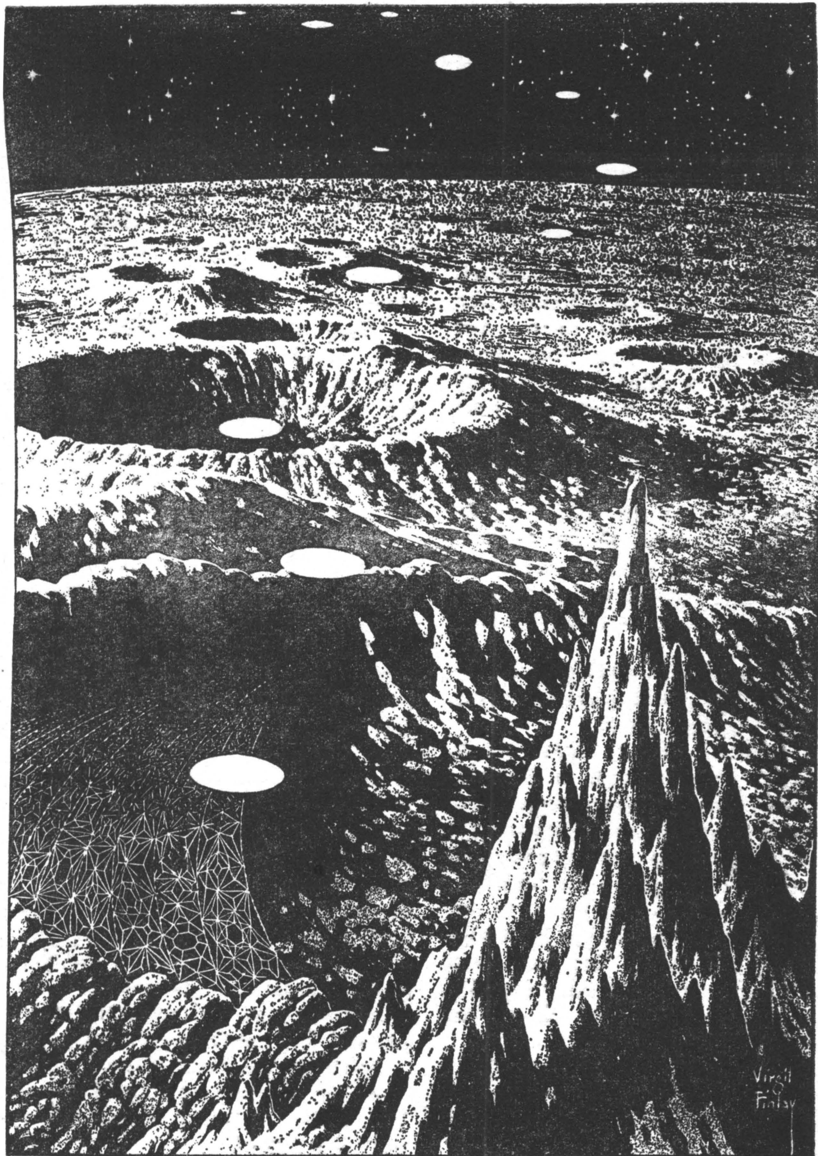
Jiro considered the various ways in which he would enjoy destroying this fat sow, who claimed to be a human being.

"I told you I don't know," he answered. "Maybe somebody else has a Tame George. Maybe that George watched me put the eggs in the locker. Maybe that George watched what I did with the locker key. Maybe that George told its owner where to find the key. Maybe the owner got the key and opened the locker."

Nellie Moll looked startled at this fantasy.

Jiro was bluffing, he was trying to find a way to stay alive for a few more minutes. So far as he had known until he had heard the bird chirps coming from the tiny radio, there was no such thing as a tame devil. By definition, a devil could not be tamed. If it was tamed, it had to be called something else.

"Another Tame George?" Nellie


Virgil Finlay

Moll looked shocked. She did not like this idea and expressed her dislike by biting heavily on the tip of the cigar. "Nah! I'm the only one who has a Tame George. You'd better believe it, buddy!" She scowled at Jiro.

"All right," Jiro said. "But remember we've got a man dead with a slashed throat in a monorail train doing ninety miles across the desert. Maybe the same devil that killed him followed me into the station and watched me hide the black eggs. Maybe it is working for somebody besides you. Of course, I'm only guessing. If you have a better guess than mine, you're welcome to it."

His frankness in admitting he was guessing seemed to unnerve the fat woman a little. Lying or evasion she expected and could handle. An honest answer left her confused.

"Them devils wouldn't double-cross me!" she said, suddenly angry. "They wouldn't dare."

"Wouldn't they?" Jiro asked. "Maybe your George is listening to every word you're saying. When he gets ready to write you off the books, he'll slip an icepick into your heart and go on his way."

"He can't understand me except through this," Nellie Moll said, tapping the radio. "He can't hear me without my using the radio. I'm not sure he sees me all of the time."

"I wouldn't bet on any of that," Jiro said. He may be hearing and seeing you without letting you know about it."

"George is my friend. I take good care of him. He likes me," Nellie Moll hastily answered. "George wouldn't stick an icepick in me when I wasn't looking. Nah! He wouldn't do it."

As she was speaking, she was turning hastily to look behind her. Back there were Mole-face and Hair-cut. Both looked as if they would very much like to be somewhere else.

"They don't have friends," Jiro said. "Only enemies."

Again she tried to look behind her, again Mole-face and Hair-cut tried to dodge. Again she seemed to search the room in a silent hunt for something that was invisible but which she knew was present.

On the bed, Jim Jiro was quiet. Although he knew it was pointless, he found his eyes were searching the room too, looking for something which he could not see. Smoke from the cigarettes, pale blue mist from Nellie Moll's cigar, filled the air. Was there something in the room that could hide behind swirls of tobacco smoke?

Remembering the bird chirps he had heard, Jiro was sure that something was actually present in this room. Those hatefilled bird noises had come from a world of frequency higher than that of the blue smoke, from an incredible world that many men had suspected existed and had feared exceedingly.

Suddenly the radio chirped again.

Nellie Moll almost jumped out of her chair. "I forgot I had left it on!" she gasped.

Continuing bird chirps shrilled through the room.

Listening to them, Nellie Moll's face started to turn green. Her little pig eyes almost popped out of her head.

"Boys, we've got to move fast. George says he smells men coming. Lots of men!"

The three tried to get through the door at the same time. Nellie Moll literally shoved her way between the two men. The door slammed shut behind them. From behind it came the sound of feet fleeing down a hall.

On the bed, Jim Jiro sighed, and relaxed. He did not know how it had happened, but his life had been saved.

Then, as something stung his left cheek, he realized his life had not been saved.

Nellie Moll, Mole-face, and Haircut had fled.

But George had remained behind.

IV

The thing that stung Jiro's left cheek was razor sharp.

Whether it was a razor or an icepick-shaped claw, Jim did not know. Nor did anyone else. No member of the special unit called the Peace Corps who had seen this cutting edge had lived to tell what he had seen. All anyone had seen of this cutting edge had been the results in the form of bodies cut into ribbons of meat, flesh slicked and carved clear down to the bone, vital organs cut into layers of tissue, arteries severed. All were done by a cutting edge that was invisible and, until Calkins had died in the washroom of the monorail train, all had been restricted to the moon.

Or perhaps the icepick had been used. The result had been bodies with hundreds of tiny holes in them, holes in the eyes, holes in the heart, holes in the liver, holes through the guts.

Jiro did not know whether a razor edge had slid across his cheek or whether an icepick had been thrust into the skin there. He could not move his hands, to touch the spot, nor could he see it. Turning his gaze downward, he had the vague impression that he could see something there. A creature as intangible as moonbeams seemed to move there, but he was not sure he was seeing something or whether his vision was distorted. Once, he thought he caught a glimpse of a single eye watching him.

Jim could feel moisture trickling down the side of his face but he could not tell whether the wet feeling came from sweat or from blood.

Fear surged up in him.

Then he remember that Nellie Moll had said that these devils could live — actually did live — on the fear radiations generated by human beings. Wildly, he wondered if the ancient injunction in all of the scriptures of the world to "be without fear" had had its origin in a knowledge of the existence of such creatures as these. Had they appeared on Earth before?

As to the idea that they could live

on fear radiations, he knew from wide reading that a frightened man exuded a strong odor that a dog could detect. Frightened people were more likely to be bitten by dogs than calm people. Perhaps a life form could exist which had adapted itself to live on the odor or on the radiations from a frightened person, or on both!

As fear surged up in Jiro, he realized that Nellie Moll had been telling the truth when she had said that George thought he was almost *ripe*. The purpose of the prick of pain on his cheek was to frighten him even more, to bring up more fear in him, to *ripen* him still further. This purpose was being achieved. Fear was rising in him.

He caught the emotion with mental effort, resolving within himself not to be afraid, telling himself verbally that he was not afraid. As he did this, he rediscovered what he already knew, that in a man fear grown to full fury had the strength of a wild stallion. Words were the rope with which he was trying to hold this wild horse called fear. The rope was much too weak for the job required of it. The stallion lunged, the stallion stood on his hind feet, kicking at the air.

Fear reached for the control of his imagination, seeking there the control center that would give it freedom to go completely wild.

Jiro fought the fear. Deep inside himself, he reached for inner strength, to control the rising emotion.

Something stung his right cheek. Wetness — whether blood or sweat, he could not tell — ran down the side of his face. He tightened muscles all through his body, putting pressure on the wires that held his hands to the head of the bed and to the wires that held his feet to the foot of the bed. The wires were strong. They did not break. The mad stallion of fear again lunged, trying to be free.

Something was in the room that could kill him at any moment it chose, could slash his throat, could thrust an icepick into his heart. It was teasing him now, playing with him as a cat plays with a half-dead mouse, to enjoy the squirming of the captive creature that was struggling desperately to retain a life already in forfeit.

Jiro, struggling with equal desperation inside himself, held the rising fear in check. But only in check. He knew that holding it in check was not conquering it but was only transferring it to some hidden place inside himself, to some basement of the mind, from which it might erupt later.

In the distance, in some other world, it seemed, he heard doors bang, but his now fully occupied mind did not register any meaning for the sound.

"I'm going to lick you, George!" he whispered. What he meant was that he was going to control himself, which could be a way to win a battle over his invisible antagonist.

In response, what felt something like three claws raked suddenly across his forehead.

As this happened, the fear he had hidden in the basement tried to erupt and to add its strength to that of the wild stallion. Desperately, Jim Jiro held the stallion from lunging free.

The thing hidden behind the blue smoke waited for its torture to take effect. Jiro had the vague impression that it was confused by its failure to get the expected reaction from him. In the past, humans had gone completely crazy at just the touch of the razor edge it used for a cutting tool. Sometimes they had gone into panic just by thinking about the meaning of this razor edge and by imagining it was near them.

The man on the bed was suffering, he was partly ripe, but he was not going into full panic, and he was not going completely crazy. He even seemed to be losing some of his *ripeness*. To the invisible thing in the room, he seemed to be becoming less palatable.

This irritated the thing. It did not understand how this could happen. It sent out tendrils to explore the radiations flowing from this man's body and hastily withdrew the tendrils as they reported minimal edible content.

The thing passed from irritation into the edge of the zone of anger. It was hungry. In its invisible body, energy cells were nearing exhaustion. These had to be replaced. If they were not soon refilled, it might have to find its way out to the street and attack there the first person it found, preferably a female. It had discovered that women, with the exception of Nellie Moll, went faster and deeper into panic than men.

If it left this basement and wandered through this great city, it would find plenty to eat. It might wander into a library where someone was reading and leave behind it the grim record that it — *something* had been there. A person reading a book might feel a slight stinging sensation. Looking up, he would think that perhaps a fly had landed on his face. He would brush it away. His fingers would reveal that blood was flowing from a gash in his cheek. As he wondered about this, a second stinging sensation would come. Then another! At this point, the human would go into wild panic.

And it would feed!

Its methods of perception were so different from human senses that its method of cognizing its environment could not be called *seeing*. It did not truly see the man on the bed in the way another human would have seen him. It was aware of a pattern of shifting colors surrounding a heavy structure — the body — which was shot through with colors of red, violet, purple, and many others, all constantly changing and all eternally in motion. This happened so rapidly that the effect of solidity was given. It did not see the bed on which the man was lying, as a bed, but it was aware of the electronic patterns made by the metal legs and by the coiled springs in the mattress. To it, the flow of electronic energy around these coiled springs was very beautiful.

Its method of cognizing the environment, while it missed much that the human eye saw, also made it aware of much that the human eye did not detect. It was well aware of radiation in frequency ranges that the human eye could not detect.

It was also well aware of a grim law of existence, of life preying on life. It thought this was the only law that existed. As humans preyed on the life below them, on plants, fruits and animals, it preyed on humans. Not necessarily by choice — it preferred the long-ranging radiations from its home world — but if these were not available in sufficient quantity, it could survive on the fear radiations from a frightened human being. Plants and fruits meant nothing to it, animals meant very little. It liked men, felt it was superior to them, could prove this point to its own satisfaction and felt completely justified in preying on them if it so chose.

The man on the bed was not palatable enough, not ripe enough just now. Therefore he had to be induced to produce additional fear. It knew how to deal with a man lying on his back. Extruding two needle-pointed tendrils, it inserted them into the skin just at the top of the man's eyes. Experience had taught it that every man had a reflex action to protect itself from damage to his eyes.

Jiro felt the tips of the tendrils as they touched the upper lids of his eyes. Each felt like a tiny icepick. He remembered a body he had seen near him on the moon. It had been filled with hundreds of tiny holes, the result of something resembling icepicks being driven through a tough plastiskin space suit. As this memory came into his mind, the stallion in his subconscious world went crazy. The stallian thought this picture was real. Jiro knew it was too frightened to be held on a close rope, that unless given some measure of freedom, it would break free and would run wild. He gave the stallion of fear a little freedom, felt his heart jump and his breathing quicken in response, then checked the stallion and held it on a steady rein.

He held his eyelids still.

Pressure increased there. Pain increased with it. Jim felt his breathing quicken again. This was an automatic mechanism that had to be controlled. If he let his breathing become wild panting, hurried gasping for breath, his emotions would break completely free. To control the fear rising in him, he had to slow his breathing to long, rhythmic inhalations and equally slow exhalations.

Doing all these things required all his attention, all his will power, all his ability to concentrate. He knew if he did not do them the wild stallion would break free down below and his bloodstream would be flooded with adrenalin. Radiations would pour out from his body.

George would free! George would eat! George would gorge!

In the depths of his mind at this moment, he hated George more than he hated Nellie Moll.

Jiro brought his breathing under control. With it, he controlled the wild stallion of fear rearing and plunging in the depths of the subconscious mind.

As the invisible thing realized its tactics were not producing the desired results, it thrust the icepicks deeper. Passing through the skin, the sharp points touched the tender flesh of the eyeball itself.

At this added prick of pain, the wild stallion broke free.

Jim Jiro knew he had lost a battle.

As he was preparing himself to die, he heard a thudding sound which seemed to come from some far-off world. The thud was followed by a crash, as of wood splintering.

Instantly the icepicks were withdrawn from his eyes.

As Jiro tried to open his eyes, to see what was happening, a throbbing sound was suddenly in the air. Somewhere something squealed like a stricken and dying bird, screaming in pain, a noise that seemed to reach Jiro's mind through some channel other than his ears.

Then a man began to swear. Jiro heard quick footsteps approach his bed. He opened his eyes. A baldheaded man wearing heavy goggles was bending over his bed. The baldheaded man was swearing.

Vaguely, Jiro recognized the baldheaded man as being Mr. Urban, his superior officer, his boss, the man who gave him orders in the special unit he served in World Governments. As he was wondering how Urban had found him, consciousness slipped away.

Eventually, slowly, he came back to consciousness. He did not do this of his own free choice. In his mind as he came back to consciousness was the thought that again he would have to endure a horror called a Tame George and the razor's edge and the icepick's point. Then he realized he was being forced back to consciousness not only by some liquid that was burning his lips — and lighting a fire on the place on his tongue which Nellie Moll had touched with her cigar — but also by the sound of hot profanity near him. The man near him, whoever that man was, could swear!

Slowly, Jiro realized that the pain was gone from his shoulders, from his wrists and from his ankles. This felt so good he tried to move and found he could. This so astonished and pleased him that he allowed himself to become fully conscious again.

Wearing blue goggles with a small hole in the center of each lens, Urban was holding him in a sitting position with one hand.

With the other hand, Urban was holding a small flask of brandy to Jiro's lips. It was the brandy that was causing the burning sensation on his lips and tongue. Ignoring the pain on his tongue, Jiro gulped at the brandy. A fire immediately started in his stomach, but his will to be conscious, his will to be alive, came surging back.

"George!" he shouted.

Now for the first time Jiro noticed a man standing at the foot of his bed. This man was also wearing goggles with blue colored lenses and with a small hole in the middle of each lens. In addition, this man had what looked like a very strange flashlight in each hand. On top of each flashlight was an aiming tube with another blue colored lens. On the bottom of each flashlight was a trigger. As Jiro stared at this man, wondering who the fellow was and what he was doing there, he became aware of a foul odor in the room. If a hundred skunks had been skinned in this place, the smell would have been similar.

He noticed now that Urban was coughing and that the man at the end of his bed looked as if he wanted to hold his nose.

"Jim, are you all right?" Urban demanded.

"Well — " Forced to think about himself, Jiro decided he did not know the answer to this question. His tongue was raw, his eyelids had pain in them. Urban seemed to read his mind.

"Lie down, Jim. I've already sent a man for a local doctor," Urban said. He made certain of compliance to his orders by forcing Jiro to lay down.

"George!" Jiro said, suddenly remembering. At Urban's urgent request, he explained what he meant.

Urban shook his head. "That smell is all that is left of that particular horror," Urban said. He nodded toward the man standing at the foot of the bed. "Danny got him."

The man standing at the foot of the bed removed his goggles. Now Jiro recognized him as a fellow worker on that very strange World Governments unit called the Peace Corps. "Hi, Danny, hi," Jiro said. "You really — I mean — "

Danny tapped one flashlight with the other. "The lab boys came up with this, Jim. It projects a very high frequency tight beam of radiation. This thing that you call George screamed like a wounded buzzard when the beam struck him. Now he stinks like a dozen skunks."

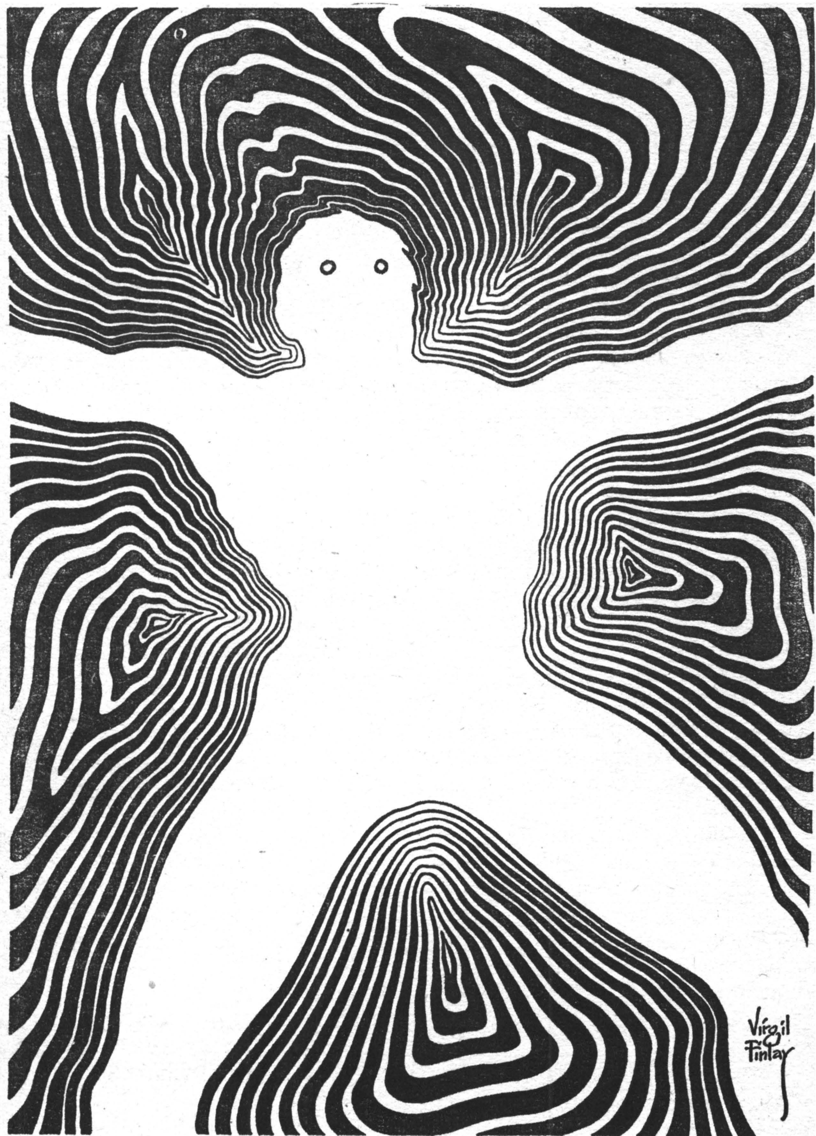
"Great," Jiro said. "Very, very great. I love you, Danny, and I love the boys in the lab. A gun for George! I really can't tell you how good this makes me feel!"

"I know how good it makes us all feel," Urban said. "Up until now, we've had to sit around and wait for something to cut our throats. Now we've got a gun. We can do a little blasting of our own."

The bald-headed man seemed to expand as he spoke. "There's a furor about this in the highest echelon. Space admirals are demanding action. The WG cabinet itself wants to know what is going on. Now that we have a gun we can go into that moon mine and find out what's there."

Jiro thought about what Urban had said. It felt good to him too. But there were other things that did not feel good.

"Nellie Moll!" he gasped. "And two men."



PEACE CORPS

"They must have gotten away just seconds before we arrived," Urban answered, irritation in his voice. "I've put out a general pick-up order on all three of them. They will be picked up within hours, I hope." His eyes came down to the man on the bed. "What did she want with you, Jim?"

"Eggs!" Jiro answered. "Incubator." His shaken mind was still off the track. "I left them in a locker in Salt Lake City. She said they weren't in the locker."

"I hope not," Urban said, looking comfortable again. "We were lucky enough to have a young woman operator right there in the monorail station. You may have seen her."

"Me?" Jiro said. "Say, there was the cute chick in the skintight pants walking around with a transistor radio stuck in her ear. I hardly noticed her — "

"Next time be more observant," Urban said, grinning. "We've got the eggs, Jim."

"Good," Jiro answered. But there was still something else. "Incubator," he said.

"We've got them in an incubator, and I have two men on duty at all times watching them through these special goggles. Each man has one of these weapons." He touched the flashlight gun in the right hand of Danny, who was maintaining his position at the foot of the bed. "We've got cameras going all the time. One way or another, we will know what happens."

"Good," Jiro repeated. "You've really got things moving — "

"That's my job," Urban said. "Lie still, Jim — "

"But I've still got another question," Jiro protested. "How — how did you find me?"

"Probably the same way Nellie Moll followed you or the way she had that invisible monster follow you.

"I meant to meet you at the airport, but I got in a few minutes late and I was just in time to see her bop you over the head with her umbrella. I followed her while I got one of our local men(with a good detector, on the job following you. He traced you clear across Chicago, from the radioactive dust on your hat. Meanwhile, I was tailing Nellie Moll. Our local man and I met at that rat-trap where you had holed up. We were just in time to see Nellie Moll and her two men load you into limousine. We followed it and set up a raid here."

"I see," Jiro said. "I see." What he saw mostly was how good it felt to be a member of such a team as the WG Peace Corps. If a member of that team got into trouble, some other team member was always on hand to help.

"Say, she could talk to that invisible monster she had with her," Jiro continued.

"Then the crooks of our world have established communication with the crooks of another world." Urban said, bitterness now rising in his voice. "That is more than I can say for the people of the Peace Corps!"

Outside the room, hurrying feet were sounding again. At the foot of the bed, Danny deftly tossed one of the strange flashlights to Mr. Urban, who caught it with equal deftness. Danny then exited through the door. A minute later, he stuck his head inside again to explain who was there.

"Send them in," Urban said.

A brisk young man carrying a doctor's bag with a professional air entered the room. He was followed by two men. One carried a tank of oxygen, the other a stretcher.

"There's your patient," Urban said, pointing to Jim Jiro. "I want him in shape to board a plane to Denver within an hour."

"Sir — " the young man began.

From his billfold, the bald-headed man took a small gold-rimmed card. The young doctor read it. "Oh, the Peace Corps," he said, sudden respect in his voice.

"Yes," Urban said. "And if we don't work fast, there won't be any peace to keep, only pieces!"

V

The great ship swung into a minimal power orbit high above Crater 64.

From this position, part of the surface of the moon not normally visible from Earth could be seen. It was a ghastly land of marsh shadows and of nightmare shapes, of plunging craters and of bare-fanged mountains rising threateningly toward the lunar sky. Seen at fairly close range, nothing about the moon was pretty. It was a land of chaos, of darkness, and of black night — a world where men, coming from the green softness of the Earth, could live only in the private incubators of plastidome shelters and where they could venture abroad only when wearing protective suits of tough plastiskin.

It was almost as if the moon hated men and sought to bar them from her world.

As the great ship swung into position over Crater 64, three smaller ships took up positions around it in such a way that the big ship was like the hub of a wheel. Considered as a group, the four ships formed in the sky something similer to an umbrella.

When the umbrella was formed and the four ships were in positions so that all the area surounding Crater 64 was under observation visually, by radar and by new devices that had been hastily installed, another ship came nosing toward this crater, coming from the lower edge of the moon, where the main sky-port serving Earth-Luna traffic was located. As if to escape observation, this ship flew very low, and when it reached that dip at the moon's limb known as Crater 64, it dropped down sharply and made a quick landing near a cluster of plastiskin domes which was located at the base of a huge cliff. At the bottom of this cliff, a black hole marked the entrance to a mine tunnel that bored deep into one of the rich bodies of ore that had been discovered on the moon and which gave the satellite enormous value to the sky-jumping

technology now developing on Earth. Space itself would have to be explored in ships made of ore mined on the moon! To the left of the tunnel a huge pile of black gravel indicated the ore taken from the mine and dumped here to wait the arrival of a ship to take it to smelters elsewhere.

Ore ships had stopped coming to this mine.

Work had stopped in this mine.

In the highest echelons of World Governments administrative officials, this was known as the mine where hell had moved in.

When the arriving ship had settled itself down in the landing area near the plastiskin domes, the forward port lock opened. The creature that stepped down from the ship looked like a knight in chain mail armor. There were differences between this man and the knight of the middle ages. This knight had a powerful electric light mounted on the top of his helmet. The visor of his helmet was made of permaglass which included goggles with special lenses colored a dark indigo blue. The goggles were inside the helmet. Each lens had a microscopic hole in the center. Instead of a sword, the knight carried in his hands what looked like a large and strangely-shaped flashlight.

The knight was Jim Jiro.

Standing in the lock, he started to step down to the frozen soil, then quickly gave a small jump to keep from stepping on what was lying on the ground there. In this light gravity, the jump carried him a dozen feet. Turning quickly, Jiro flicked on the radio in his suit.

"Jump or you'll step on a dead man!" he called out.

The next knight jumped. Each in his turn was careful to leap over the dead man, until 21 men, besides their leader, had made the jump. Then radio inquiry came from inside the ship, seeking permission to close the lock.

"Okay to close lock," Jiro said. "But keep a man on duty to watch for us. If you see us coming, get the lock open."

"Yes, sir," a respectful voice answered, from inside the ship. "But, sir, on the ground there just outside the lock — "

"He was probably one of the miners here," Jiro said.

"Yes, sir. But, sir — "

"Leave him where he is," Jiro said. "I don't want anybody outside the ship who is not wearing armor."

"Yes, sir."

At Jiro's order, the group moved toward the dark tunnel that opened inward at the base of the cliff. Over a plastiskin inner suit, each of the men was wearing linked chain armor which had been tested and which was guaranteed to be proof against penetration by icepicks or by weapons as sharp as razors.

The armor idea was borrowed from ancient times. Armor made of metal of poorer quality had stopped arrows, spears, and swords.

"Jim, there's another dead man — " a voice spoke over the radio in Jiro's helmet.

"I see him," Jim answered. Look-

ing down the street that led to the tunnel, he spoke again. "I see at least two more. As I understand the situation, when their mechanical digger here broke through into — well, into a cavern that was not known to exist — the miners tried to run. Some got this far." His voice went off into grim tones as he finished speaking.

Flipping another switch, he spoke again. "Peace Corps detail reporting. There are dead men down here — "

"From your detail, Jim!" the bass voice of the bald-headed man shouted back at him from the great ship in the sky. "If that chain armor failed, I will never forgive myself — "

"Easy sir," Jiro replied. "So far nothing has hit our armor. The dead men are miners. What — what has happened to my eggs?"

"I have no recent report on that," Urban answered. "They haven't hatched as yet, I'm certain. I'm also certain the admiral here in the ship is watching the hatching of those eggs, me, and you very, very closely."

"You haven't got those eggs in the ship with you?"

"No, Jim. They're in their incubator in our laboratory in Denver. Have you — have you seen — "

"Not yet," Jiro answered. "But we're looking."

"Jim, you're not taking this thing too lightly, are you?"

Jiro's grunt had deep bitterness it in. "Chief, remember I saw Calkins with his throat cut. Remember, I personally met Nellie Moll's Tame George. No, Chief, I'm not taking these creatures lightly."

"Good, Jim."

"Now that the subject has come up, have the boys found Nellie Moll yet?"

"No, Jim." The deep voice had regret in it. "But they *will* find her. Jim, I only wish I could be there with you — "

"What?" Jiro interrupted. "For Pete's sake, have some sense, Chief. Down here you'd just be in the way. Out."

Jiro broke the connection to the man in the sky before the angry retort could came back in, then shifted to the frequency used for group communication. Here voices grumbled at him, telling him he had treated the chief a little rough.

"I know it," Jiro said. "I also know he is looking for an excuse to come down here and join us. He belongs up there. He has the kind of mind that can see a thousand details all at once and can fit them into a pattern and can see which way the pattern is going. Up there in the sky that kind of a mind is invaluable. Down here with us he would get to thinking about the big pattern, and something would run an icepick past his eyeballs and — Oh, the hell with it! His job is to be boss. Our job is to fumigate a hole in a moon cliff. Come on."

The detail clumped forward. The sound of their feet hitting the eternally frozen moon gravel was transmitted upward to their ears.

Each man of this detail was a volunteer, each was unmarried, each was without dependents. Like the French Foreign Legion of the old days, the only home they knew — or wanted to know — was this strange organization called the Peace Corps, a name that had also been borrowed from the old days of Earth, before the human race really started moving spacewards.

At the entrance to the first plasti-skin dome, a miner lay dead.

"They play rough around here," Overman said, over the radio. Overman was short and just a little fat. He looked from the dead miner toward the sky, then pointed. "They're also spinning webs."

Glancing upward, Jim Jiro saw the sky of space. It looked a little like black velvet which held little shining lights that were actually the suns of far-off space. Against this backdrop and against the rough facade of the jutting moon cliff, thin strands of cobwebs were dimly visible.

"These were not here before," Jiro said. "I wonder if they were hibernating inside this cliff. They came to life and started flying and started building webs when the digger burst through into their cavern — " His voice slipped away into speculative silence.

"Breaking through into that cavern was sort of like opening Pandora's box," Ed said. "We didn't know what trouble was until we opened it." Ed was tall, thin and a little stooped.

"On Earth, spiders build webs to catch flies," Overman's voice came again. "What would they catch in a web here on the moon?"

"Back on Earth, the brains — meaning some of our top scientists who are in on this thing — were doing some guessing about possible reasons for spinning webs where there are no flies to be caught," Jim Jiro said.

"One of them guessed — and he admitted he was guessing — that the purpose of the webs is to catch a special kind of energy coming from some far-off sun. The invisible monsters probably came from that sun in the first place. They need its energy to keep their life forces at a high level. This guesser believed these webs might be antennae."

"We know so little — " Overman's voice came again. "Can you imagine a form of life that builds bodies that we can't see out of energy that it catches on what looks like spider webs? Energy or messages? Or energy acting as a message? We know so little — " Repeating himself, Overman's voice trailed into silence, then came again, stronger now. "I wonder — " Lifting the weapon in the shape of a strange flashlight, he pointed it at the webs.

Light raced across the face of the cliff as the web surged with what seemed to be electric fire.

"Well, what do you know, it worked?" Overman said. He sounded pleased with himself, then gasped and stopped walking. "Something hit me right in the middle of my helmet!" he gasped.

"We're being attacked!" Jiro shouted. Through the indigo blue lenses of the big goggles built into his helmet, he caught a glimpse of something that looked a little like a very small flying saucer. As he was bringing up the flashlight weapon to center it on the moving object, light streaked from his left. The miniature flying saucer exploded.

"Got one!" Ed's voice came.

Then other voices were shouting. Flashlight guns were searching for targets. The sky was bright with exploding lights.

The attack died as quickly as it had come.

"Report!" Jiro shouted. "Is anybody hurt? Did the armor hold?"

Voices coming back took some of the anxiety out of his mind. The armor had withstood an attack of icepicks. The helmets had also held.

"I got hit on my helmet right in front of my right eye!" Overman's voice came.

"Did the plastic hold?" Jiro shouted.

"It sure did," Overman's answered. "If it hadn't held, I would have an icepick through my eyeball!"

Jiro counted noses, then counted again, to make sure, then reported to Urban what had happened. When urban had been satisfied that all members of the detail had survived the attack, he asked further questions.

"They look a little like balls of light through these goggles," Jiro explained. "They have a tremendously complicated internal structure that looks like a web. All of the strands are connected to an extremely bright core which is the heart of the monster. They can change shape almost instantly. I saw one stretch himself out until he was six feet long with a point that looked needle-sharp. Like a spear, he hurled himself at somebody — "

"Who? Is that man all right?"

"I told you everybody came through safely," Jiro answered. "I saw another one flatten himself out until his front end formed an edge like a headsman's axe. Something like this must have been used to kill Calkins."

"What happened to the one who made a cutting edge of himself?"

"He died," Jiro said. "I accounted for him personally. Have my eggs hatched yet?"

"No. Jim — "

"Have the boys found my girl friend yet?"

"No."

"Okay. We're entering the mine tunnel," Jiro said.

"Good luck," the voice in the sky said. "And, Jim — " For an instant, frantic anxiety was revealed in the voice.

"Yes, sir."

"Take care, Jim," the voice said, fading out.

"Yes, sir." Jiro said.

The detail moved forward into the tunnel. Just inside the entrance, the beams of the powerful lights mounted on top of the helmets revealed two more dead miners.

"Why didn't they send somebody

out here to pick up these bodies?" Overman asked.

"They did send out a ship," Jiro answered. "I was on it. Two men left the ship through one of the locks and were killed. Two more men were lost recovering the bodies of the first two."

"Those damned things — " Overman said.

"If we find this on the moon, what do you suppose we will find on Mars? Or on Jupiter? Or on Saturn?" Ed asked. The tall man's voice held depths of sudden gloom. "Or on the path to the stars?"

No one attempted to answer this question, but it seemed to each man on this mission that the question intensified and deepened the feeling of cold, creeping through armor and plastiskin suits, that had appeared upon touching the surface of the moon and which now was growing even colder as they moved deeper and deeper into the mine tunnel. This was a strange kind of cold. As if the cold were some alien life form of an incredible kind, the skin of a human being seemed to try to pull away from it.

"Brrr! It's cold in here!" voices whispered over the radio.

The tunned widened and became a great cavern with large pillars left to support a roof of stone somewhere overhead. Here the miners had found a large body of almost pure ore. At the far end of the cavern, a huge mechanical digger squatted. It had been brought piecemeal from Earth and had been assembled here. His light catching the digger, Jiro stopped.

"One miner lived long to get into a plastiskin dome outside and to report by radio what had happened. This miner was one of a crew of four on that digger." Jim swept the beam of his light around the huge machine and counted three unmoving objects that had also come from Earth. "One, two, three. Ah, yes, there they are," he said, counting.

His light swept up to the wall above and beyond the digger. Blackness was there. The wall was missing. Part of it had fallen inward and now formed a rock slide that almost covered the mechanical monster. Another part had fallen in another direction and was not now visible.

"That blackness up there, this doesn't feel to me like just the absence of light," Overman's voice came. "It feels like a blackness that exists in its own right."

"I agree with you," Jim Jiro said. "But we have to go into it, no matter what it looks like."

Carefully, the detail picked its way over the fallen rock until each man stood at the top of the slide. Beyond was blackness deeper than the heart of night, a kind of blackness that seemed to swallow up the beams from the lights worn on the helmets of the men.

"There's a cavern here," Overman's whisper came. "Can you imagine that right here in front of us, invisible to us, is actually *something,* perhaps a city, perhaps a gigantic machine, perhaps many small machines, perhaps villages and towns, perhaps many, many forms

of life, all created out of an energy that exists at so high a frequency we can't detect it?" His voice was tight with growing tension.

"I can imagine a pit filled with rattlesnakes," Ed's voice came, also in a whisper. "Each with his tail buzzing. That's what this place feels like, inside me, where I feel!"

"We've still got to go into it," Jiro said. He went forward cautiously feeling his way down the slide. There, beyond the broken rocks, he found a smooth floor. On the slide above him, a man screamed a warning.

Jiro turned his eyes quickly. What looked like a spear that was ten feet long was coming hurtling out of the darkness. At the middle of the slide, it struck a man. The point of the spear went through the chainmail armor, went through the inner suit of plastiskin, went into the man's body, went through it, put a bulge in the armor at his back, then flared in incandescent fury as beams from the flashlight weapons struck it.

" — I saw what happened!" a man stuttered. "Eight or ten of those devils f — formed themselves into a single s — spear!"

The man who had been struck was already falling. Like a rag doll, he tumbled down the rock slide. The falling body started several small slides. When the body reached the floor, sliding rock fell over it, covering it.

"There's another spear, just starting to form!" Overman yelled.

Jiro saw the spear come into existence. Little objects that looked like flying saucers in miniature seemed to merge and to become one. The single being that resulted began to elongate and to take on the shape of a needle-pointed spear.

Beams from the flashlights caught it as it took on shape. Light as bright as that of a small sun flared in the darkness of this cavern, revealing an enormous space that seemed to have only one object in it.

Reaching for the switch to shift his transmitting frequency to that of the ship now so far away, Jiro suddenly caught the action. He switched back to the unit frequency.

"Did anybody else see that ship — " he began. "Right over there! A ship! One that was built on Earth! Did anybody else see it?"

He cut out the transmitter and waited for a reply. Sudden blasting static tore at his ears. In this static, confused and alarmed men called to each other in sounds that had no meaning. Then the static was gone and a new — and familiar — voice was shouting across the moon cavern.

"Just lay your guns down, gents," the voice was saying" "Lay your guns down and put your hands up into the air and walk over here to the ship and come inside!"

The voice was that of Nellie Moll.

"And don't think that armor is going to save your hides! Because what we have right here — Go on, show him what I mean!" Nellie Moll's voice continued.

From the ship, light flashed. What followed was here soundless, but on Earth it would have been the crack of a rifle, the scream of a bullet and the thud of the steel-jacketed projectile striking and going through linked mail armor as if it were paperboard.

"I'm hit," Overman's voice came, in a whisper, while both Nellie Moll and the static were still. "No, don't try to help. Nothing — nothing to be done — "

Overman's body was falling as he was speaking. Like a somewhat plump rag doll, he tumbled as he fell. When he struck the floor, slides of rock following behind flowed over him too.

"I'm going to turn the static back on, so you won't be able to tell anybody anywhere what's going on here," Nellie Moll continued. "I'm also going to turn on a light. All I want to see is you boys walking toward me, with your hands high over your heads. And in case — in case you don't feel like walking, my little friends will be out there to help you!"

Harsh, grating noices that Nellie Moll thought were laughter came over the radio. As Jiro was frantically switching back to the transmitter that would put him back into contact with the ship in the sky, the static roared back into existence and became a continuous rattling roar in his ears.

VI

In the great ship in the sky, a bald-headed man sat hunched in front of a microphone. Sweat covered his face.

"Calling the moon detail," he said over and over again. "Can you hear me, moon detail? Can you hear me? Come in Jim Jiro. Come in, please."

In an effort to hear any answer, however faint, he had cut out the loud speaker and had gone to earphones. Listening, he heard over and over again, the grinding noise.

"That damned static!" His eyes went to the communications officer of the ship.

"It's coming from the moon sir," the communications officer repeated. "We can't do anything about it. Every frequency we can use for moon communications is jammed, sir."

"What can we do?"

"Nothing, sir, except wait until it lets up or is turned off. It is being done deliberately, sir, by somebody, to block our communications."

The face of the bald-headed man became a mass of wrinkles. He glanced at his watch. "Two hours and twenty minutes since I heard from them!" he muttered.

Behind him, an admiral shifted his position. Hastily the bald-headed man spoke again into the microphone. "Jim boy, speak to me," he repeated, again and again and again. His voice was becoming an angular and as criss-crossed with wrinkles as his face.

He was using the special communications unit which had been set up in the main cabin of the great ship. Part of this unit was designed

to carry on moon communications. These frequencies were jammed. Other frequencies, used to continuously monitor the possible hatching of three small black eggs in a special incubator, while hampered by the moon static, were still operational.

"Answer me, Jim, boy," the baldheaded man said, over and over again. Out of the corners of his eyes, he warily watched the other three men present in the cabin.

One of these men wore the uniform of an admiral of the space forces. The second was wearing ordinary business clothes but had the clasped hand symbol of authority in the WGC — World Governments Council — in his buttonhole. The third was also in ordinary street clothes but in his buttonhole he had the caduceus of the WGHS — the Worlds Governments Health Service.

When the baldheaded man sighed and turned to check the receiver monitoring the hatching of three eggs on Earth, the admiral watched him closely. When he had finished checking with the technician at the Earth receiver, the admiral spoke to him, asking a question.

"Sorry, sir," the baldheaded man said. "Nothing as yet from either place."

"How long before you anticipate a definite report from your detail on the moon?" the admiral asked.

"It's impossible to do anything but guess, sir. Our man in charge of the detail, Lieutenant Jim Jiro, is a most competent individual, sir. I don't know what kind of a situation he has run into down there in that cavern but I'm sure he can handle it if anyone can. You will have a report as soon as it comes, sir. In the meantime — " He flicked on the speaker grinding static. "This is all we're getting."

The admiral considered this information. His face was grim and bleak. "Ah, well. Ah, yes. Static." He glanced around the room. "I want to mention, gentlemen, that if these — ah — devils, monsters, or whatever they are — are shown to be a threat to human life or to — or to human expansion in the Solar System or to human development of the lunar resources in an orderly manner, then they are under my jurisdiction."

When he had finished speaking, the admiral's lips closed in a knife edge line.

"I want to remind you also that I am responsible for the safety of human life in space," the admiral continued.

"Then it all depends on how we define these creatures," the man with the clasped hands symbol in his buttonhole began.

"They have not been defined by the Supreme Council as being a large-scale threat to human life," the bald-headed man said quickly. "Believe me, I am not defending them. It is that —"

"It is what, Urban?" the admiral asked.

"It is that I have a detail down there on the moon," the baldheaded man answered.

"I see," the admiral said. For a split instant, his grim face softened. "Well, I can certainly sympathize with you. Once, when I was a young man, I had to — to sacrifice a detail — "

"Sir!" Real alarm sounded in the voice of the bald-headed man.

"There are times when we must disregard personal feeling," the admiral continued.

"But we as yet don't know what they are," the man wearing the caduceus said. "They may be regarded as over-sized microbes, as huge germs that posses very unusual qualities but which are basically bacteria. I have been commissioned by the World Governments to investigate all bacterial threats — "

The face of the admiral turned red.

The man with the clasped hands symbol in his buttonhole spoke for the first time.

"And before we take action of any kind, we have to exhaust every possibility of making friends with them. Remember, World Governments represents everyone in the Solar System." His voice was pious and his face was benevolent.

"We didn't make friends with the sabertooth tiger or with the cobra," the admiral said.

The face of the man wearing the clasped-hands sympol lost some of its benevolence.

"We didn't make friends with the germs of anthrax or syphilis or tuberculosis," Caduceus said.

The three men had far to much rank to stoop to personal quarreling. They remained very polite yet each urged his own course of action. And each was determined to have his own way.

The earphones the bald-headed man was wearing cut off most of the conversation from him. Again and again, he spoke into the microphone, "Calling moon detail. Jim, baby — " No answer came through. Now and again he tried to make himself believe that he was actually hearing a voice in the heavy static pounding in his ears but each time he knew it was only the voices of the three men in the cabin growing louder and louder. Of the three men, the bald-headed man feared the voice of the admiral the most. They were in space where the admiral had real authority. Then he was aware that the admiral was really speaking to him.

"Yes, sir," he said, hastily.

"Any news yet, Urban?" the admiral asked.

"No, sir."

"Well, I suggest you continue trying to contact your detail, to order your men to withdraw," the admiral said.

"Yes, sir. But, sir — "

"You have one hour," the admiral said, glancing at his watch.

"But — "

If you can't make contact with them in one hour, we must assume they are dead," the admiral said.

"You lousy —" The bald-headed man caught himself. Only his face revealed what he was feeling.

"Carry on, Urban," the admiral said.

Virgil
Finlay

"Jim, baby — " the bald-headed man began. As he was speaking, he was aware that the technician on duty at the receiver constantly open to receive news about three small black eggs was waving frantically to him.

"What is it?"

"Sir, they are trying to get to you from Earth, to say that the eggs are hatching."

VII

"So you see how it is, Mr. Jiro," Nellie Moll said.

"Pull off the ships outside, and I will take my little friends and leave. They're going to take me and my two helpers here — " She nodded toward Mole-face and Haircut sitting beside her at the table in the cabin of the space ship in the cavern. "They're going to take us back to their world with them. They say there are lots of things they can learn from humans. I'm going to teach them all about how it is on Earth."

Sweating heavily, she was stinking too. With a small cigar clamped between her teeth, she looked more than ever like a fat sow that had learned how to use tobacco.

Sitting opposite her at the table, Jim Jiro was fighting the impulse to vomit. What was left of his detail was sitting against the wall behind him. Weaponless, their helmets gone they looked a little like men who had fought their last battle — and knew it — and now were waiting for the headsman to come and put them out of their miseries.

They had surrendered; they had dropped their weapons; they had been walking across the cavern with their hands in the air as they had been ordered, when a spear twenty-five feet long had hurled itself at them. It had penetrated through the bodies of four men before it had stopped.

When the spear had withdrawn, something that had looked like a battleaxe with a blade five feet long had come at them, cutting through armor, plastiskin suits and through bodies with equal ease. The axe had slaughtered seven men before a gasping Nellie Moll had managed to stop it.

Or she claimed she had stopped it. Jiro wondered if she had sent it out in the first place.

"How much control do you actually have over these — ah — " His gaze went up to the ceiling. Up there, in spots the paint had peeled away, revealing the dull metal.

Jim Jiro felt his flesh crawl within the plastiskin suit he was wearing. Between him and the ceiling, an invisible life form watched him. He had the vague impression that between him and the steel plate were thousands of microscopic eyes that the whole vast swarm of alien life had compressed itself into small size and had come into the ship.

Every one of those eyes hated him. Perhaps they hated all humans.

Jiro brought his gaze down to look at Nellie Moll. If he had not been so sick already nothing could sicken him further, the sight of this monstruous creature would have

done the job. Her face was sweating grease. On her lap was the inevitable knit bag she had been carrying the first time he had seen her.

"Do they boss you, or do you boss them?" Jiro said.

Rage wrinkled her face and glared in her eyes. She fumbled in the knit bag. "I'm boss!" She told Jim Jiro. "Don't you ever make any mistake about it. I made a deal with them, and I'm boss." From the knit bag she took the same miniature radio set he had seen her use before. "You up there!" she shouted. "Oh, I forget about the static. You!" She jabbed Mole-face in the shoulder, and he flinched and tried to draw away from her. "Go shut off that static. No! On second thought, Jiro might be trying to trick me to turn it off, so he could get a message through to somebody up above him."

Mole-face had started to rise. "Well, make up your mind, Nell," he said sitting down.

"Well," Jiro said, looking at her.

"What do you mean — *well?*" she demanded.

"How'd you get here, Nellie?" he asked, ignoring her outburst.

"We borrowed a ship. I thought, I mean I' figured — " She choked on the words she was trying to use.

"You thought you could come here and take on board every Tame George in this cavern," Jiro said. "Then you could take them back to Earth and use them to make yourself the biggest pig in the criminal mudhole." He nodded to himself. "Yes, I see where it could have worked. The person who controls these alien monsters can be mighty big on Earth."

Jiro looked up at her. She was about to choke. Sitting beside her, Mole-face and Hair-cut looked sick.

"But instead of getting a shipload of Tame Georges, the devils trapped you. Isn't that the way it worked, Nellie?" Jiro said.

Animal noises came from her lips as she tried to speak.

"And now what they really want is a ship to get them out of the Solar System. Is that it, Nellie?"

"Y — yes. T — they say they can fly without a ship, but to go from the moon to the Earth, they would need a ship. To reach their home world, they must have a vessel. They say they can make changes in this ship so it will get them home, if we will give them time. They say they came here in a ship a long time ago, but crashed it trying to land."

Her voice was a mushy sound halfway between the grunt of a pig and the squeak of a mouse.

"And just when you were ready to leave, several ships appeared in the moon sky and took up positions in such a way that you can't get out of here without being seen?"

"Y — yes," the pig-mouse voice said.

"So now they are trying to trade our lives — my men and me — for safe conduct passage out of the system, taking you and your two friends with them?"

"Y — y — yes," the pig-mouse said, again.

"Do you suppose you will live past Pluto?" Jiro asked.

"What? Past Pluto? Of course!" Anger flared in the pig-mouse eyes, then faded into growing doubt. "What do you mean by that? They've got to have me!" She pointed to the tiny radio. "They've got to have me as a go-between, they need me to talk through, without me — well — " She rolled her eyes as she tried to find words to hide the fear swirling inside her.

"Past Pluto they won't need you," Jiro said, logically. "There are no humans past that planet. They won't need you to talk out there."

He watched fear grow in the pig-mouse eyes — and grow and grow. The two men with Nellie Moll were squirming too.

"We'll make 'em leave us where they leave you!" she said. "Then we won't have to go past Pluto." Elation sounded in her voice. She had found a solution, she thought.

"There's one thing wrong with that," Jiro said. "I remember a back yard in Chicago. I remember kids at play there." His voice grew grim and hard and mean. "No, Nellie, you don't want to be left where human law can touch you. Nor do the two men with you!"

"Damnit, why'd you have to kill them kids?" she screamed at Mole-face and Hair-cut.

"They were causing trouble!" Mole-face screamed back at her. "You told us not to let anything stand in our way."

"You damned fool, I didn't mean it that way!" she screamed back at him. For a time, the sound between them was a mixture of distorted noise.

Jiro looked toward the ceiling. Up there, spots of light that seemed to be microscopic eyes swirled into existence, then swirled out of existence.

Nellie Moll screamed louder than Mole-face. He subsided into grumbling silence.

"All right then," she shouted at Jiro. "We'll leave with our friends. We'll go to their home world. And when they come back — "

"They're coming back?" Jiro asked.

"I don't know if they are or not," she answered. "But we're going back with them. We're tired of the way things are being done on Earth. Just plenty tired!"

"So am I," Jiro said. "You're one of the things I'm tired of!"

"What?" Fat cheeks puckered in a fat face as she glared at him.

"I'm also tired of hearing you scream," Jiro said. "What you want is safe passage out of here. You will take my detail and me with you and drop us later. You guarantee to leave the system, and we hope to hell you will never return!"

"Hunh — "

"Cut off the static, and I will get in touch with my superior officer and find out if he and his superior officers are willing to make deal with you."

"So many wheels — " she began.

"There's a whole hierarchy up above me. To them, I'm just a pawn in a game they are playing. Cut off the static, and I will talk to them, and I will let you talk to them."

"If you're thinking of double-crossing me — " she began.

"Then have your friends up there stick an icepick through me," he said, gesturing toward the ceiling. Weariness was suddenly on him. He was tired of Nellie Moll, tired of the eternally suspicious mind that she possessed, tired of trying to deal with such minds.

"I'll just do that," she said, triumph suddenly in her voice. She spoke in the radio.

The bird chirp that answered her said, "Yes. Yes. We understand you!" in English clear enough to be understood.

Jiro stared at the little radio set. If thoughts moved through his mind, he kept them from showing on his face. He watched a spear materialize before his eyes. Thinking it was going to impale him, he caught his breath, but it hung in the air as a threat of impalement to come.

There it is!" Nellie Moll said, triumphantly. "Just look at it. If you try to doublecross me, it'll go through you in an instant. In just an instant!" she repeated.

Jiro looked at the sharp point that was aimed at his left eye. Behind him, along the wall, he could hear men stop breathing. "Cut off the static," he said.

At Nellie Moll's signal, Mole-face rose from the table and moved to an alcove in the cabin. A switch snapped softly. Jiro asked for his helmet, which contained the radio equipment. It was brought to him. The spear moved at the sight of it. He unsnapped the radio equipment and lifted it out. The spear backed away from him. He fitted the tiny received into his ear. The static was gone.

"Calling the ship," he said.

"Jim? a far-away voice answered "Jim — " the voice faded.

Jiro started to speak, then stopped. The spear was moving again. He could only catch little glimpses of it without the special goggles, but these glimpses told him it had taken up a position above his head. He started to speak again, then stopped hastily as Nellie Moll screamed and lurched to her feet.

Penetrating the right eyeball, the spear had driven itself all the way through her head.

Screaming, she fell backward.

What happened next was so fast that Jiro was not certain what was happening until it was done.

Spears seemed to come out of nowhere. One impaled Mole-face through the throat, the other struck Hair-cut somewhere in the neighborhood of the right ear. Both were hard driven. Both penetrated flesh, bone and brain matter.

Both produced almost instant death.

On the table, the little radio that Nellie Moll had used spoke again.

"These were no longer needed," the little radio said. Each word was carefully spoken, each syllable clearly voiced. "We will deal directly with you."

On the floor, the body of Nellie Moll was making thumping sounds as it went into spasmodic death contractions. Mole-face lay without moving where he had fallen. Haircut was twisting and wiggling as he died.

"Contact your chief," the little radio continued. "Make arrangements for our passage from your system — "

"Jim . . . " the phone in Jiro's ear whispered. "Jim — " The voice had a pleading note in it. "Jim . . . The eggs have hatched . . . . "

"What?" Jiro said, automatically.

"The eggs have hatched. They must have been hungry, Jim . . . . They have killed at least thirty men so far, and we haven't got them rounded up yet. Jim — the admiral . . . "

The words coming from the ship in the sky firmed the decision that was already in Jiro's mind.

"Drop bombs!" he said. "Drop several bombs! Blow this cavern and the monsters in it halfway to Mars!"

"Jim!" the voice gasped from the ship.

"These creatures are totally alien," Jiro continued. "There is no way to make peace with them, no way to live in the same world with them, perhaps no way to live in the same universe! They must be destroyed; it doesn't matter what the cost!"

Jim Jiro was aware of men rising to their feet behind him. He was also aware of microscopic lights swirling near the ceiling as the aliens up there began to grasp what was happening.

"Drop bombs!" he continued. His voice was wooden, stiff, mechanical, but inside his heart a glow was forming. The glow came from the deep inner knowledge that belonged to all men who followed his calling — that if necessary each could give his life that others might live. This knowledge was in him now, strengthening him for what was ahead.

"Jim!" Urban's voice screamed at him from the ship.

"There is no other way," Jiro continued. "There just isn't!" In spite of all his efforts to keep his voice wooden and mechanical, it caught and choked. "You have been a great leader and a fine friend, Mr. Urban."

"Jim — " Urban's voice was also cracked and broken.

"Drop bombs — " Jiro repeated.

"It's already done, Jim!" Urban whispered, from the sky.

"What — "

"When the admiral got the report on what had happened after the eggs had hatched, he refused to delay any longer. Bombs, Jim, the bombs are already on their way to your cavern!"

In the cabin of the ship, Jim Jiro caught a glimpse of light near the ceiling. He steeled himself for the icepick he thought was coming, then saw that the creatures there no longer had any concern with them. They had understood his talk with the man in the sky and were now in mad flight from the ship and from the cavern.

Jiro turned to the men who had entered the cavern with him. He rose to his feet.

"It is good," he said slowly. "That the few should die for the many to live."

His gaze swept their faces, and he saw in the glows in their eyes the meaning their lips could not say: that they were in full agreement with him, that among many other facets, to be human was to be willing to die that others might find life. Could their peace corps have any other purpose than this?

Coming over the radio from the ship in the sky was the sound of a man weeping. Up there, somewhere, a bald-headed man was sitting hunched and broken in front of a radio panel and was crying without shame. In the cabin of the great ship, an admiral and a man wearing a caduceus in his buttonhole and a man wearing clasped hands in his lapel were trying to console him. Weeping, he was having nothing whatsoever to do with them or with their consolations.

Jiro listened. He turned to what remained of his detail.

"Gentlemen of our peace corp," he said. "I give you peace — "

The floor under him leaped upward as the first bomb hit.

Those watching on special screens in the ships in the sky over Crater 64 saw something come out of a great cleft many miles away from this crater, something that looked like a swarm of bees or of hornets or of miniature flying saucers. As this swarm emerged from an opening hidden in the cleft the first bomb hit. When they saw the bomb hit, when they saw the moon dust puff skyward, when they saw the moon surface fall in upon itself, revealing a great cavern there, the men of the ships knew what had happened.

For this reason, if for no other, they were very thorough in searching out and in destroying this swarm of alien life that had found a foothold on the moon. However, there was another reason for being thorough, this lay in the fact that a grim-faced admiral drove them relentlessly to their task of destruction. Though they did not know, the admiral himself was driven by a weeping man who was completely bald.

At the top of a barren cliff, looking outward toward all the suns of space, is a great shaft of granite. Inscribed and carved on Earth, it was brought to the moon and was securely anchored on the cliff above the rubble heap which is now a part of Crater 64.

The great shaft is like a defiant spear thrust at the infinite depths of space by men determined that nothing shall stop them in searching out the secrets of the far-away sky.

On the shaft is a list of names and the following words:

HERE LIE 22 BRAVE MEN WHO DIED TO OPEN WIDER THE DOOR TO THE FAR-OFF SPACES.

Heading the list is the name of Lieutenant Jim Jiro.

END

CONVENTIONS GALORE!

by LIN CARTER

If you can't come to Cleveland, here are a dozen second bests!

Last month in this space we were talking about the annual World Science Fiction Convention. So howsabout it, gang, are you going to catch the Tricon in Cleveland and hear L. Sprague de Camp's fascinating speech? De Camp is so impressive, just hearing him talk creases your trousers. Well, if you can't make the Cleveland scene, don't give up hope and switch to reading Westerns, you've still got a chance!

You see, every year all around the country, fans put on eight or ten smaller conventions. One or two-day affairs — local, regional conventionettes, usually as informal and relaxed as a well-worn pair of old sneakers. These regional get-togethers are scattered Hither and Thither (especially Thither, and not to mention Yon), and chances are good that one will be located near *you*. So lend an ear, or, I guess I mean, eye.

New York and New Jersey

This year, *New York* was host to a dual convention April 16th and 17th: the Eastercon and the Lunacon. This is the second time these cons have coincided — one is formal, like with programs and all that, the other is little more than an excuse for a jolly-good-fun party. The two are sponsored by New York's two main fanclubs, the Fanoclasts and the Lunarians. Plus these, the first weekend in March each year is the date for the annual "open meeting" of ESFA (the Eastern Science Fiction Association in *Newark*, New Jersey). This particular bash is heavy on program traditionally, but it attracts a celebrity-studded attendance from the various writers and editors who live in and around these parts.

The East Coast

Philadelphia has a large, very old, very active fan group who sponsor

each year an ambitious, programful con called the Philcon the second weekend in November. You'll find it in progress somewhere in the Hotel Sheraton in that city. Generally on hand are Frederik Pohl, James Blish, Lester Del Ray and L. Sprague de Camp (who lives in one of the suburbs of the City of Brotherly Love). *Boston* has its second annual Boskone in mid-March—1965's Boskone was such fun, they seem to be making an annual bash out of it. As for *Washington*, D.C., the yearly Disclave is firmly established by now. Disclaves are held during the first half of May. Light on program but long on partying and a chance to talk with some interesting people. Of course some of these conventionettes will already have gone past before this column sees print, but they go on every year the same time so I hope you're taking notes?

Down South

The South, I'm sorry to say, being a Florida boy myself, is pretty skimpy on fan activities. The reason for this *malaise* is beyond conjecture . . . maybe all the fans do what I did years ago and move up to the Big City. Well, anyway, if you chance to be in the environs of *Charlotte*, North Carolina, any time around the latter half of August, you'll find something called the Deep Southern IV in progress. Since this is the fourth of these fannish hootenannies in Dixie, I hope its popularity eventually stimulates dormant communities in other portions of the South to sponsor comparable hoedowns—like, say, in Texas or New Orleans.

In the Midwest

Moving deeper into the Interior, we find two small local affairs scheduled. There's the long-established Midwescon, renowned in song and story, which will be held in *Cincinnati* at a big motel long inured to such cataclysms. The date is the last weekend in June. Come on along and meet Robert Bloch and Wilson Tucker, if you've a mind. If you haven't, they each have half a one left and that should be plenty. Also, there's a *new* local con starting up this year, doubtless the first of many. This one will be in *St. Louis*. It takes place the terminal weekend of July, and rejoices in the charmin' folksy title of Ozarkon 1.

Way Out West in Californy

Always a lively state, fanwise, California has the popular Westercon every year, which wanders around from city to city like the homeless waif in a certain famous comic strip. I am informed by Andy Porter, a veritable fount of fannish information, that 1965's Westercon site was Long Beach, Cal. This year's Westercon can be found in *San Diego*, come the July 4th weekend. I don't think there's a smidgin of truth in the base allegation that the Westercon is homeless because it causes such a ruckus irate city fathers keep running it out of town on a rail: this is but an idle rumor, and I am quietly proud to be able to scotch it in the bud, so to speak.

The Westercon, by the way, is one of the oldest of these regional clambakes (another point of resemblance with the wandering waif in the comic strip, who must be pushing forty by

now). This year's Westercon will be the *19th,* by gad. You'll notice these local mishmashes are staggered, calendrically speaking, so as not to boorishly obtrude upon or otherwise cut into attendance at the yearly World Con, which is always held in the neighborhood of the Labor Day weekend.

So what happens at a local con?

Some are excuses to vacation for a long holiday weekend in congenial company, such as the Midwescon. You just loaf around for a couple of days of casual chit-chat interspersed with the acquatic disturbances of a snoozing attendee being hurled into the nearest swimming pool by rowdies. Others are formal, with programs and guest speakers and the whole bit. Take for example this year's "open meeting" of ESFA which took place in Newark the first weekend in March.

It was convened, most appropriately, with an address given by Willy Ley, the rocket man whose science articles have been a longstanding feature of *Galaxy*. There was also a rare screening of Fritz Lang's old film, *Girl in the Moon,* from the book by Thea von Harbou whose more famous *Metropolis* he turned into a cinematic classic of hoary vintage.

Those who attended ESFA's annual clambake this year were of the opinion the most entertaining feature on the entire program was a panel discussion of "the commercial (*i.e.,* MONEY) aspects of science fiction," between Jack Gaughan (Magazine and paperback cover artist), Henry Morrison (literary agent for science-fiction writers, myself among them), and Ted White (a fan writer just beginning to make a success writing sf professionally). The money angle to science fiction is one side of the business fans and readers rarely consider and seldom are aware of. It is, of course, as the panel pointed out, the vital factor. If a magazine doesn't sell, it goes out of business. If a publisher can't make money printing science fiction, he drops it. Hence this discussion was intriguing and interesting, whether due to novelty of concept alone or the stinging, epigram-laden wit of the speakers, I cannot say.

Other regional conventionettes with formal programs offer similar fare. Speeches. Panel discussions, usually open to questions from the floor, as we say in parliamentary lingo. Screening of rare science-fiction films—or sometimes *advance* showings of new, not-yet-released science-fiction movies. Auctions of books, magazines, original magazine covers and interior artwork. Not infrequently the distinguished fannish-historian - *cum* - hardcover - sf - anthologist, Sam Moskowitz, gives a speech in his familiar, resonant, chandelier-shaking *basso profundo.* Moskowitz illustrates these with color slides projected on a screen. If you attend as many of these regional hootenannies as I do, you eventually exhaust the full spectrum of the Moskowitzian repertoire. I saw him cover (no pun intended) cover art on science-fiction magazines at Philadelphia, fanzine covers at New York's 1965 Lunacon—and what he

will do for this year beggars the imagination.

Mostly, though, whether the con has a formal program or is just a lazy weekend of carousal, the force motivating fans to get out of their accustomed weekend lethargy and attend is, simply, the pleasure of meeting and getting acquainted with folks who share their own passionate devotion to Our Favorite Brand of Entertaining Reading.

To get right down to it, frail flesh affords few pleasures more intense, for the small-town science-fiction reader, than that of *actually meeting in person* the famous writers whose works he has read for many years. After following the literary ventures of Robert A. Heinlein or Poul Anderson or L. Sprague de Camp or Isaac Asimov or others of comparable magnitude—you can imagine the thrill of meeting these demi-gods and talking (yes, actually *talking*) with such Olympian Beings. I can recall the puzzled feeling I got first meeting, many long years ago, the legend-fraught John W. Campbell, Jr., and discovering that he was not, after all, twenty feet tall, but of the same calibre as ordinary, if lesser, mortals. You may get the same kick when you discover Ed Emsh or Fred Pohl or Jim Blish do not, after all, eschew the igorniny of having a cup of coffee with a tongue-tied and enthusiastic admirer. They are just plain folks, gang, and get just as much of a kick out of meeting their admirers as you will out of meeting them. As Isaac Asimov confessed to me once, ablush with modest confusion: "You know, all year long I am just another Bostonian, but the convention gives me a chance to be a *celebrity*, for at least one weekend out of the year!"

You might be diffident about interrupting their aloof cerebrations to ask for an autograph . . . but you'll be pleased to discover they do not really mind granting the honor. And some professionals get so embarrassed at the unusual celebrityship thrust upon them only on a convention weekend, they may actually ask you for *your* autograph!

Magazine editors, in particular, are happy for the chance to mingle with their readership and thus find out (from the horse's mouth, as it were) exactly how the mag is going over with the average citizen who has to fork out a couple of coins each month to procure the latest number. Jovial illustrators like Jack Gaughan, the guy who does so many covers, enjoy talking with people who can intelligently discuss the artwork in science fiction. Keep in mind that most science-fiction writers, editors and illustrators work pretty much in a vacuum . . . they mingle and correspond with other professionals largely, and know how their *peers* feel about the current level of their work, but except for the handful of reader-letters printed in those very few magazines that have letter columns at all, they don't know first hand how they are coming across with the consumer.

So don't be hesitant about attending one of these conventionettes, if convenient to you. You'll find it a lot of fun—it might even make a fan out of you! END

THE HOUR BEFORE EARTHRISE

They were only two teen-agers, alone on hostile Mars. They couldn't hope to survive — but they were surviving!

by JAMES BLISH

Illustrated by MORROW

VII

CHILDREN IN THE SKY

From all the reading Dolph had done in his relatively short life, and from the same amount of observation of people, he had been more than entitled to conclude that any real rescue was years away, if it were ever to come at all. True, most of the people he had known personally were pleasant people who were far from short either of

What Has Gone Before . . .

Teen-ager Dolph Haertel was attempting to discover the secret of anti-gravity. He had three things going for him — his intelligence; a family that encouraged research — and the fact that he didn't know it was impossible, in the orthodox view of relativistic science. And so he succeeded. He fitted out his tree house with an anti-gravity generator and propelled himself on a tryout expedition to Mars.

But there his luck ran out. The basic power tube was damaged in landing. It was irreplaceable on Mars — and he had no way to get off Mars. Nor could Earth's much-vaunted space programs help him. Relying on chemical rockets, they were years behind schedule — worst of all, no one knew he had gone.

Or almost no one. Dolph's nearest neighbor teen-ager back home — who happened to be a girl named Nanette — had been let into his secret, just a little bit — but enough so that, with what he had told her and what preliminary models he had left behind, she was able to follow him.

She did . . . and now there were *two* teen-agers stranded on Mars!

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money or of good will—people who would not hesitate to help someone in trouble if they could, or thought they could. By the same token, most of the fiction he had read had been about fantastically self-centered, unwashed people without a grain of human kindness even toward themselves, who seemed to depart from prolonged acts of suicide only to strike out at the people around them. Between the two he struck a rough sort of balance . . . and concluded that on Mars he was on his own.

His knowledge of the state of the art called space flight, as it had existed at the time he left Earth, was equally rough, but roughly accurate. There was no hope for a really adequate expedition for years to come, even on a crash basis, to rescue him — which he could hardly hope for. Earth's technology simply wasn't up to it yet.

In all this, he was quite right, but he had left out one factor, simply because he had never heard of it. That was not his fault; no example of it had turned up during his lifetime. It was that factor which newspapermen, in their brutal but not always cynical jargon, call The Baby Down the Well.

To be sure, at first Dolph's and Nanette's parents had suspected the

worst — which, as Nanette had known automatically, meant an elopment, either with or without marriage. But time and lack of evidence disposed of that awful notion — time, lack of evidence and a creeping willingness to believe that no matter how they had zigged and zagged in the past, neither Nanette nor Dolph could have broken with their character and their backgrounds so completely and at the same time. Faith had set in.

The next horrible suspicion was kidnapping and murder. But no ransom notes arrived, and no bodies were found. Finally — and with rising despair that any outsider would have mistaken for self-righteous fury — the families concluded that the youngsters had simply gone camping and had lied about it (inventively, outrageously, but probably borrowing the fantastic elements from Something They Had Read) to gain time for an unusually long trip. But at long last this story, too, fell to the ground of its own weight, for there was no evidence for it at all.

During all this time — a matter of weeks — the ground around both homes was literally strewn with clues which could point in only one direction — the direction in which Dolph and Nanette actually had gone, and in which Nanette had honestly said that they had gone. Since at bottom what both families wanted most in all the world was to have their children back safe and whole, they were finally left with no recourse but to believe in the only evidence, as well as in the honesty of their children.

It took a long time, for none of the adults had any better opinion than Dolph had of how the authorities would greet such a story. But the time the families had taken to mull over the alternatives in private both stood in their favor and drove them out of themselves. They had done their best, with their own limited resources and that of the local police. Now they *had* to do more; and they did not stint.

They sent telegrams to their senators and representatives. They appealed to the President and to N. A. S. A. big-wigs both in Washington and at Cape Kennedy. They made long-distance telephone calls to scientists in the space program. They pulled wires; and — most courageously of all — they talked, without pulling any punches, to the Press.

The Press had heard it all and cried Hoax.

To the papers and to television alike, it was only another Silly Season story, like the previous decade's obsession with flying saucers — something to fill up space during the last of a hot summer, while important news tends to be slow because most of the world's movers and shakers are on vacation, and most readers and viewers are too fagged with the post-vacation blues to care whether what they are told is an important piece of news or an obvious piece of nonsense. During the Silly Season what both the press and the public most wants is someone to make fun of, to feel superior to.

The two desperate Iowa families filled the bill nicely. They got the full treatment. Their nights were filled with despair; their days, with impotent rage.

But not even the Silly Season lasts forever, and here and there several important people had already listened to the two families and had taken them seriously — or had stopped to think what it might mean to the space program if they were taken seriously.

In Washington, somebody high up in N. A. S. A. who knew Mrs. Haertel spoke soberly to somebody even higher. Slow machineries began to awaken from their summer sleeps. A mathematician in London who had been a renegade from relativity all his life read the garbled newspaper stories, covered eighteen pages of foolscap with calculations only two other men in the world could have any hope of following, and sent them by ordinary post to one of those men. His assistant prudently photographed the calculations before they were enveloped and sent the negatives, hidden under a postage stamp, to Moscow, where the other man was. (There are many different kinds of renegades in the world, and they do not always know when they are working together.) The man in Moscow brooded over them for a long and dreadful night and decided to risk his life, his career, his family and even his country on them — though perhaps not exactly in that order. The lonely operator of a 68-foot radio telescope in the Australian outback focused his gigantic dish-shaped antenna on Mars and picked up from, he could not tell where on that remote desert, traces of a signal which might have come from a small but heavily sparking electric motor, and began to compose a brief technical paper to be called "Irregular Broad-Spectrum Martian Probability Anomalies" for a journal called *Proceedings of the Swiss Society for the Freedom of Ether*, which in consequences would not be seen by anybody likely to be interested in it for decades to come.

There was more — most of it not known of at the time, and much of it still hidden in obscure files all over the world, some of it out of secrecy, some out of simple ignorance — but all of it working, however slowly, in the same direction.

And less slowly, because the pressures on it were greater, the Press found the Silly Season over and the story still standing . . . not only alive and unrefuted, but showing some signs of official interest, of being after all important. The Press made inquiries of the appropriate officials, but was rebuffed without comment. This only made the story seem more likely to be important, after all. And with nothing official to go on, the Press was driven back to rediscovering the Baby Down the Well. The Press handled it like this:

CHILDREN LOST IN SKY, NASA HINTS

Space Scientist's Son,
Girl-Friend Stuck on Mars?

Sen. Hill, Committee Demand End to Secrecy on Mars

Teen Flyaways Rumored Doomed on Red Planet; USSR May Plot Mercy Trip

'Save Our Kids'; Mars Parent's Own Story

MARS TOTS MYTH, REDS SCOFF

Shiela Djarling Talks to Teens:

'HONEYMOON ON MARS — REAL GOFFIN, PREACH!'

Hill Committee Seeks Untold Mars History

SPACE SCIENTIST SAYS: MARS KIDS DEAD

HFH ORDERS CRASH MARS RESCUE

Cape Kennedy Scientists Seek Ways to Speed 'Project Ares' Flagship

The world was indeed fully as bad a place as Dolph had assessed it to be — indeed worse, for his memory encompassed no important war — but all the same, let one Baby fall down a Well, and all the resources of technology are mustered to save it, while the rest of humanity, on the spot in spirit and passionately applying body-English from the sidelines like rooters at a billiards tournament, hangs upon the half-hourly bulletins from the Press.

Well intentioned but stupid people sent the two anxious families money. Others turned up in droves simply to gape at their homes, or — until police cordons stopped it — to cut or dig souvenirs. More interviews were sought than the families could have granted even in a 24-hour day devoted to nothing else. Thousands of persons who had never looked at the sky before in their lives could now point to where they thought Mars was, and it was astonishing how many times they were right. A quasi-mystical hobby called "the Mars vigil" captured a number of minor religious sects, especially in southern California (where the fact that Mars was a red planet also convinced some of the politically religious that the Children in the Sky were just more parts of the great Communist Plot, along with UNICEF and mixed marriages) — in addition, of course, to the uncountable number of prayers offered in all the major churches of the world.

But the element which gives the Baby Down the Well its suspense is the knowledge, lurking always at the back of everyone's mind, that there must soon come a time after which all the effort and all the hope will have been for nothing. Detective work far more thorough and scientific than any the families could even have engaged, let alone paid for, soon established within quite small limits of error what supplies Dolph and Nanette

had taken with them — and therefore, the maximum time they could be expected to stay alive, assuming (for the sake of hope) that they both had landed on Mars gently and without any hurt, loss or damage. It was immediately evident that the *von Braun*, the Ares Project's flagship, could not be completed within that time — let alone launched upon a crossing it would then take the ship 228 days to make.

(This fact, however, in no way discouraged the newspapers from sponsoring bus trips by high school science clubs to Cape Kennedy to watch the *von Braun* being built — though there was very little to be seen from the distance over which the trippers had to look even after they reached their destination. The trippers themselves made fine copy — almost as good as candid-camera or the man-on-the-street interviews. The television networks agreed.)

And no amount of detective work, nor scientific research, either solo or in conference, did better than approach the margins of the discovery by which Dolph and Nanette had made the trip. This fact alone increased the urgency to rescue the youngsters to a pitch almost as high among scientists as it was in the families — not only because the knowledge was wanted, but because the scientists suspected in Dolph a mind of a caliber not seen on Earth since the death of Norbert Weiner, or perhaps even the immortal Hermann Weyl. After all, Dolph had made the discovery which the scientists had not — and could not even with the most important fact in their possession, a fact that Dolph hadn't had: that the thing could be done and had been done.

The time ran out, inexorably.

Toward the end, the *New York Times* began to post in Time Square the number of days the youngsters had left, and then, the number of hours. For the last day of all, the *Times* put up the red ball impaled upon a pole, the fall of which usually indicated nothing more momentous than the election of someone to the presidency of the United States. This time, its fall would mark the expiration of the last calculated moment of life for the Children in the Sky. The world waited.

The ball fell at 11:32 P.M. Eastern Daylight Time, twenty-nine days after Dolph had left the Earth. A huge, silent crowd had gathered to watch. With its falling, there was a concerted sigh — almost a whisper of it left individual lips, but magnified by numbers into a sort of wave-like moan.

For the rest of that month, flags flew at halfmast all over the world. No one can estimate how many millions watched the televised memorial services.

Then the flags returned to their usual positions, and the production of memorial books and pamphlets — and souvenirs — began. With the coming of fall, the serious business of running the world began to come back into the headlines.

The case of the Children in the Sky was over.

Or so it seemed.

Dolph must have reached Nanette within six or seven seconds after the crash, though to him it seemed an eternity of running and searching. The impact had reduced her crate to a jumble of planking and other, more anonymous debris, but the Martian starlight was more than bright enough for him to see her inert body under the rubble.

He wasted no time. Snatching off his respirator, he clapped it over her face, secured it and heaved her up out of the wreckage by the shoulders. If it had taken him an eternity to get to her, there was no word for how long it seemed to take him to drag her back, through the bitter, blasting cold in which he could no longer even breathe — let alone dare to gasp — to the dubious haven of his own craft. Bundling her awkward, incooperative form through his airlock was also maddeningly time-consuming; by now his head was swimming. But somehow, he got them both inside. Then he just sat and panted.

He had, after all, gone out for exercise. But this much had almost been fatal.

After a while, however, he had recovered enough to take a look at the girl. She was in bad shape. To begin with, she was so blue with cold, and probably with oxygen starvation, that he could not tell where her blueness was also due to bruises — as a lot of it surely was. That landing had been hard. If she also had broken bones, or even more serious injuries, he would be unable to guess at them until she recovered consciousness and became able to tell him where and how she hurt worst.

For the time being, there was nothing he could do but keep feeding her pure oxygen through the mask, and warm her up. For the last purpose, the blanket alone wouldn't do. Without a single second thought, he crawled under it with her.

It was more than a little like bedding down with an extra-large rubber ice-bag. Nevertheless, toward morning, just before dawn, she seemed to be warmer, and Dolph, who was very cold, managed to sleep a little. He was awakened again by the morning sandstorm. Afterwards, Nanette stirred a little and muttered something unintelligible underneath the oxygen mask.

Dolph got up promptly, removed the mask and shut off the oxygen. Then, with creaking muscles, he set about making a meager breakfast. Nanette, now looking normally pink except for a magnificent black eye, continued to snooze peacefully. He did his best not to disturb her. She needed the sleep — and he needed more time to think.

For him, it was very clear, the case of the Children in the Sky was far from over.

VIII

WINE AND STORM

Except for the black eye, and a few other, more extensive bruises whose location Nanette refused to specify, there turned out to be

nothing wrong with Nanette that oxygen and warmth could not cure.

But it had been a near thing. Her crate had leaked enthusiastically during her crossing to Mars so that she had lost consciousness while still trying to land. That was what had caused the crash which luckily had been caused solely by a short fall under Mars' weak gravity, not by any still-uncanceled momentum.

It was still possible, of course, that she also had gotten a severe radiation dose during her crossing. But as the days went by without her losing any hair, turning pale, or developing any nausea, Dolph decided to discount that. Except for the bruises, she was almost glaringly healthy —and hungry.

"Well, did you bring any food?" he demanded.

"As much as I could pack into my ship. Remember, it was smaller than yours."

"Meaning that I'm going to have to split with you," Dolph said. "And that probably goes for oxygen and everything else, too. Wuff! Nan, it was nice of you to come after me — and darned smart, too — but we're in a spot. You shouldn't have done it."

"I'm here," Nanette said practically. "And I'm willing to learn — and cooperate. If it helps, I'm sorry I didn't give your notes on the anti-gravity to somebody, and sorry I didn't think ahead about a lot of other things, too. But I didn't, and here I am."

"Okay — okay. Now we have to stay alive. I guess the next thing to do is look through that crash of yours and see what we can salvage."

"Good! Let's go."

"Not so fast! And, Nan — try not to *bounce* so. It wastes oxygen. Believe me, we've got to think about every move here before we make it."

"I'm sorry," Nanette said, so instantly contrite that Dolph felt like thirty-three different kinds of heel. "I'll wait for orders."

"It's not a matter of orders," Dolph said, and then had to stop and wonder just how to explain to this burstingly alive girl that she might die any minute in any one of hundreds of ways — as she almost had several times already. "The first thing is, I've got only one mask, and only one set of heavy clothes, and only one pair of goggles. You don't dare go outside without those things. Outside is — well, it's like the worst features of the top of Mount Everest, plus the worst of a salt desert like Muroc Dry Lake. It's warm enough around noon, but except for that, it's deadly."

"But I already knew that," Nan said in some surprise. "I brought goggles and a mask — I just didn't think to put them on while I was landing. They're out in the wreck, along with my oxygen bottles and my sewing kit."

"Oh, Well, I'll have to go and get them myself. If they're all right, after that we probably can go out together."

"Fine," Nanette said. "While you're gone, I'll make breakfast."

"No, no!"

"*Now* what's the matter?"

Again Dolph had to swallow and start over. "We've already *had* breakfast, Nan — and lunch and dinner, too. One meal a day is the rule here. And no cooking. While it lasts, we eat the stuff as it comes out of the can. Luckily those field rations heat themselves when you open them, and we can use any extra heat we get. Don't waste any by trying to dress things up. We just can't afford it."

For a moment Nanette looked as though she were about to frown, but instead, she smiled slightly.

"All right, I'll forget cooking. Maybe I'll dust — no, I guess that comes under the head of bouncing. Well, at least I won't have to worry about dieting. Back home I was getting kind of pudgy."

She paused, looked at Dolph critically, and then laughed outright.

"You look like a dog trying to figure out a porcupine! Go ahead, Dolph. I'm human, and I'll be all right, really I will."

"That's good," Dolph said doubtfully. The girl was in many ways a bigger problem than Mars was, and one about which he knew far less. But since he had no choice, he dressed and went out anyhow, trying to distract himself by wondering what he would find in the wreckage — and what he would find when he came home.

He did not notice that this was the first time he had called the surviving packing-crate "home."

He was, moreover, totally unprepared for what he found when he did get back. Nanette had found the root of the irregularity in the pump cycle, which had been eluding him for weeks.

"What was it?"

"Nothing to it," she said calmly. "You forgot to oil it, that's all."

"But — what did you oil it with?"

"I rubbed the axle-points against my nose. If I've got to have a greasy nose for the next ten years, I might as well use it for something. Sit down and stop gaping, Dolph, and show me what you salvaged."

It had been too much to hope that Nanette's power tube had survived her crash, and indeed it hadn't. But there was a surprising amount of supplies and tools that had, and with this plus an additional person the interior of Dolph's crate changed from being almost intolerably crowded into being impossible. After thinking the matter over, Dolph evolved a solution which also gave him a use for some of the lumber from the derelict.

"I think the best place to build it would be on the airlock side," he added.

"But what? It'll just be in our way."

"No, it won't, not much, and it might help to *keep* us our way out. Maybe you've noticed that the sandstorms always blow from west to east — just like weather on Earth — and the airlock faces north. Some day we're going to have a really big blow, and the sand might dune up against the airlock. If I

put the leanto on the north side and put its entrance on the east, we'll have some protection against being sanded in."

"Makes sense," Nanette admitted at once. "Also it gives us a longer shadow."

"A what? I mean, sure it does, but what of it?"

"The sand blows almost in a line — horizontally. If the house is twice as long as it is now, it'll catch twice as much sand against its front and give use twice as wide a low-sand lane in the back."

"So it would," Dolph said. "And that might be worth a lot to us some time. Sharp."

"Thank you."

"In fact if you hadn't been sharp you wouldn't be in this mess at all," he added. Her slightly smug expression evaporated. "Well, let's get on it. With what's left over from the lumber, we can put up a windmill — I think that old Exide's past due for a recharging."

They were not able to pressurize the leanto. Dolph would have liked to, not only for the extra living space it would give them, but also because it would afford them separate sleeping quarters. Dolph was not greatly worried about the proprieties at this distance from home, and in any event, between the exhausting life they were forced to lead and the thoroughness with which Nanette had absorbed a rather Puritan upbringing, he doubted that romance was going to be one of his major troubles. Nevertheless, they were the only human beings on an entire planet — and very little on this whole rusty world could be more dangerous to them than a pregnancy.

But he could not build the new structure to sufficiently close tolerances to caulk it, even had he had enough extra pitch to do the job. He had to settle for moving more than half of their possessions into the shed, which at least gave them noticeably more floor space in their present living quarters.

The windmill-generator worked well, which emboldened Dolph to try at last the production of oxygen by electrolysis of tumble-lichen sap. This worked too, thus confirming his theory that the sap was largely water; but it also confronted them with a problem which he should have anticipated, but hadn't. Once the sap was gone, it left behind a brown, gummy residue which was a prime nuisance to clean out. And once he had his still going — thus also solving their drinking water problem, at least for the foreseeable future — the resin accumulated in that, too.

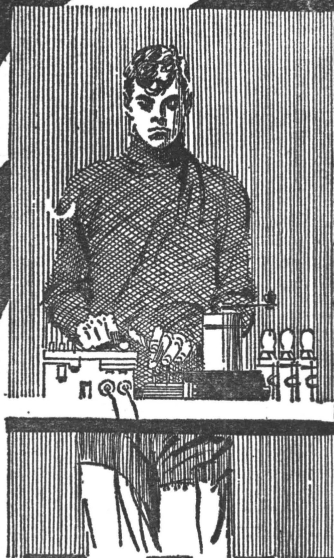
"It must be good for something," he said thoughtfully.

"To eat," Nanette suggested. Nothing on Mars discommoded her so much as her own stomach.

"I'd hate to try it. If the chinks in the leanto weren't so big I'd try it for caulking."

"Stuff them with dried lichen. We've got bales of the stuff outside, even allowing for what blows away."

"It won't pack solid enough. But maybe . . . hmm. You know, I'll



bet that if we shredded it fine enough and used this goo for a binder, it might make passable paper."

"Goody," Nanette said with heavy irony. "Then we can keep a diary."

"If I keep one, I'll Tell All," Dolph said. It was remarkable how Nanette's presence cheered him, no matter how she complicated his problems — or perhaps it was not so remarkable after all. "But I was still thinking about caulking. We can smooth out the sand in the leanto for a tray to make the paper in, and turn it out in big sheets — we don't have to care if it isn't uniformly thick — and plaster it up on the walls, as many layers of it as we need. *Then* we can caulk and pressurize. I'll bet it would take less than a month."

"Better had," Nanette said ambiguously. "Wallpaper on Mars! Well. I vote for a floral pattern."

"Why?"

"Because I'm going to live there, so I get to choose."

"Idiot. Let's go try it."

But her suggestion that the resin might be good to eat continued to work on him, somewhere at the back of his mind. Sooner or later — sooner, now that Nanette was aboard — they were indeed going to have to try the tumble-lichens as food and pray that they were indeed edible. He decided to attempt the experiment alone and in private; there was no point in jeopardizing both of them. When? Not, at least, until after the wallpapering project was finished. By then, Nanette would have had

enough experience of Mars, and enough warning of the traps he had encountered before her arrival, to have at least a good chance of surviving alone as he would have had . . . and a rather better chance than they had of surviving for any length of time as a couple.

The obvious need to keep this plan a secret made facing up to it doubly hard. Somehow he was not helped by the fact that the wall-papering project was a resounding success and made Nanette as cheerful as a puppy at the prospect of having her own quarters. He wonwered if, after all, she wasn't just a little too cheerful, too optimistic about living on Mars, to take the problems of survival there alone with enough seriousness. Wouldn't it be better to wait until —

But he recognized this line of reasoning in time as the excuse it was, and grimly fought it off. When the appointed time came, he was not exactly ready to greet it gladly, but at least he was still determined.

Nanette was in "the next apartment", earnestly picking up an object from *here* to set it down *there* — a feminine rite which these cramped quarters had at last taught Dolph to appreciate. He was facing about half an ounce of tumble-lichen sap, freshly squeezed from the press and hence quite cold. He thought he now understood, too, how Socrates had felt when faced with the hemlock. Taking a deep breath, he tossed the swallow down with a most unphilosophic grimace.

Then he held his breath and waited.

The response was not long in coming. It astonished him completely.

Whatever he had expected, it had not been this. Gradually, but with increasing speed, there crept through his body a feeling of total well being. He was no longer hungry, no longer thirsty, no longer chilly, no longer even tired. Yet it was more than just an adding up of negatives: he felt strong, alert, as ready for anything as he had ever felt in his life — and he had seldom been ill.

He wondered: Is this what it's like to be drunk? But he had experimented with alcohol once, and it felt nothing like this. For one thing, it had made him feel happy, almost gay, whereas there did not seem to be any emotional edge to the sensation caused by the sap. For another, it had made him giddy; well, he could test that. He walked across the room and back; no, no dizziness.

He noticed that he was still holding his breath and let it out.

"It was several seconds before he realized that he felt no desire to take another.

He looked at his watch, and allowed another ten seconds to go by; fifteen; then twenty. He still felt not the slightest need to breathe. A marvelous suspicion smote him, and he called out:

"Nanette!"

"What is it? I can barely hear you."

"Come here a minute, will you? Important."

After he called, his diaphragm

gave a small heave — just enough, he would guess, to replace the air he had used in calling. Then his chest was quiescent again.

"Dolph — Dolph, what's the matter? You look so strange!"

"How so? I mean, in what way? Do I look sick, or have I turned green or something like that?

"No, you don't look any different that way," Nanette said. "It's just your expression — like you'd just seen Banquo's ghost or something. What is it?"

"I don't know yet, but it could be something big. Do me a favor and take my pulse. Tell you why afterward."

"Sure, but — oh!" She snatched her hand back.

"What now?"

"It's nothing. You're cold. It startled me."

"I thought so. Go ahead with the pulse."

She took it and then stared at him incredulously. Then she took it again.

"This is crazy," she said. "It isn't more than twenty to the minute. Dolph — you *are* sick!"

"No, I don't think so. With a pulse of twenty I ought to be dead. But I feel fine. In fact I feel great. And I think our lives have just been saved. If you watch me, you'll notice I'm not breathing either, that is except when I start talking to you."

"If you don't stop being mysterious," she said grimly, "I am going to pick up the nearest blunt instrument and make you good and sick. Talk!"

Grinning, Dolph told her of his experiment with the sap. She was furious; it took him the better part of ten minutes to get her calmed down.

"I know, I know. Everything you say is true, but all the same it had to be tried. And look, Nanette, this stuff is better than food. It slows down the metabolism — slows it *way* down, about five times. We'll use that much less food, that much less oxygen, that much less water. And there's something else. I'll check this *very* carefully, believe me, but it might even make it possible for us to live outside without masks, at least for a few hours at a time during the day. We'll save on heat, too — I'll bet my body temperature's going to wind up at about half normal — and we'll be glad of that in about a year."

"Why a year?"

"Because then it'll be winter. The Martian seasons are four times as long as they are on Earth."

"Hmm. I still think it was foolhardy, but . . . . I want to try it."

"No," Dolph said firmly.

"Don't give me that! If you can make a nitwit of yourself, I can too. And if there are any benefits, I ought to be entitled to them."

"No argument — but the experiment's less than an hour old. The stuff could kill me. Even if it doesn't there may be long-term bad effects — what the doctors call chronic toxicity. And then there's this business of feeling so good; it's like a drug. Maybe the sap's addicting."

"Even if it is, there's obviously

plenty," Nanette said, but she did not press the point. "Okay, I'll hold off for a little while, anyhow. How long are you going to insist upon?"

"Oh — say a week. Not really long enough, but it'll have to do. I want to experiment with the dose, too; maybe I took more than I need, or — well, we just don't know yet. What now?"

Nanette had cocked her head and had stopped listening to him with more than half her mind.

"Listen to the wind. That's not just the evening blow. It's getting worse."

After listening a moment for himself, Dolph had to agree. "I wonder what that means?"

"Didn't you say we had a year to go until winter? Then we're just at the beginning of autumn here. This is such a small planet, the winds must change pattern pretty sharply with the seasons. And I think it's just started to change."

"I think you're right." Dolph strode to the porthole and looked out. "Look at that sand! It's getting thicker every second. This could be a bad one."

Nanette nodded soberly. "If you ask me," she said, "that week is going to be a long one."

IX

THE LONG BLAST

Nanette was right. That night's sandstorm was only half an hour longer than usual, but the next morning's was better than an hour longer; and as the week wore on, the situation worsened steadily. By the end of the week, there was only about an hour around noon (and, presumably, another around midnight) when the air was quiet and clear. It was evident that the porthole would be covered shortly — and after that, perhaps the house itself.

Their only hope lay in the fact that the wind continued always to blow in the same direction — though now from the south. Both the change and its constancy baffled Dolph for quite a while, but finally he thought he saw glimmerings of an explanation.

"Look," he said, drawing a circle on a scrap of left-over wallpaper. "Say this is Mars, looking down on it at the North pole at the time we arrived — just before the equinox, when the equator is warmer than the poles, just like it is all year around on Earth. While it's like that, the air ought to circulate like it does on Earth. Here's the direction of rotation, counter-clockwise. Now —" he quickly sketched in something like a ship's propeller, its center at the pole, its blades bent away from the direction of rotation — "that gives us a travelling wave up in the stratosphere, a jet stream, like this, going in and out toward the pole twice a day but blowing in the same direction the planet rotates. Of course that never touches the ground, but — " he put in four ovals trailing after the "blades" of the "propeller" — "it trails four high-pressure spots out toward the equator, and those give us our dawn and dusk winds. If we

were farther north or south, say at about forty-five degrees of latitude as we were in Iowa, we'd hit low-pressure cells that would have the same effect. So that's why the weather always moves from West to East, just as it does at home."

"Which is why the wind is blowing steadily north now," she agreed gravely. "Brilliant, Holmes, brilliant."

"No, it isn't idiot. Now winter is coming on, and winter on Mars *isn't* like home, because then one Martian pole is warmer than the equator — which never happens at home." He drew another circle. "Here's Mars in winter. Then the wind blows from one pole to the other, going along the ground from the cold pole to the warm one, and back up and over through the stratosphere. And it'll go right on like that through the soltice to the next equinox."

She considered this in silence for a few moments.

"It makes sense, all right," she said at last. "And I don't think I like it, Dolph. With the wind blowing from the cold pole steadily, all the time, for nearly a year — well, it's going to be cold around here."

"Sure it is," Dolph said. He took her hand, tentatively. "But look, Nanette, we knew that already. We knew it before we ever left the Earth — we just didn't know exactly why. Even at noon it won't get above freezing around here, not by more than ten degrees at the most, and it'll be blowing all the time. But by being here, we've gotten a break we couldn't have expected or foreseen at home: the tumble-lichen sap. If that works out, we won't be too awfully cold, and we'll come through."

Nanette closed her eyes, and slowly shook her head.

"What's the matter, Nan?"

"Dolph, Dolph — the lichens will all be buried. They may be buried already. *And they die in winter* — we saw that from the Earth, too!"

After a moment, Dolph put his hand to his forehead.

"That's true," he said, stunned. Nan, we've got to go out."

"Into that storm?"

"Yes. We don't have any choice. We can still dig in the lee of the house — the 'shadow' you talked about. We'll have to, before the sand gets any deeper. We have to pack the leanto full of lichen, while we can still get it, or we're dead."

"All right," Nanette said. "Then pass the bottle, Dolph."

"The time isn't up."

"I don't care. I won't go out into that storm without some sort of juice under my belt. If I do, neither of us will come back."

There was no arguing this. Silently, Dolph put the wine-press into action. Despite the gloominess of their situation, he was forced to chuckle at the parade of expressions that crossed Nanette's face as the elixir took hold. If he had looked like that when she had first seen him after he had tried it, he could understand why she had been alarmed.

"Wow," she said. "That's great.

I don't see how anything that good could be poisonous."

"I just hope that doesn't come under the heading of famous last words," he said. "But we've got no choice — we can't get along without it now. Better get dressed now. The sand out there's getting deeper by the minute."

They managed to dredge up several bushels of tumble-lichen during a quiet noon, before the storm drove them inside again. This in turn yielded about a pint of sap — enough to last quite a while, for Dolph had discovered that a tot of it barely large enough to swallow was sufficient to carry him through a full 25-hour day, while a larger dose, while it exerted its effects somewhat longer, was in the long run wasteful. Nevertheless, they lost no opportunity to augment the supply, for — as Nanette had reminded him — when the winter had firmly closed in there would be no more lichens for months to come.

For the rest of the time they were hard put to it to fill up the hours, for though there was much that they needed to be doing to provide against the future, most of it could not be done while the storm raged. Nanette had adopted her own, originally half-frivolous suggestion of keeping a diary. There had been a great deal to record in it at first, but as their confinement wore on the entries became shorter and shorter. Nevertheless, she kept at it, for even a bare notation of the passage of a day had the minimum virtue of keeping their calendar up to date.

"I wish we could have some light, though," Nanette said. "Not to stay up at night with, but for days when the weather is like this. Since the sand started blowing I can hardly see what I'm writing. Can't we spare the electricity, now that the windmill's working? Or is the battery going to go dead on us some day, too?"

"The battery's new, and this type ought to be good for about a thousand rechargings," Dolph said. "And we can take power directly from the generator as long as the wind blows. But I'm just not up to making a carbon filament — and besides, even if I could, and got a bulb blown, I couldn't evacuate it . . . . Hm. Don't need to. I could just take it outside and seal it up out there — 200 millibars of nitrogen ought to be nearly as good as a vacuum for this purpose. I'll think about it. Maybe it *could* be done."

While he thought, he busied himself cannibalizing the anti-gravity rig to build a crystal radio. It had occurred to him that it might just barely be possible to pick up one of the strongest of Earth's broadcasting stations, or perhaps one of the networks if all the stations in a network broadcast on the same frequency — a question to which he could not remember the answer, if indeed he had ever known it. In the loneliness and silence of Mars, even the lobotomized ravings of WABC might occasionally be a welcome reminder of home, however tenuous.

While he worked, the wind blew on monotonously, and the sand

mounted toward the bottom of the porthole. The oasis was an oasis no longer, but a well of red murk, except at noon when the sun shone briefly down upon endless waves of ochre dunes, none the less depressing for a wild and patternless beauty, like a sea of blood frozen in mid-tide.

"What are we going to do for light after the sand piles up over the portholes?" Nanette wanted to know.

"Go out and shovel it away, I guess."

"What, Mr. Edison — still no magic electrical glow-lamp?"

"Nope. Just shovelling."

"Pooh. And I always thought space travel would be glamorous."

But at least she still seemed to be cheerful — or was making a brave show of it. Perhaps the elixir helped; heaven knew there was little enough else to be cheerful about.

The storm did not stop at the end of a week, but by the end of two it seemed to have reached a sort of inflection-point, after which it carried away about as much sand as it brought in; though by then the burden of detritus was high enough to require daily trips outside to clear the porthole.

By then the radio was almost finished, and high time, too. The circuit had not given Dolph any trouble, except with his memory, but contriving an earphone — he would have preferred a loudspeaker, for Nanette's benefit, but he did not have the necessary transformer to drive one — had almost defeated him. The design was simple enough but he had no piece of steel thin enough to serve as a diaphragm. In the end he had manufactured one out of iron filings imbedded in baked tumble-lichen resin. It was not as flexible as he would have liked, but he thought it would serve.

For several evenings thereafter, his cat's-whisker probing of the ether — or whatever was doing duty for the ether these days — brought him in nothing but the faint wash of background white noise which is the sound of stars — that "music of the spheres," plus occasional bursts of aural hash which were most probably static from the Sun itself. Evidently no AM signal in the standard broadcast band was powerful enough to push its way through the Kennedy-Heaviside layer of Earth's atmosphere and have enough strength left to reach Mars. Too bad. He had half expected it, but still it would have been pleasant to have been able to pick up a little music now and then . . . to say nothing of an occasional human voice, were it only some pitchman touting headache pills. Instead, the only man-made signal that came through the earphone was the steady *flickflickflick* of his own pump, like the distant sound of someone single-mindedly dusting a piece of wire screening with a whiskbrook.

The other signal, when he finally found it, was markedly softer but there was no possiblility of its being man-made.

"I don't like it," Nanette whispered, her eyes wide, the

clumsy phone pressed to her ear. "It sounds like — like an animal in pain."

"Well, it could be somebody singing — I've heard worse," Dolph said judiciously. "But I don't think it is."

"Then what — "

"Wait a minute, and you'll know everything I know about it. I made up a loop antenna after I happened on this thing. Watch what happens when I rotate it."

Her eyes widened once more. "The sound gets louder! . . . There, now it's faded again."

"Yes, I swung the loop back out of line. I can't pin it down more than approximately, but it seems to be coming either from west-northwest of where we are — or from exactly the opposite direction, of course. In other words, either from somewhere in Syrtis Major, or in the direction of 'Arabia'. Or from somewhere much farther away, more likely, by the weakness of the signal."

She lowered the earphone and stared at him.

"But, Dolph — that must mean — oh, no! Do you think that somebody's come for us?"

He took the earphone from her and listened for a long moment to that high-pitched, infinitely melancholy, ululating whine. It went on and on, as though the thing that produced it had no need to pause for breath. The sound went through the inside of his skull like the pain of a dentist's burr.

"No, I don't think so, Nan. It's far too soon for that. And whatever else that noise is, it isn't a human noise. Or any other sound that was heard on Earth."

"Then —" She stopped, as though uncertain whether to be hopeful or alarmed. "Then it has to be Martians! Oh, Dolph, do you think they might help us? Do you think they could?"

"I don't see how," he said gently. They don't even know we're here. And I'm not so sure but that I'd rather have it that way, at least until we know more about them. At the moment we've got nothing to go on but that noise, and I don't find that any more reassuring than you do."

He listened to it again, then shook his head.

"As for us finding them — well, at the distance they're bound to be at, Nan, we couldn't possibly make it without flying. For all the good they can do us right now, they might just as well be on Pluto. Or on Earth. It comes to just about the same thing in the end."

He put the earphone face down on the table. Nanette did not bother to nod, but it was clear from her expression that she could not much mourn the evanescence of a hope so suddenly raised . . . at the very least, not this soon.

Outside the house, the long blast blew on regardless.

X

CIRCUIT OF THE SUN

As any student of Dante — or the Arctic — knows, an eternal winter is as close to being an inferno

as any living human being is ever likely to imagine. And as Dolph and Nanette found, a yearlong winter spent in a primitive hut is not a noticeable improvement.

Of course there was never any snow, but fine sand makes a perfectly acceptable substitute, and is even more difficult to keep out of the house. As for cold — mediated though they were by the tumblelichen elixir, the night-time temperatures in the house were often ferocious. Outside, they were always so low as to be outright meaningless.

Nanette bore it the less well. Despite all that Dolph could do with jokes, word games, improvised chessmen and sessions of hard physical work — and there was certainly very little of *that* he had to improvise — her innate cheerfulness wilted steadily, melting gradually into becoming morose, sullen and solitary. The small bruises that she inevitably sustained, often simply from bumping into things in the narrow confines of the hut, hung on for weeks, and after a while, too, he began to suspect that there was something wrong with her eyes.

It was only after two episodes of something suspiciously akin to delirium, however, that he realized that she was specifically ill. It was most probably a nutritional deficiency of some sort; Dolph had no way to judge which one, since such things had long been extinct in the part of the world in which he and she had been brought up, but he suspected beri-beri. Luckily, it did not seem to be grave, at least not yet. But it worried him. Even worse, it deprived him of her help and company alike most of the time.

In her absence, he took on also the chore of keeping up the diary. In the remaining time — of which there was a lot — he listened to the ceaseless, wavering cry from the crystal radio. There was a pattern in it, of that he was sure. Sometimes he felt almost on the verge of grasping it. Then, once more, it would fall apart into meaninglessness.

He thought that with a cathode-ray oscilloscope and a high-speed camera he might have cracked the problem in short order — but he might as well have wished for a million dollars, the Taj Mahal and a broiled lobster with drawn butter and a spring salad. (Never mind that.) As matters stood, he had nothing to fall back on but close listening, patience and a mathematician's faith in the existence of order at the heart of every puzzle, even on Mars.

And slowly, slowly, these began to pay off. His first assumption, that the noise was in fact a voice — for it certainly did sound organic, like an animal in pain, as Nanette had said — he discarded eventually on common-sense grounds. Nothing animal could go on and on like that, hour after hour, week after week, not even a WABC announcer who didn't need to breathe. If the message being sent were both important and unique, it couldn't possibly be so long — and so limited in range. If, on the other hand, the message was brief and repetitious, as seemed more likely, it would surely be assigned to a machine — unless the

imagined Martian had a commercial sponsor, which hardly seemed likely.

A machine then; but if so, what kind of a machine, and what was it sending? First of all, there was the possibility that it was "sending" only by accident, like the noise made by Dolph's pump, and that the sound carried no information (other than being characteristic of the machine that made it). But this was the only such Mars-born sound that Dolph could pick up. This presupposed either (a) that the Martians didn't know how to shield their electrical machines, and that this one therefore was the only one in this part of the planet; or, (b) that they did know how to shield, and had shielded all their machines but this one. Neither notion was logical enough to be worth any more study for the time being.

Okay; then the signal was machine-generated and repetitious, but there was a message in it — intentionally.

To know that much about it already — no matter with what reservations — had to be counted a solid gain. Nevertheless, it was not much more than a beginning.

What might the message be about? Before Dolph could know that, he had to know how he was supposed to be receiving it. True, he had picked it up as a sound, but that was no guarantee that it was being sent out as one. All he knew about that for sure was that it came to him as radio waves which he *could* translate into sound waves, but which the Martians might translate into something else — or might be able to sense directly, as Dolph could sense light waves directly.

Now there was a thought. Supposing the signal was supposed to be translated first into a picture — that, in other words, it was a television broadcast? At first he rejected the notion out of hand, since he was getting the broadcast on a wavelength rather low in the standard AM band, whereas television required high-frequency transmission. Later, however, he remembered vaguely that very short waves had not been available when TV had been invented, at the dawn of the century. The primitives had sent stationary pictures by low-frequency AM, and even by wire.

But if the Martian noise were even so simple a TV transmission as that, to translate it Dolph would need a pierced-spiral scanning disk — which he could make — and a powerful but sensitive amplitude-modulated light source, which he couldn't. All right, scratch that — and hope that it's wrong anyhow.

But wait a moment; was he giving up too easily? Any such noise as he was now hearing would not translate into anything but the simplest of pictures — a cross, say, or an ellipse — and that certainly would not make even a good test pattern for a useful television set. Its very simplicity suggested that it had been designed to be easy to pick up, and easy to identify, and over continental distances at that. Dolph could think of only one kind of signal that would have to satisfy all three of those conditions:

A beacon.

And what could be *more* likely, on a planet where the desert was supreme over vast areas for three years out of four, and even the vastest landmarks might be obliterated by a sandstorm in a matter of days? If fixed bench-marks were needed, they would have to be established where nature could not touch them — except, briefly, with solar static: in the eletromagnetic spectrum.

What Dolph was listening to, unlikely though the notion was on a waterless planet, was almost surely a lighthouse.

What use he was going to make of the discovery was a question for which he could see no answer at all.

He had no more time to think about it now, in any event, for somewhere on the far side of the dead of winter, Nanette began to improve slightly and thereafter was much more trouble than she had been when most ill. Dolph was delighted; every other problem but this went completely out of his head.

The improvement was small enough, in all conscience, but he fostered it like a wren trying to raise a cuckoo-chick. At first, she only talked in her sleep and allowed herself to be fed without objecting more than feebly to his interfering with her private nightmares, even when she discovered him sitting with her after a blackly howling night. Then, she became wakeful enough at times to become embarrassed that he had been doing sanitary patrol for her while she had been unable to do it for herself. He had a hard time persuading her that he ought to continue to do it for a while to conserve her much dwindled strength. He won that only by reminding her brutally that she was on Mars — which she had forgotten mercifully at her worst crisis. After that she was docile, though depressed.

As her spirits lifted, she began to ask that he tell her stories.

The task baffled him completely. Though enormously sensitive to the poetry of mathematics, he had no literary imagination whatsoever. The outcome of the proposal was that *she* told *him* stories. This embarrassed him at first, but the tales she invented — fantastic improvisations about six-legged animals who needed boots to ward off a bad cold, dragons abashed to discover that they had fluffy pink wings, bears who went space-traveling in a rocking-chair (well, what really was so fantastic about that, now?) — were so unpredictable, and she seemed to take such delight in alternately surprising and outraging him, that he concluded they were at least as good for her as anything he might have concocted, with talent or without it.

Glad though he was to see her beginning to recover, however, he was nevertheless at a loss to understand why she was recovering — or what it was she was recovering from. He had done nothing for her that he had not been doing all along, and there had been no other

change around them that he had been able to detect. For example, his guess that her problem was a dietary deficiency now had to be ruled out; her diet was exactly what it had been for months.

Equally obviously, she could not have had and sort of systemic infection, for had it been acute she would have recovered — or died — much earlier, whereas if it were chronic she would not be recovering now. Had it been simply the blues? A serious depression of the spirit, a kind of poisonous despair, which had expressed itself in a random collection of physical symptoms? That was possible, of course, but it seemed grossly out of harmony with what he knew of her character and her youth.

He let the problem rest for a month, finding no handle by which he could even begin to grasp it with any confidence. In the meantime, however, her partial return toward normal human converse — slow though it was — encouraged him to broach the question to her, once he felt she was strong enough not to be discouraged by his puzzlement.

She promptly alarmed him all over again by laughing.

"I've been thinking about that myself," she said. "There are parts of it that I noticed long before you, but I didn't want to bring it up because — well, because well-brought-up young ladies aren't supposed to discuss such things with males, not even relatives. But I guess this isn't exactly an ordinary situation, either."

"Listen, are you sure you're feeling all right? It isn't that important, now that you're mending. We can wait until — "

"No, Dolph, I really am making sense. The thing is, this planet doesn't have any moons, or at least the ones it does have are so small that they might as well not be there."

"Moons? But, Nanette — "

"Hush and let me finish, will you?" she said firmly. "On Earth the moon is important to all sorts of things, not just the tides and the calendar. It has something to do with the weather, and there are lots of animals — even ones you'd never guess, like fiddler crabs — seem to time some of their behavior by it. Isn't that right?"

"Yes, it is," he said. Belatedly, he was beginning to see what she was driving at.

"Okay. It affects people, too. That business about crazy people getting crazier at certain times of the month — it was even called 'lunacy' — wasn't just superstition. And *everybody* knows that us female types run on a lunar calendar . . . except that on Mars, it seems, we don't."

"So that's it."

"Well, that's part of it, anyhow I think," Nanette said. "I noticed that something was amiss not very long after I got here, and since then just about nothing has gone the way it's supposed to. I must have gotten pretty toxic, and probably my hormones were all out

of balance, too. I'm just going to have to adjust to a new schedule, that's all — and so is every woman who comes to Mars, I'll bet. I'm just glad it's over this time."

"I hope it is. But how can you be sure? I mean — what do you think made the difference?"

She smiled. "Why, Dolph, that's easy. Spring is coming."

"Spring?" he said numbly. "Yes, I suppose it is. Not that we'll notice any difference for quite a while yet."

"I've noticed," she reminded him firmly. "And you will too if you listen. You've been so busy worrying about me this past week, you haven't even noticed that the wind has changed."

Startled again, Dolph got up and bounced awkwardly to the porthole. Sure enough. The air was still hazed with ochre dust, but the narrowing fan of land where the drifts had been lower, the lee area they had taken to calling "the back yard," showed long feathers of sand curling off the tops of its dunes, horizontal to the building. Gradually the yard was being swept clean.

While he stared, there was a soft thump from above, like the sound of a cat jumping off a table.

He looked up automatically, and then out the porthole again as two more thumps hit the crate roof. This time, one of the objects came falling into view and hit the ground before him, still rolling before the wind. It was about the size of his head; once, beyond question, it had been bigger.

It was a tumble-lichen, fallen into the oasis after having been blown across a thousand miles of steppes and clefts. It was not as pretty as a first robin, but it was a thousand times more welcome.

Spring was indeed begun; the "wave of quickening" was on its way north from the melting and subliming polar cap.

But no buds showed, and no birds sang. It was still cold as death outside, and the air as thin and lifeless as it had always been, and always would be. Only the gradual replenishing of the food supply and the still more gradual rise in the noonday temperature maxima showed that the grip of winter had broken. They were still confined to quarters, except from the briefest of forays to collect lichens and clean the pump-filter. At least these broke the monotony of their days, a little.

Except for the journal, they would never have noticed the day when an Earth year had passed since Dolph's spoiled landing.

The Martian year was not much more than half over — how much more, it was hard to guess, for Dolph and Nanette had necessarily been counting Martian days, of which there are 668.6 to a Martion year. By Earth time, the Martian year is 687 days. Either way, however, there were better than 200 days to go to the end of the first Martian year.

To the eye, nevertheless, the oasis outside the crate and the

leanto softened as the days wore on. As the wind lessened, the periods of good visibility began earlier in the day and ended later in the afternoon. The lichens spread gradually, too, not just occasional migrants now, but establishing themselves on the floor of the crater. The time was foreseeable when there would be a carpet of them again, as unbroken as it had been when Dolph had first seen it.

The moderating weather suggested to Dolph the possibility of exploring the oasis, at least in short forays in the hours bracketing noon. Though he was reluctant to admit it, what he was hoping to find was an artifact — any object, no matter how small, how old or how broken, which had been made by some guiding hand and brain, not just a product of nature. It seemed to him that by Martian standards, this valley had to be considered so sheltered and verdant a place that it must be known to whatever entities were responsible for the mysterious radio signals. Even if they were not using it now, he reasoned, they must have visited it at some time in the past and left some sign of their passage, even were it only a few pieces of their equivalent of garbage. There was a lot one could learn, after all, from midden-heaps.

But they found neither midden nor artifact. If the valley had indeed ever been visited, the visits must have been brief and far apart — or too long ago to have left any traces Dolph's inexpert eye might recognize. Of course, Dolph's and Nanette's brief, random diggings hardly qualified as skilled, intensive excavation, but Dolph was reasonably sure that had there ever been a lot of traffic in the oasis, they would have hit upon some sign of it. There was nothing.

They did, however, find something that Dolph thought might be of even greater value to them in the long run: a Martian animal, of a size large enough to suggest that it might be practicable to eat it.

Nanette at first rejected this suggestion with horror, for the critter was not pretty. It was a hard-shelled, reddish invertebrate which combined the best features — or, from Nanette's point of view, the worst—of a centipede and a scorpion. It even had a sting in its tail, suggesting that somewhere on Mars there were animals its own size, or larger, against which it might have to defend itself. It was a burrower, coming out only at dawn — which explained why they hadn't seen it before — to feed on the mites and nematodes and harvest water from the lichens. It had twenty legs, moved rapidly when the sun warmed it, and seemed to vary from about seven inches in length to nearly two feet.

Nanette's verdict on this complex biological wonder, so beautifully adapted to its world, so recognizably obeying many of the evolutionary laws which prevailed on Earth, yet so obviously neither an Earthly creature nor related to any, was classic in its simplicity: *"Ugh."*

"Very ugh," Dolph agreed. "But

a real find, all the same. I'll bet there's a lot of meat in those claws and probably along the sides and back too — it's need lots of muscles to run all those legs and make the tail strike as hard as it does." The toe of his shoe carried a respectable slash to testify to the force with which the animal could drive its stinger. He suspected that the sting was venomous, too, but had absolutely no plans to test the theory.

"Dolph Haertel, if you're suggesting that we eat that thing, I'll just leave you flat. Starving to death would be a lot better than — ugh!"

"I'll bet you've eaten lots of things like it."

"I have not," she said indignantly.

"I seem to remember that you love crabmeat — especially from those huge Alaskan king crabs."

"Well — all right, yes, I do. But I don't have to think about the crab while I eat it. Any more than I have to think about a pig when I'm eating bacon. This thing is different."

"Nanette, put your hand on your heart and swear to me solemnly that you have never, never eaten a broiled lobster straight out of the shell. Now look at our friend here. He could almost *be* a lobster if it weren't for the extra legs. Isn't it true?"

Nanette looked stubborn. "I see what you mean," she said, "I agree that there's a likeness, I agree that the first time I ever saw a lobster I was horrified — I'll admit anything you like. But I will not eat that monster."

"Well, I won't insist," Dolph said with a sight. "But I mean to try it. One thing that's been worrying me is that our diet is awfully short on protein. This looks like a good source of it, if it's edible at all. And I want to build up a lot of strength for summer. I've got a really major product I have to try — not just simply surviving, but actually trying to make things better."

"What is it?"

"I want to climb up to the rim of the oasis."

"What on — on Mars for?" she said, aghast. "Why Dolph, that's miles up — and no breathable air at the bottom, let alone at the top! It'd be like trying to climb Everest in your underwear!"

"Not quite as bad as all that. Remember, I weigh much less here than I did at home, but I've still got the same muscles I had then — though I'll have to be in better shape than I am now."

"But *why?*"

"I want to set up some sort of simple radio jammer up there," Dolph said earnestly. "Not to send any message, but something that might scramble or fuzz up that beacon we've been listening to. And loud enough so that the Martians — if that's what we're dealing with here — can pinpoint where it's coming from."

"Great. We louse up their beacon, make them mad and give them our names and our zip code numbers. Then they eat us, and our troubles are over!"

"It could happen that way. But I'm hoping they'll be more curious

than angry. Remember, we don't know a thing about them; we're not even sure they exist. But if they do, I want to attract their attention. I think we have to.

"In fact, I'm sure we have to. Nanette, we've been doing better at getting along on Mars than anybody could have expected. We've got good reason to be proud of ourselves. But it just isn't good enough. One more bout of sickness — or some other accident, something we can't even guess might happen now — and we'd be done for.

"Somewhere up there, there just may be intelligent creatures who could help us, if we asked them to. And I'm going to, Nanette. We need help."

XI

HIGH GROUND

Designing the jammer took considerable thought. It had to be simple (as did all their improvisations), portable and capable of putting out a lot of noise over a relatively long time. For power, Dolph decided, nothing would be a more suitable source than the wind. It would be erratic, true, but less so than an Earthly wind, and it would last longer than his device, which was more than could be said for any accumulator he might devise with the material at hand.

He had no hope, of course, of matching the complexities of the Martian signal itself, but any spark that would produce a tearing burst of white noise across most of that band should prove quite annoying enough for his purposes — if anyone was listening at all, the sole hope behind the whole project.

This time, furthermore, it could not be fragile — not only because he would not be around to service it if it broke down, or replace it if it gave up, but because he had to climb the crater with it. During the course of that climb he could at best expect to knock it several times against one outcropping or another. At worst he might drop it — but nothing he could build could be safe against that kind of fall, despite the weak Martain gravity. His building materials were too closely limited to such stuff as coins, glass and old string, whereas rock was rock, even on Mars.

The final product looked as gimcrack as all of his other constructions, but it was, bluntly, the best he and Nanette had been able to do. He thought it would serve. Essentially it was an anemometer which whirled one set of unevenly wound coils inside another, passed on the resulting power to a set of small sparking brushes which spun on the same shaft, and fed the signal to an antenna which was one end of a mile-long spool of wire, the other end of which Dolph planned to throw over the cliff once he was at the top. The pole-pieces for the coils had been made by the brute-force method of pounding chunks of soft iron until they were magnetized enough to pick up nails.

This Rube Goldberg device packed into a frame about the size of a cigar box and weighed less

than a pound. On test, even in the moderate winds of that oasis, it produced in the earphones a weak but strident whistle which varied in pitch with the wind velocity. Nanette found the noise almost as unnerving as the beacon whose operators it was supposed to annoy, and heard together they produced a wailing the like of which had probably been heard before only by Dante. When they crossed they produced most satisfying bursts of white noise, unpredictably but frequently.

"I'd hate to have to try to screen that out, even with a lot of equipment on tap," Dolph said. "It's so wobbly that the only sure way I can think of to deal with it is to pour on more power and drown it out — and if the integrity of their signal is important to them, those white spots will still annoy them over long distances."

"It seems like such a small nuisance," Nanette said. "Like a mosquito. It's hard to believe they'll notice it."

"The mosquito knocked out the Roman Empire," Dolph said, "and if Gibbon had known that, think what a lot of writing it would have saved him! I hope we don't do anything *that* drastic. Anyhow, the thing works. Now all we have to do is get it up to where they can hear it buzzing."

"That's what scares *me*. Oh Dolph, take care of yourself!"

"The very best," Dolph said gently. "You too. Starting now, with early-to-bed. You still need more rest than you've been getting, and I'm all packed and ready — I want to go as soon as the morning winds slack off."

"All right," she said. For some reason, she seemed very dispirited, though she was trying hard not to show it.

In the morning, however, just before he donned his mask to leave the house, she stunned him by kissing him good-bye. Up to know they had been very careful about even the tiniest of touches, much though they both often had needed them. Dolph could only touch her shoulder briefly, jam the mask into place and blunder out — otherwise he would never have been able to leave at all. He thought it could only make everything from now on much harder.

But in fact, he barely noticed the first five-hundred-odd feet of the climb to the crater's rim.

Five hundred feet, however, is only about a tenth of a mile, and a mile was only half the distance Dolph had to climb to reach the dreary tableland of the Martian desert. Two miles measured straight up; the amount of ground he would have to cover to get there might well add more than another.

Nevertheless, it had to be climbed; and it was climbed.

Except to experts in the sport, accounts of mountain climbs suffer from a certain sameness, devolving from the fact that one mountain is really much like another. It is this situation which drives novelists into enriching fictional climbs with Abominable Snowmen, mantichores, love triangles and other monsters

either irrelevant or mythological. Dolph encountered none of these, but his ascent was no duller or less desperate to him on that account; and besides, it was in many ways unique.

Having to travel masked all the way was a grave disadvantage, but there were other aspects of the terrain which, he was surprised to find, worked to his advantage. One of these was that it was not in fact a mountain that he was climbing, but a hole blasted into once-level ground by a random astronomical missile. Hence he was not faced with sheer, plunging walls of hard granite, but with the rougher, softer limonite, which offered a surer footing and many more handholds. Like the lunar ringwalls, the slope of the crater was relatively gentle. Like them, too, it was terraced, offering natural levels at which to stop for rest and food — indeed, most of the terraces were quite broad enough to sleep on without worrying about rolling over an edge; keeping himself from becoming frozen solid overnight, which he had expected to be, the most serious of his problems, solved itself when he discovered that if he lay down just before dusk, he quickly ,became the core of a sand dune inside which the only difficulty was in breathing. Fortunately he he did not need to breathe much. And unlike the lunar terraces, these were weathered, so that their ledges were rounded, and cloven by many irregular fissures worn by trickling sand.

Also unlke the lunar terraces were the banks of rubble which connected these to each other: formations called talus-slopes produced by the splitting of water-bearing rocks by alternate melting and freezing — a process called, poetically, exfoliation, because on Earth it happened in the autumn not long after the trees shed their leaves. There was not much water on Mars, but the melting and refreezing required for exfoliation happened every day, not just a few times a year. These long slides or jambles were a mixed blessing, for although they offered easier grades than the rock slides of the terraces themselves, they were also slippery. After being nearly buried by one after a flailing tumble back to its base, Dolph tackled them only with ant-like caution and climbed fissures or chimneys instead whereever possible.

Geology — or areology, if that was what he had to call it here — had another such trap in store for him. Limonite is not as crumbly as sandstone, but it is not very cohesive, either. He found this out the hard way as he was heaving himself up over the rim of a terrace, when an outcropping moved under his hand and turned into an independent boulder the size of a barrel. Feeling it move under his grip was a sickening sensation, but a frantic lunge and scramble brought him safely over the edge.

Safety? After a moment he was not so sure. Pausing to recover his breath and his nerve, he watched the boulder fall and was immediately afraid that the danger had only transformed itself into another guise.

The big rock fell slowly, but the weakness of Martian gravity had not changed its mass any. When it next struck the side of the crater, it bounced high, and two companions were tumbling in its wake. Though the slowness of the process was almost dreamlike, it did not seem to take very long for it to churn its way into a sizeable avalanche — and below it, seeming directly in its path, was the shack, looking from this height as small and fragile as two kitchen match-boxes.

Gradually, however, the terraces intercepted more and more of the sliding masses of rocks. When the dust finally settled and he could again see the floor of the oasis, the match-boxes were still there, with no motion visible anywhere near them. It was more than possible that Nanette had never even been aware of the danger, unless she had happened to have been looking up after him during the past few minutes, for the slide had not been heavy enough to shake the ground and, in this thin air, had been virtually soundless.

In addition, he could see that his climb had taken him at an angle away from a direct line down to the shack, so that even had the avalanche struck the crater floor, it probably would have missed Nanette by several hundred feet. All the same, the near-disaster made him even more cautious of his hand-holds, and his route still more indirect; which had the effect of slowing him down still further.

And then, incredibly — for it now seemed to him that he would go on climbing forever, as he had always been climbing — he topped one more crumbling ridge, and the high desert stretched out before him, glowing and still in late afternoon sunlight.

Despite its stillness, it seemed to his dazzled eyes to be moving, in some subtle way he could not quite understand. There was no wind, and nowhere even a feather of cloud — only the dunes, long frozen ripples that told of motion past and movement still to come. But by some oddity of the light, the tilted steppes seemed to be burning, as gently and inexorably as though the very atoms of the ancient sands were decaying into cold light before his eyes. A tinge of brilliant, almost electric blue in the light made the usual rusty color of the sand seem almost brown, and the puddles of shadow so like ink-blots as to seem almost liquid, especially those made sharper and smaller by distance.

He looked up. Except near the sun, the sky was as usual dark enough to show quite a few stars; but even at its blackest, the blue tinge was there. The whole sky looked as though it had been made from a spill of "washable" ink which had paled a little around the sun and the stars — not a proper heaven at all, but a dome of stained crystal, pierced here and there to let in celestial fires which burned not very far beyond it.

Bemused, Dolph remembered at once a famous medieval woodcut of a man who, having reached the horizon of a flat world, had broken through the crystal of the sky where

it touched the ground and now stared in wonder beyond the sphere of stars at those prime movers — great wheels and other engines — which kept all the inner, Aristotelian spheres turning against their backdrop of eternally twinkling flames. Though he knew that even the artist had not seen the matter so simply — that, indeed, the woodcut had been intended only to symbolize what a philosopher might do only in his mind, but no man ever in his physical person — Dolph felt for a long moment as though the *primum mobile* might well lie and turn just beyond this close, utterly unEarthly horizon, which he had only to cross the desert to touch . . .

And even to hope to touch it would be death. This was the high desert of Mars, a terrible vision of dry and eternal winter, in mid-spring as always. No man would ever cross it except as part of a fully equipped expedition — or, by himself, in a carefully designed vehicle supported (and, when necessary, succored) by the entire resources of an elaborate, Mars-based, Earth-supplied technology. For Dolph, that tempting glass horizon was as unattainable as Earth itself.

Thus brought back with a thump to the realities, he set about unpacking his device. But he could not help wondering about the light. Evidentally this was one of those rare days of "blue clearing," when the atmosphere of Mars, usually as opaque to blue light as all atmospheres are, had suddenly become transparent to the shorter wavelengths of the visible spectrum. The

effect had often been noticed — even photographed — on Earth.

All very well, except that as an explanation, it didn't explain. Here on the spot, he could no more guess what caused "blue clearing" than could Earth's astronomers. But the effect was certainly striking; in fact, it was downright eerie, like a landscape remembered from a nightmare.

The jammer seemed to have suffered no damage during the climb. Finding a shelter for the machine which would protect it from the sand — without at the same time shielding off a part of its output by the iron-rich rock — was out of the question, and in any case would have defeated the whole purpose of his climb. The anemometer cups had to be out in the open, preferably as high up as possible. He settled eventually upon a sharp rise with a flat, mesalike top, on which he anchored the device with heavy rocks — not nearly as heavy for their size as he could have wished — upon its base flanges. The cups were already rotating in the rising breeze of evening, and an earphone check showed that the complex signal was being generated as strongly as before.

The last move was to throw the aerial reel over the lip of the crater. Since the floor was already a well of night, he lost track of the spool quickly and so could not tell whether it had unreeled all the way, or had become arrested on some terrace.

Well, that could be checked easily during the climb down, simply by following the aerial wire as a route-marker. But that was for tomorrow morning. Dolph made camp and, for the rest of the evening, watched the Earth set after the Sun behind the glass horizon, until it grew too cold for him to stay outside his pup-tent any longer.

The return was in many respects harder than the climb up — in part because he had now to be looking down much of the way, and in part because the route laid out for him by the aerial wire had been chosen by gravity without regard for such human conveniences as handholds. Experience, however, steered him around the worst traps and troubles, so that in the long run he managed to make the journey a little faster than he had made the ascent.

But when he got back to the shack, he found Nanette ill again.

Not seriously, no. Much of it, obviously, was simply the product of loneliness and suppressed fear, and within hours of his return she was almost her old self again.

Nevertheless, it was clear that he could never again dare to leave the oasis by himself . . . nor did his memory of the high ground give him any reason to think that they could dream of crossing it, even together. For better or for worse, this was where the line ended.

XII

"THEY ARE NOT DEAD!"

In the Arctic lands of Earth, spring is so bitter and summer so short that the ground only a few feet below the surface never thaws. This

iron-hard layer is called the permafrost; and it was something much like this relentless stratum that the Haertels and the Fords had long since struck in their attempts to rescue their children.

The trouble lay partly, of course, in the distances involved — and not only in their sheer size, but in the way they fluctuated, which in turn affected the time lapses between years when a flight to Mars looked even slightly feasible at all. In an era when spaceflight of a sort had been a fact for more than two decades, the Moon at a quarter of a million miles away seemed to be nearly in Earth's back yard to people who thought about the matter at all, though nobody had set foot on it yet; but Mars — though there were plans, on paper, to go there — still seemed quite a different matter. The 48-million-mile gap between the two planets still looked vast to begin with, and on closer examination it also turned out to be a fiction — it was only a mean distance, not a real one, and the actual abyss a spaceship would have to span on such a journey was never going to be less than eight times as far — at least not as long as "spaceships" meant "rockets" — since the destination like the home port, is always in motion and must be chased.

Nevertheless, those paper plans to go there did exist, and several unmanned vehicles, beginning with Mariner 4 in 1965, had paid the little planet visits of sorts. The real barrier was the permafrost that lies beneath the surface of all large governments, no matter what name they go by: layer after frozen layer of official indifference to any project not close to home in some way, and not likely to pay off — in votes, in prestige or simply in color — during the effective lifetime of the office-holder who might be in a position to do something about it. There was no deliberate cruelty behind that indifference, only a kind of practicality which was worse than cruelty in its confessed and deliberate short-sightedness.

Four bereft taxpayers in Iowa were in no position to thaw such a glacier. Not that the families' long and determined campaign had made no impression whatsoever. The case of the Children in the Sky, though it had been out of the news for more than a year and was considered closed, had left a lasting memory trace. Indeed, one widely syndicated columnist had even observed its anniversary by demanding to know what the government was doing — though he knew the answer well enough and was asking only because embarrassing the administration was his stock in trade.

And the campaign had left them with at least one official friend: Garth Marshall, the research director of A. O. LeFebre et Cie., a huge industrial complex which subcontracted rocket stages, solid propellants and many more highly secret objects to NASA and the Department of Defense. The fact that a LeFebre subsidiary was building about half the hardware for Project Ares was probably irrevelant. The additional fact that Dr. Mar-

shall had once been a suitor of Mrs. Haertel's may have had more bearing on his support. Whatever the reason, that support was wholehearted, and neither the Haertels nor the Fords were in any state of mind to question its motives.

But Dr. Marshall had thus far been unable to budge NASA a centimeter.

"It's the same old story," he told a family conference — the latest of dozens, all equally fruitless and becoming steadily gloomier. "We haven't been able to do anything on the Ares components thus far (I'm not supposed to be telling you this, of course) but make refinements here and there. Strictly frills and furbelows. They may add some reliability to the mission eventually, but they don't do a thing toward getting it off the ground."

"It's still the question of timing, then," Mr. Ford said. The Haertels had met him only once before the disaster; he had struck them then as an amiable non-entity. Since then, he had somehow simultaneously become both grayer and more forceful.

"Yes, I'm afraid so," Garth Marshall said grimly. "With the timetable for the Apollo program in the same old shambles, NASA is having enough trouble getting continuing funds for a Moon landing. Even just plain talk about any manned expedition to Mars now comes back labeled 'premature.' And the Soviets won't budge without our cooperation — naturally enough, since they'll be asked to provide all of the orbital-assembly phase, which is where the really heavy stuff is called for. They don't want to spend the money if all we've got for them to boost is one glider and a flock of empty nose-cones."

"Premature!" Mr. Haertel said. It might just as well have been a swear-word.

"But what's that got to do with anything?" Mrs. Ford said. "I don't want to go to the Moon, Doctor Marshall. I don't see why anybody would want to go there. We only want to get Nanette back, and Dolph. Why can't they help us?"

Mrs. Haertel, who had followed Dr. Marshall's account all too well, put out her hand to the other woman, who grasped it blindly. There was a painful silence.

"They don't care about the children," Mrs. Haertel said. "It's not their fault that they don't. They're not their children."

"No," Dr. Marshall agreed. "And besides . . . well, if NASA ever believed that the kids were on Mars — which I'm not entirely sure they did — they don't feel any pressure to rescue them now. They think that Dolph and Nanette are dead. I've tried hard to sell Ares as a rescue mission, and I've failed utterly. It's just too late for that."

"But they aren't!" Mrs. Haertel cried. "Garth — they got to Mars before anyone else. Doesn't that count for something? Isn't it stupid to think that they could do that, and yet not be able to take care of themselves when they got there?"

"It might have been a fluke," Dr. Marshall said, very gently. "Dolph's

basic discovery certainly must have been a major accident. I've got a man in my lab who's worked out a really colossal infringement of relativity, derived just from the bare knowledge that Dolph had some kind of anti-gravity, and nothing more — not from any knowledge of what Dolph actually did, because nobody has that. It might well give us a breakthrough to some kind of ion drive, something that might shorten a crossing to Mars by nearly three months. But I'm sure it isn't more than remotely related to Dolph's work. Everybody in the world is stuck for the most elementary explanation of that. And . . . we know that Dolph took off for Mars too soon, before he'd properly stopped to think about what a dreadful desert the planet is. Nanette left even more precipitiously; she may never have reached Mars at all. They've already worked one miracle. Two is a lot to hope for — more than I can sell, anyhow. We have to face up to that."

"Do *you* think that?" Mr. Ford said.

"I . . . " Dr. Marshall fell silent and put two fingers to his brow, as though something ached above his eyes. At last he said:

"I've studied Mars for many years. My company's spent millions of dollars trying to work out ways for human beings to live there — skilled adults, backed up by lots of highly specialized equipment. How two teen-agers could last one day on that planet, I do not know. I simply do not know."

"But you'll go on helping us, Garth, won't you?" Mrs. Haertel said steadily.

"Yes, Doris, of course I will. I'm just forced not to be very hopeful, that's all."

Mrs. Ford burst into tears, but almost they seemed to be tears of relief. Dolph's stepfather stood up. He looked unexpectedly tall.

"There's got to be some way," he said. "Garth, I don't care what any of the other problems are. There's bound to be a way around them, if we stick them out. But as far as the children are concerned, of one thing I'm absolutely sure: *They are not dead.*"

Dr. Marshall stood up also. "I'll go now," he said. "And I'll keep trying. If I can sell somebody our ion drive . . . well, that remains to be seen. LeFebre can be as hard to move as NASA — one of the penalties of size. But in the meantime — no, dammit, I quite agree with you. They are not dead. I know it. They can't be, that's all."

His face stormy, he stomped out. The meeting was over. It was still as gloomy as all its predecessors had been; but it was not yet despairing. Not yet. Not quite.

Once back in his office, Dr. Marshall locked the door, interdicted all incoming calls and carefully constructed a bombshell. Probably, he thought, it would do nothing but destroy his job, his security clearance and his career, but he considered that the time was now past for half measures. The bombshell might also, of course, turn out to be a dud. On the whole, he

was sure he would prefer almost any sort of explosion, now.

It looked like this:

CONSOLIDATED WARFARE SERVICE
Division
A. O. LeFebre et Cie.
Geneva Berlin Brasilia London
Paris Rome Tel Aviv
Office of the Director
Department of Space Sciences
Bethesda, Md.

To: Research Personnel
Re: Booster Program — Prime Mover Section

Your attention is called to the relativity discontinuity recently discovered by Dr. Lloyd McCann of our staff (v. *Nature*, whole no. 5463; LeFebre Tech. Publ. 1094; unpublished memo, ARES D-968).

Briefly and non-mathematically, this discontinuity (which we are calling the McCann Effect for short, over Dr. McCann's objections) implies that gravity is a function of the weaker and still unnamed 'fourth force', and as such can vary independently of Lorenz-Fitzgerald mass variation. The pertinent field equations also suggest that gravity has polarity under certain conditions, none of which appear to be duplicatable experimentally.

While the Effect has large implications in cosmology and other theoretical fields, immediate interest attaches to its possibilities as an adjunct to rocket vehicle design.

Suggestions are invited as to ways of applying the Effect to the reaction mass, jet flow or (possibly) payload of a space vessel, either chemical or ionic. As there appears to be no present active NASA interest in Project Ares or other trans-lunar operations, the Geneva office will perhaps wish to explore the possibility of technical consultation with British, French, Israeli and Soviet contacts. Needless to say, such explorations should be kept on a strictly scientific basis.

Please post.

GARTH MARSHALL

And that, perhaps, was that: either the beginning of a marvel — or the end of two lives, and possibly three. Time, as usual, would have to tell.

The dark cold sleep of permafrost was also on Dolph's mind, though in a considerably more direct sense. Frustrated even in his hopes of quitting the crater for high ground, he had turned defiantly in the opposite direction: straight down.

He was hoping, in fact, to dig himself and Nanette a water mine.

He was from the beginning almost sure that such a project was feasible, the only important qualification being how deeply he would have to dig before the sands defeated his efforts to hold them back. There was, after all, much more water on Mars than the most optimistic scientific estimates had hazarded — not only enough to cover thousands of square miles of one Martian pole with hoarfrost (or perhaps even snow), but also enough to account for all the water in the bladders of the tumble-lichens; an attempt to calculate how much that added up to gave him a figure which was incredibly in the millions of gallons.

Obviously the source of so much water could not be on the planet's

surface. For one thing, sun highlights would flash off it, which would have been visible from Earth, whereas in a solid century of observation since Schiaparelli nobody had even seen one. For another, any open body of ice in this thin air would sublime — that is, pass directly from the solid state into water vapor, without intermediate melting. Most of it would remain permanently as finely divided ice crystals in the uppermost reaches of the atmosphere, and the rest would join the hoarfrost at one pole or the other in winter.

The conclusion was inescapable: There had to be ice underground, in considerable quantity — perhaps not just a layer of permafrost, but a whole geological stratum, a sort of "aquasphere" hundreds of feet thick.

They found it within a week of digging. It was not much more than fifteen feet beneath the shifting surface of the crater — which now could be called an oasis in all accuracy, for obviously the aquasphere would be totally inaccessible from the high desert without the most elaborate of drilling rigs.

They shored, shielded and roofed the short shaft with the few boards left over from the leanto project, filling in the gaps with homemade paperboard. The result was reasonably strong where it had to be and kept out enough wind-blown sand to keep the hole from filling, although its bottom had to be shoveled regularly. They alternated at that task and at the daily chore of cutting and fetching ice-blocks. The near water supply took a great deal of wear off the wine-press, which now needed to be used only for the extraction of the all-important elixir.

They found, too, that the well unexpectedly simplified the job of hunting the scorpion-like creatures (which tasted absolutely nothing like lobster, but were not unpleasant to eat, and were inarguably nutritious); the scuttling beasts took advantage of the exposed ice layer for their own watering, and there were always two or three of them half buried in the sand-cover atop it in the early morning.

But the well proved abruptly to have another attraction that was a good deal less welcome.

Nanette discovered it and returned one morning without the ice-cake she had gone for and with her eyes wide behind her mask. She did not need to say a word; she simply beckoned, and that and her expression were enough. His slowed heart thudding, Dolph followed her out.

The crude trap that they had built for the ugly arthropods was broken and empty. Around it in the sheltered sand were half a dozen broad, regular markings about the size of a pie-tin. Most of them were blurred, but one was quite clear and sharp.

It was the print of a heavy, five-toed paw.

CONCLUDED NEXT MONTH

HE LOOKED BACK

by CARL JACOBI

Mr. Smith made the mistake of Lot's wife — and suffered the same punishment for his act!

First of all, Elsie, I want to thank you for getting me this job. When I first met you in Porto Vargas I don't mind telling you now I was down to my last twenty. Oh, my tour was paid for and the boat had made its last stop before returning to New York. But I had been careless buying souvenirs and things and . . . well, a girl can't go around without money in her purse.

I like it here. San Carlo is a beautiful little country, even if it is run by a dictator. And Rodosa is a pretty town, although I would like it better if it were nearer the coast instead of way up here in the mountains. But then the weather wouldn't be so nice, and one can't have everything, I suppose.

Just as you said, I'm living in the hotel—Antenida, they call it—and I really have two jobs in one. I operate the desk switchboard (lucky I told you I had phone experience and fortunate too I brushed up on my Spanish last winter) and I serve as public stenographer occasionally in my spare time.

Right now there aren't many guests here as it's sort of between seasons, but in a month or so President Solera will stop in on his regular hunting vacation and then, I'm told, the place will really be jumping.

We do have one VIP. His name is Captain Juan La Cola, and he drove up in a gorgeous sport model Cithedra-Ole that was about a mile long, bumper to bumper. He is a tall man, swarthy, with a beard no amount of shaving can completely remove, and he wears high boots and a belted tunic with the mark of the Confiden-

tial Police on the collar. I was standing next to the room clerk when he signed the register and I couldn't help seeing his signature. And would you believe it, the National Identity Number he wrote after his name was 137.

Imagine me being in the same hotel with a one-thirty-seven. The closest I've ever come to important people is a twelve thousand, a supreme court judge, seventy years old. Of course that was a Norte American NIN, but even so.

Well, this Juan La Gola asked if I'd take a letter for him, and I did, and then he said I should come up and see him in an hour or so when he got settled, for more typing. Meanwhile he was expecting a package and wanted it delivered to his room as soon as it arrived.

Did he say package? It was a wooden crate, five feet square, and so heavy it had to go up the freight elevator. It had a lot of foreign seals plastered to its sides, but I couldn't read any of them.

After an hour I went up to the fifth floor and rang his bell. No one answered, but the door was partially open, so I went in. The crate had been opened, the boards stacked in a corner. In the center of the room on the table was a brand new dream machine.

It wasn't like any dreamer I'd ever seen, and I've seen a lot of them. It had three instrument panels instead of one, and mounted on the center one was a thing that looked like an enlarged hour glass with black powder running from one chamber to the other. It had a shiny disc, tipped sideways between two olendrons that slowly changed colors, from red to blue to yellow and back to red again. There was a sound chamber too somewhere, and out of it came a *clickety clack* like a faraway train.

Sprawled on the bed at the far side of the room lay Captain La Gola, fully dressed even to his boots. He was asleep. A single wire trailed across the floor from the dreamer and divided into plugs in his ears.

I made a noise but he went right on sleeping. I stood there uncertainly, then moved across to a chair. I knew it disturbed some persons, to be wakened suddenly while under the effects of a dreamer, and I thought I'd wait a few moments and then, if he didn't awake, leave and come back later.

Now fleeting images took form in sepia on the titled disc, to be followed by a series of postcard-like views of places I had never seen before. But all was in caricature with exaggerated detail and blurred background. After a while it came to me. The scenes must be the visual reproduction of the Captain's dream while he slept. Never had I seen a dreamer with a sight attachment!

The whirlagig changes continued, then held on what seemed to be the interior of a train. At the same time the *clickety clack* from the sound chamber grew louder. A group of officers in the uniform of Solera's DEP Guards swam into view as they sat about a table in a train coach. Briefly the features of one officer after another appeared in close-up on the disc.

Then the scream of a train whistle sounded. It was repeated again and again. Wheels screeched, steel ground against steel as the brakes were applied. An instant later there was a muffled crash, the sound of breaking glass and agonized cries. The last scene on the disc became immobile.

Across the room Captain La Gola sat up on the bed, blinking his eyes. There was a little smile of satisfaction on his lips as he removed the wire-connected plugs from his ears. Seeing me, he nodded and got to his feet, buttoning his tunic.

"You said something about more letters . . ." I said.

"Yes . . ." He strode across the room, looked out the window. "Yes . . ." Then he began to dictate: "Don Carlos Proportoy Riaz, Casa Republica, Ventriago. Senor: The Government will require a thousand head of prime beef cattle by the first of the month. You will see that shipment is made to Porto Vargas without delay. Failure to meet these demands will result in your wife's and daughter's immediate transportation to the retention camp at Los Tobellos."

"And the signature . . ?" I said as he finished talking.

He smiled again. "Juan La Gola, 132."

"Yes, Elsie, he said one-thirty-two."

Talk has died down now, and I guess we all can breathe a little easier. But while it lasted the confusion over the wreck of the Sonora Express had the hotel in an uproar. The death of five of its most important officers, to say nothing of the many lesser fry, was hard for the Government to take. Confidential Police were all over the place, asking questions, checking alibis, which was to be expected, I suppose, since the wreck occurred only 48 kilometers—30 miles—from here.

They even questioned me, which was absurd, for what would I know about a train wreck; unless I told them about what I had seen on the dreamer in Captain La Gola's room. But that was three days *before* the wreck; and besides a dream is only a dream. If Captain La Gola wants to report the matter, I figure he can do it himself.

I had to do an extra stint on the switchboard last night. Consuela, the night girl, went home ill. Before she left she said, "If Captain La Gola should make any middle-distance calls, put him through to operator 5 on C circuit."

I didn't know what she meant by middle-distance calls, and C circuit is an unconnected part of the switchboard with no outside lines at all.

But a moment after she had gone, I examined the board and I saw that C circuit did have a new plug and a new outlet, and there was sawdust on the floor where installation workmen had left traces of their work. I thought it queer that Mr. Alverez, the manager, had not informed me of changes in the board, but Mr. Alverez is always so busy I decided he must have forgotten about it.

Just at midnight Captain La Gola's line lit up, and I plugged him in.

"Consuela?"

"No," I said. "This is Jennie. Consuela is sick."

There was a moment of silence. "Look, Jennie, as a representative of the government I found it necessary to have certain additions made to your switchboard. Can I rely on you to say nothing about it to anybody?"

"Of course," I said. I was still disturbed by that letter he had dictated in his room; but the more I thought about it, the more it seemed a routine harmless official threat. Of course I really know nothing about governmental procedures of this kind.

"Good," Captain La Gola said. "Now put me through on the new circuit."

I called Operator 5, as Consuela had told me, and she answered; and then a lot of queer things began to happen.

"Operator 5, this is Antenida 756-28. Have you an open line?"

"Go ahead, please."

I switched in the captain. "Okay, Sir."

Immediately a Donald Duck chatter began, which meant the captain had switched in a scrambler at his end. The voice of Operator 5 came on again.

"I am taking your call, Antenida 756-28. Interspace distance, please relay."

An amplifying hum sounded, followed by a burst of static. Then a far-off voice spoke,

"This is Cliedes 4. We are relaying."

Another burst of static. "Rentarion-south. We are relaying. To Janison Sphere. We have a polerated call for you from Antenida 756-28."

"This is Janison Sphere. Go ahead."

The Donald Duck began to chatter again, and a scrambler now came in at the other end. I sat there, listening to the meaningless high cycle. But presently it ended, and the light above Captain La Gola's plug winked off.

Well, I asked myself, what was that all about? I was still thinking about it when I went off duty.

After that I began to do more and more work for the captain. One day he dictated twelve letters. I didn't like the tone of those letters and I didn't like him. He was all spit and polish. He wore a plaited holster at his waist, and in it was one of those new logmetic revolvers. He knew how to use the weapon too. I was on the veranda one morning when he took up a position at the far end and calmly drew and fired at one of the hanging medallions that ornament the sun blinds. There was no sound, only an almost imperceptible tracer of lavender, and the medallion flew into a hundred pieces.

"Progress," he said to me with a little smile. "Even in San Carlo the science of defense has come a long way."

Well, you know me, Elsie. Curiosity may have killed the cat, but it's always been a part of my makeup. I got to thinking about Captain La Gola's dreamer and how he'd jumped his NIN number backward *before* the wreck of the Sonora Express and the death of those five of-

ficers, and I decided I wanted another look. So I waited until the captain had gone into town and then I took the key and let myself into his room. The first thing I looked at was the drawer of his desk and there I hit the jackpot right away. There was a book in that drawer, a military manual, and between its pages was a folded-up typewritten list and that list contained the names of men prominent in San Carlo governmental and military affairs—I had read a lot of them in the newspaper from time to time—and after each name there was a number through 136 and a line had been drawn through the last names. Other names were marked, some with a check, some with a star, some with a question mark.

I put the list back in the book and the book back in the drawer and turned to the dreamer which still stood on the table in the center of the room. The dials on one of the panels looked about the same as those on my little second-hand machine back in Iowa, but the calibrations were not in English or Spanish or in any language I knew. The disc in which I had seen—the visual reproduction of Captain La Gola's dream still showed that last frozen scene of the train interior from that dream.

I turned to the stacked pile of boards from the dismantled packing case which still stood along one wall of the room. Stenciled on one of the boards was apparently a return address:

Janison Production Assembly
Janison Sphere—Terberon Galaxy
Teleport Station Number 5

At that moment I heard steps in the outer corridor. I knew if I were caught I'd have plenty of trouble explaining my presence. I eased open the connecting door to the adjoining room, slipped in and waited until I heard the adjacent hall door open. Then I went out into the corridor and made my way back to the lift. I hadn't been seen, but I had seen things that disturbed me.

That night Captain La Gola again asked to be connected to the new circuit and again the call went through with surprising speed and facility. He had his scrambler on but I couldn't see that he needed it, so loud was the static amplification drone. The call was over almost before it began, and the only thing I could understand was a voice that came on just before ring-off. It was a cold brittle voice, and it said, "It is decided then. The twelfth, according to your calendar."

Naturally, Elsie, I didn't say anything about those calls, but when Mr. Alverez, the manager, came into the office, I spoke to him about the switchboard. He seemed nervous and anxious to avoid the subject. He said,

"Yes, I know. Just keep on with your work as before. And if you want to, you can take the morning off tomorrow and go to the fiesta in San Medro. The bus leaves at nine a. m."

Which I thought was pretty nice of him, especially since I've been here only two months. On the bus I thought for a moment I saw Captain La Gola sitting alone just in

back of the driver. But it must have been someone else for this man was in mufti and he neither looked around or spoke to anyone during the entire trip.

San Medro is a delightful town with a lovely old church at one end of the single crooked street and the market place at the other. The fiesta, or rather fair, was charming. I bought a *tecinta* neck scarf and one of those spangled *oncero* hats, and I drank so much chocolate I thought I would get sick.

There's an observatory at San Medro, and according to the postcards in the shops it has a scope with a mirror twenty feet in diameter. I thought it would be interesting to see even in daytime when observation was of course impossible. So I walked up the long cedar-lined trail and climbed about twenty flights of steps, but I might as well stayed at the fair. The front of the observatory and the walk that encircled it bristled with soldiers, all armed to the teeth, and every few yards machine guns had been set up, covering the road below. There was absolutely no admittance. In back of the observatory a kind of shelf had been hacked out of the hillside and a big wooden wall had been erected as if to hide something from the people of the town.

There was a large door in the side of this wall, and it opened while I stood there arguing with the guards. I had only a fleeting glimpse of what was inside but I did see a massive steel framework with criss-cross braces. The area around the block house—I took it for a black house—swarmed with federal troops. And when I went back to the bus stop more soldiers had set up large camp tables and were questioning all civilians who were made to queue up and file by them.

"Somebody declare war?" I said to one of the uniformed men. He didn't smile and I didn't realize at the time how near the truth I was.

The bus ride back to Rodosa was restful, and after my climb to the observatory I was content to sit in the sloping seat and doze, occasionally opening my eyes to watch the rocky scenery slide by. We were five miles out of San Medro when the explosion sounded behind us, a muffled thump as if a great container of water had fallen from a height. An instant later the shock wave hit! a window in the bus shattered, and the road in front seemed to stagger momentarily.

But I really didn't know what had happened for two days. It took that long for the garbled story to straighten itself out and by that time the significance of it had tapered off somewhat. It was still mighty big news. A Coronado interception missile had blown up in its cradle just outside San Medro. More than thirty officers and men had been killed. Rodoso was in an uproar. Concern of the people was not only over the explosion but for the reason behind the presence of the missile. Why had it been brought there to this little town far up in the mountains? Was the exploding of it an act of sabotage? If so, what persons were responsible?

The confusion lasted a week.

Gradually things began to return to normalcy. Rumors passed on, and the wild talk subsided.

And then like an anti-climax President Solera marched in with his entourage and took over the entire twelfth floor. The switchboard lit up like a Christmas tree as the occupants of the rooms made outside calls or demanded room-service.

To make matters worse, Consuela was taken sick again, and I had to do four hours of the night trick. At a quarter to twelve the outside line on the new C circuit suddenly lit. I plugged in.

"Antenida 756-28."

"I have a call for Captain Juan La Gola."

"Just a minute, please."

The captain did not answer; and then I caught sight of him, striding across the lobby. He took the call at one of the house phones, and after he had talked for a moment he seemed to become greatly excited. When he hung up he stood there for several minutes, drumming his fingers on the counter.

Then he came up to me. He became confidential in a way I knew he wouldn't dream of had he not been so disturbed.

"Jennie," he said, "how long have you lived in San Carlo?"

"A little more than two months," I replied.

"You came from the United States, yes?"

"From Iowa."

"And how do you like San Carlo? Specifically, how do you like El Presidente Solera?"

"Like him?" I said uncertainly. "I'm not sure I know what you mean."

"He's a dictator, Jennie. Do you like dictators?"

"Look," I said with some annoyance, "I just run the switchboard. Local politics are a little out of my field."

He nodded and lit a cigarette, expelling the smoke through his nostrils. "You wouldn't tolerate dictators in your country," he said. "Why should we here?"

I said nothing. He went on,

"When the machinery of a government becomes decrepit, it is time for a change. That change can bring wonderful results when it comes from far out and its operators are far more advanced than we, even if they are alien."

"What do you mean, alien?" I said.

He shrugged and smiled crypically.

"I'm expecting a . . . friend . . . a Mr. Smith. Will you tell the room clerk to see that he gets the finest accommodations possible?"

Next day the captain dictated two letters, and he signed them with the number 87.

If possible the man became more disagreeable. He strutted about the lobby, his boots polished, his tunic buttoned to the throat. He gave orders and he signed the endless flow of papers that were brought to him.

I couldn't help thinking about that three-panel dreamer in La Gola's room. Was it possible, I wondered, for such a machine to superinduce dreams of the future. And were those dreams merely prophetic or—

and I know this sounds foolish, Elsie—or did they *cause* those events visualized on the disc actually to happen?

These questions gnawed away at me, and finally I decided to have another look at the captain's room; but the door had been fitted with a new lock, and I couldn't open it. It was perhaps just as well for I had a feeling I was being watched. And next day when I was retrieving a pencil I had occasion to view the back underside of the switchboard. There was a small box, the size of a cigar box, mounted there. Opening the lid, I saw a small compact tape recorder.

It soon became apparent that President Solera and his party were not here for a hunting vacation. Oh, several of his aides went out with guns and came back with tropicora quail, but they were lesser-fry sycophants whose movements meant little. Every few hours some official arrived at the hotel and demanded to see El Presidente. First came the civilian VIPs, next the military men, bristling with gold braid and self importance; and finally more civilians—scientists, judging from their talk and far-away looks. Everything was hush-hush; little groups stood about the lobby, talking in low tones. The switchboard was alive with calls, but almost every conversation was made meaningless with a scrambler.

They even took over the hotel's patio. Four big telescopes were mounted on tripods there, and in one afternoon all the beautiful bouganvillea were trampled on. I went into town on my day off and found the same confusion in Rodosa. No one would answer questions. Ask, and you received the same answer: "Quien sabe, Senorita?"

There were rumors, of course, and these multiplied as peasants began to filter in, uncertain and bewildered. One family told of seeing "a great white shadow" skimming over the trees, hovering over the ground in the vicinity of Balerano, twenty miles north. An old man reported seeing a huge cigar-shaped thing high up from which smaller wingless objects emerged to descend with great rapidity.

About this time Mr. Smith, Captain La Gola's friend, arrived. He came in the hotel alone without luggage, and there was something odd about the way he walked across the lobby to the desk. He moved with a kind of jerkiness as if his leg muscles were stiff and not used to action. His clothes were ill-fitting, and I got the impression he disliked wearing them, although they were ordinary civilian clothes. His voice grating and parrot-like.

"My name is Smith," he said to the room clerk. "I believe a reservation has been made for me."

In compliance with Captain La Gola's wishes, he was assigned to the executive suite on the fifth floor.

Well, I'm not exactly a fool and I can put two and two together and make four. During the night trick I sat there before the silent switchboard with the big lobby deserted and quiet as a tomb, and the more I thought about all the things that had happened since I had come to San Carlo and Rodosa, the more I seemed to see a pattern take form

with Captain La Gola at one end and, curiously, Mr. Smith at the other.

I thought of the wreck of the Sonora Express and the destruction of the interception missile and the closing-off of the observatory at San Medro, all the preparations—troops and guns, and scopes in the patio—and the tape recorder on the switchboard, and I thought of President Solera and the wild stories told by the peasants who had come down from the north.

At one a. m. I was having my lonely coffee break when the whine of the descending lift broke the silence. The lift door opened and President Solera stepped out. I didn't know him at first. He wore dark glasses, and the collar of his coat was turned up hiding the lower part of his face.

He came straight up to the switchboard. "Is there a through bus to Porto Vargas tonight?"

I did a double take. El Presidente on a bus?

"There's one in half an hour," I said, "but it doesn't stop here at the hotel. You have to pick it up in Rodosa."

He stood there in hesitation. Then: "If anyone asks, you haven't seen me, understand." Before I could refuse, he had thrust a bill across the counter and was striding across the lobby to the door.

He had but gone out, when the second lift came down and Captain La Gola emerged. He lit a cigarette, strolled to the door and went out onto the veranda. In the mirror above the switchboard, my only unobstructed line of vision, I watched him move idly toward the steps, stop and lean against a post.

Beyond the veranda I could see the gaunt figure of President Solera as he strode across the brilliantly-lit plaissance.

For a full minute Captain La Gola continued to stand there, smoking. Then he moved sideways out of range of my mirror. An instant later a scream rose to my lips. A thin tracer of lavender had darted across the open space, straight toward President Solera. In midstride the man halted while a shudder ran through his frame. His head jerked back; his shoulders twisted; then he pitched forward like a string-cut puppet and lay still.

Well, you know well enough how the assassination threw all San Carlo in a state of shock. I suppose there is no need to describe to you the reactions here at the hotel. The hours that followed were hours I'd like to forget, a frenetic mixture of confusion, gloom and chaos. There were some the murder cast into the depths of despair. There were others who were openly elated at the removal of what they called an iron-bound dictatorship.

As for me, I was in a nerve-wracked dilemma, so shaken I could hardly operate the switchboard. For while I hadn't seen the source of that fatal shot, I was sure it had come from Captain La Gola. Yet what value would be placed on the testimony of a telephone girl whose only means of observation had been by way of a six-inch mirror. Still I had to tell someone.

I told Mr. Alverez. He said, "The Investigators Federale will be here tomorrow. I advise you to wait and speak to them."

Meanwhile neither Captain La Gola nor his friends were to be seen. Until evening. Then Mr. Smith came to the desk and informed the room clerk he was checking out. But before he left he dictated a letter:

> We thank you for your application for our investigation of your primary (Mokart Scale:246) culture in your secondary (Class: C-X-1) world. While we found many things which would indicate sociological and technological advancement, certain representative primordial characteristics make inclusion into the Galactic Federation inadvisable at this time: specifically the resort to military ordnance when governmental conversion was suspected to be imminent; and the ruthless homicide of an oligarch simply for the minority dislike of his political policies and the acquisition of his political status. We regret this decision but advise you herewith it is final.

That was the letter, Elsie, and when I had typed it, Mr. Smith affixed his signature and said he would like the letter delivered to Captain La Gola personally. So because it seemed important I took it up myself. The Captain's face when he opened the door was drawn, and fear seemed to have frozen his features. His clothing was rumpled, and his hair in disarray as if he had just awakened from a heavy sleep. He told me to come in in case there might be a reply.

As Captain La Gola finished reading the letter his face blanched. He lowered the paper slowly, then brought it up and read it again. "He can't do that!" he cried. "He can't . . . ." He turned and ran out the door toward the waiting lift.

And then my gaze was drawn farther in the room to the table on which the dreamer stood. There was a motionless scene on the dreamer's disc, the final scene apparently from Captain La Gola's recent sleep.

It was a scene like a three-dimensional photograph. In the foreground was the captain, running toward an indefinite figure that could be only Mr. Smith some hundred yards ahead. At that frozen moment of the visual dream Mr. Smith was in the act of entering a dark cigar-shaped shadow from whose upper midsection a violet flame was just beginning to blossom outward. There was terror in La Gola's face even as he realized he could not make Mr. Smith aware of his approach. Terror as he realized that in another split second he would be engulfed by those flames.

Well, I guess that's all, Elsie. I never saw either of them again. I did see a petrified block in a scorched glade a mile north of Rodosa, just off the Highway Nationale. The peasants of the district pointed out its vaguely human shape and compared it to a scriptural character — Lot's wife. END

The Junk Man Cometh

by ROBIN SCOTT

Illustrated by GAUGHAN

Interesting junk. Nobody knew what it was meant for — but a lot of people wanted to get it!

I

One day late in June of '86, I was sitting on the veranda of the family home in Ard County, West Virginia, trying to match the rapidly diminishing figures in my checkbook against the printing bills beginning to come in for the campaign posters I'd ordered.

It was getting pretty obvious that there just wasn't going to be enough money for even a half-way adequate senatorial campaign. I'd been out stumping around the state in earnest for the previous two weeks and I was tired. My conscience was troubling me too; I'd been neglecting my share of the work in the family junk business.

All this was on my mind when we got a call from a junk dealer over near Morgantown asking us to bid in on a load of Army surplus MHD

generators he'd just picked up and claimed he couldn't handle. His asking price sounded pretty good; I was tired of worrying about my own problems, and I told Pop I'd run over to have a look.

"Old Jacobs is a shady character," warned Pop. "Don't let him sell you no pig in no poke."

I agreed to be cautious, pocketed the company checkbook and drove the thirty miles to Morgantown in the pickup. The front rotor was acting up, and it took me the best part of half an hour on those country roads to make the trip.

But it was worth it, or at least I thought so at first. Jacobs had the goods. Two hundred cannisters with the factory seals on them, each painted olive-drab and stenciled with the model number and other nomenclature appropriate to the generators. I checked them against the catalogue listings, and at Jacobs' price I figured we could make a pretty neat profit on them. I wrote out a check for sixty of them and headed for home.

The next morning, my brother Buzzy decided that he needed a haircut and would take the carryall and two yard hands to pick up the cannisters at Jacobs' yard on the way back. Along about noon, Buzzy's wife Phyllis stuck her head out of the kitchen door to holler at me in my alfresco office on the veranda. Phyllis had reproduced herself twice and Buzzy three times, and what with the kids constantly getting lost in the junk yard, she has developed a pretty fine voice for such a little woman.

"PERCE," she bellowed from not more than ten feet away. "WHEN YOU LOOK FOR BUZZY TO GET BACK?"

"I don't know, Phyllis," I said. "But I expect he heard you inquire after him wherever he is."

She lowered her voice a couple of hundred watts. "He left here before eight and he should have been back by now. I've got to take these kids into Morgantown for their shots at one o'clock."

I looked at my watch and heaved myself to my feet. "Maybe one of the rotors on the carryall gave out on him. I'll take the pickup and see if I can find him."

I backed the pickup out of its shed, skirted a pile of tangled and rusty reinforcing rod and pulled out toward the road. Pop was coming back from the mailbox, and he hopped aboard to come along for the ride.

About three miles beyond Carson's Corners we found the carryall and Buzzy. He was still alive, and Pop got on the pickup telephone to the Morgantown State Highway Patrol — even while I was stripping off Buzzy's shirt to see what I could do for him. The Patrol ductor arrived in minutes, and Pop rode off with Buzzy to the hospital. I stuck around with the Highway Patrol and tried to make some sense of the scene.

The evidence was confusing. Both men with Buzzy were dead. Old Ed Vickers was cut clean in two and the two halves of his body were a hundred yards apart. Billy White —

at least we assumed it was Billy — was burned beyond recognition. The carryall itself lay on its side, blackened and crumpled. Under it lay the flattened remains of what had once been a white Jaguar XS convertible. Although from the time and the heading of the carryall it looked like Buzzy had been on his way back to the yard, he must not have made it to Jacobs' to pick up the generators; the carryall — or what was left of it — was empty, and there was no sign of cargo spilled out along the road.

The Patrol sergeant set his men to taking measurements and looking for skid marks. He shot a few photos and then stood scratching his head.

"It don't make no sense, Congersman Sansoni. It looks kinda like maybe your brother plowed into that there Jag-u-ar, I wouldn't thought it'd flip a big ol' carryall like that." He stooped to peer under the wrecked carryall. "And what happened to the party drivin' the Jag?"

I shook my head and shrugged. It didn't make any more sense to me. "I agree, Sergeant. And where did the fire come from? Both vehicles are Cesium-powered. And what happened to poor old Vickers? What could have cut him up like that?"

It was the Sergeant's turn to shrug. "Damn'f I know. Guess we'll just have to wait and see what your brothers's got to say." I looked away from the Sergeant and swallowed a pretty good-sized lump in my throat. Right then it didn't look as though Buzzy would ever be able to say much of anything again.

One of the principles which had guided my father, Albert Sansoni, to a highly successful career as a junk dealer was to *Keep the Stock Up*. Pop would buy anything if the price were right and the quantity meaningful, always confident that somebody, somewhere would someday pay him a higher price for it. Well, West Virginia real estate was cheap, and there was no shortage of boon-docks to hold Pop's acquistions. And of course he was right. There was always someone, somewhere.

Still, we used to kid the old man a lot. I remember Buzzy once saying that if Pop had a chance to buy up all of the old 1972 calendars in '73 for a song, he'd do it just in hopes that '72 would come back again someday and he could make a killing. Somehow, with Pop's luck, I wouldn't be surprised if he couldn't come out on a deal like that, somehow, with somebody, someday.

Pop applied his principle of *Keep the Stock Up* in raising Buzzy and me. Buzzy, who pretty well shares the old man's genius for mechanics, for combining useless junk into something highly saleable, picked up degrees in metallurgy, mechanical engineering and physics. He fought against it those years in school, but Pop is pretty persuasive, and he kept Buzzy at it.

"You never know when you might need to know some of that stuff, Buzzy," he would say. "I never had no opportunity like you got, and you damn-well better make the best of it." Buzzy would sometimes argue back and plead and protest. But Pop

finally put an end to the worst of these arguments with a blasted: "All right! You go ahead and marry Phyllis! But after your honeymoon, you get yourself back up to the college or I'll stomp the tar out'n you!"

Phyllis was the girl Buzzy had dated since he came back from the Sino-Sov war. "The college" at that time was M.I.T.

As for me, I'm two years older than Buzzy and a good deal more independent. While I didn't inherit much of the family's mechanical aptitude. I got a full measure of the old man's stubbornness. Along about high school, I got hooked on politics, played football and earned myself a law degree at the University of Virginia. I then spent two years at Oxford under the posthumous patronage of Cecil Rhodes and — after the war — came back to West Virginia to become the youngest congressman the 14th District had ever sent to Washington.

All this stretched Pop's utilitarian philosophy a good deal, but I guess he is not the only man who considers politicians a pretty useless form of life. Still, he made the best of it, gave me what financial support he could for my campaigns and was — I think — secretly a little proud of me.

I like politics, and I was a pretty good congressman. After three terms in the House, I was making serious plans to enter the senatorial race in '84, when I faced one of those situations which confronts every politician at one time or another. And maybe because of Pop or because of Cecil Rhodes or just because I am built that way, I acted according to my conscience — which can be a very expensive luxury in politics.

I won't go into the details, but after the dust had settled, I found myself still reasonably popular with the West Virginia electorate, but banished from public life by the West Virginia Party machine. My hopes for the senatorial nomination went glimmering, and my place on the congressional ballot went to an old Party hack from Green County. As a result, at thirty-four, former Congressman Percival Sansoni could be found almost any fine morning in the spring of 1986 sitting on the veranda of the family home, studying the most recent issue of the *Metals Reclamation Monthly*.

That's how it was that I found myself — for a while at least — back in the family business.

II

From the way he had looked when we had loaded him into the State Highway Patrol ductor for transport to the hospital, I thought for sure old Buzzy had had it. But Buzzy turned out lucky. He had some pretty bad burns, mostly on his back, but when I finally got in to see him the next day along with the Patrol investigator, he was more angry than injured.

"Boy, wait'll I get my hands on those bums!" Buzzy was lying on his stomach, his chest supported by a couple of pillows.

"Who do you mean, Mr. Sansoni?" asked the investigator. He had his recorder running.

"The hijackers! The guys that bushwhacked us!"

"Hijackers?" I echoed stupidly.

The investigator leaned forward from his chair to bring the microphone closer to Buzzy.

"Why don't you start at the beginning, Mr. Sansoni, and tell us what happened."

As Buzzy told it, greatly interspersed with profanity and clouds of cigar smoke, he'd gone into Morgantown that morning and gotten his haircut as planned. Then he had driven to Jacobs' yard, and he and Billy and Ed had loaded the MHD generators on the carryall. They headed for home then and were just topping the grade out of Carson's Corners, when Buzzy spotted the Jaguar parked across the road, pretty well blocking it.

The investigator interrupted at this point. "What was your speed when you first spotted the Jag, Mr. Sansoni?"

"Ah hell, I couldn't have been doing more than one-ten, one-fifteen. We were pretty well loaded, and we'd just come up that grade."

As soon as Buzzy had seen the Jaguar, he'd reversed thrust, dropped the carryall down on the ground-effect shrouding and come to a stop about fifty yards on down the road from where the Jaguar had been.

"We rolled over that Jag like it wasn't even there, but I heard the forward rotors tear into it and drag it along, and I knew I'd burned up the shrouds skidding along like that. I was mad enough to spit nails."

"Was there anyone in the Jag?" asked the investigator.

"Hell no! And at first I figured some damn fool had just left it sitting there. Busted a rotor or run out of catalyst or something. Then I found out different."

Buzzy had dropped out of the cab, cursing, and started to work his way in through the ruined shrouding to take a look at the forward rotor, when there had been a flash and he heard a man scream — either Billy or Ed — he didn't know which. The next thing he knew the carryall was flipped over on its side, and there was fire everywhere. The last thing he remembered was a big piece of tattered shrouding, stinking of smouldering rubber and fiber, dropping down on top of him. It probably saved his life.

Buzzy was worn out with so much talk, and the doctor shooed us out of his room. In the hall, the investigator rewound his tape and shook his head, clucking to himself.

"We haven't had a case of hijacking in this county for twenty years. Your brother must have had a pretty valuable and tempting cargo."

I stopped short, and for the first time I began to realize just how little sense the whole thing made. "What's a Jaguar like that worth?" I asked.

"They run about ten thousand new, and that one was new."

"Then it doesn't make any sense," I said. "Whoever hijacked that cargo destroyed ten thousand dollars worth of ductor to do it and got sixty generators at a junk price of two hundred bucks apiece. They made two thousand dollars and killed two people doing it."

The investigator looked hard at me. "Maybe three. The Jaguar was registered to a woman in New York. She hasn't been heard of since she left Morgantown yesterday morning."

III

Although I grew up in one of the biggest junk yards in the East, it never occurred to me until pretty recently to really *think* about junk. I read the other day where some archeologist was calling for Federal funds to make a national memorial out of a big junk yard up in Rhode Island. Claimed it was a treasure trove for future generations of archeologists, a "many-layered record of the achievements of our society." Conspicuous consumption and so forth.

Maybe so. But — until recently — I never entertained such elevated ideas about junk; and if the elections go the way I hope they will this fall, I don't expect to give the subject much consideration in the future.

My father, being both a very successful junk dealer for over thirty-five years and something of an original thinker by natural bent, has a well-developed philosophy of junk. I can picture Pop — a skinny, tough little man with bandy legs, a face like a geologist's map and two bright eyes behind thick spectacles — Pop expounding this philosophy in his rough West Virginia speech to Mom (before she died) or to one of the neighbors or to anyone who would drink a beer with him and listen.

"The thing you gotta realize about junk," he would begin, "is that ever'thin' in the world is junk to someone, while at the same time, they ain't nothin' in the world that ain't worth *somethin'* to someone somewheres. It all depends on your pointa view."

This statement would usually earn Pop a quizzical look from his listener, and practised as he was in exposition, he'd take a long pull on his beer to let the full dramatic effect sink in before continuing with his theory.

"Now to show you what I mean, you take your *A*-rab oil millionaire with his fifty Cadillacs and two hunert wives and jools and all, settin' in his hot ol' tent just wishin' them slaves'd work them fans a little faster, and you send him a nice shiney fuel-oil stove right out'n the factory."

Pop would pause again and fix his listener with a piercing eye. "Why its junk, ain't it! Far's that *A*-rab's concerned, it about as useless as teats on a boar hog!"

Then Pop would lower his voice to a conspiratorial tone: "Oh t'other hand, you go on out in the yard there and dig up a couple them sorry old magnetic heat-exchangers and some of them cruddy surplus blowers, and you hook 'em together and give 'em a coat of paint and send 'em off to that old *A*-rab, and he's gonna be *some kinda* happy! I know, 'cause I done it already."

After this, Pop would sit back as if exhausted from the force of his argument and suck down whatever was left of his beer. Then, if he was

talking to me or to my brother Buzzy, he'd add some shrewd observation on the business of being a junk dealer as part of his continuing program which was intended to prepare us to take over the business from him someday.

As he talked he would sweep his arm comprehensively around the fifteen acres of crowded yard, taking in the old ground-effect cars, the rusting industrial machinery, the hulks of surplus military equipment, the rows of factory-reject appliances, the piles of bent ductor fans, the rolls of wire and heaps of industrial scrap, the stacks of crated electronic gear, the million and one bits and pieces which lay oxidizing quietly — each element in its own sure way — in the hot West Virginia sun.

IV

That night, after the Patrol investigator's interview with Buzzy, Phyllis cooked supper for the kids and Pop and me and then went off to spend the evening with Buzzy. Pop and I sat in the warm summer darkness out on the veranda, drinking beer and watching each other flip cigarette butts over the rail. There was a big, fat, lazy moon rising off the end of the airstrip, its yellow light silhouetting the steel spires and crags of the yard. The old M-70 tank Pop had stripped to bulldoze with looked like a war memorial. In fact the whole yard looked like a battle field in the moonlight, torn by shot and shell. During the day, with the bright wink of cutting torches, the raucous whine of the yard machinery, the squeals of Buzzy's kids as they clambered like mountain goats on the piles of scrap, the yard was a cheerful place. I'd grown up in that junk, and I knew what a wonderful fairyland it was for kids.

But at night, silent and deserted, the yard looked like a place where giants had wrestled, where great issues had been decided at high cost, leaving the wasted detritus conflict always brings.

Pop heaved his empty beer can out into the darkness. For a man of sixty, Pop can still heave pretty far. It took a long time for the distant clatter to come back to us. He peeled the top off another and propped his feet on the veranda rail. "Perce?" he said.

"Yeah, Pop."

"I run this yard more'n thirty-five years now. Ain't never been nobody hurt workin' for me here — until yesterday anyways."

"Yeah, I know Pop. But it wasn't your fault."

Pop sighed and was silent for a moment. Then he snapped his chair back on the floor from its tilted position and stamped angrily to his feet.

"Listen, son. Ever'thin' about this yard is my fault! Somebody gits hurt workin' for me, I'm damn-well gonna find out why! I'm gonna git them bums that done it to Buzzy and Ed and Billy!"

"Now take it easy, Pop. That's what the police are for —"

"Police, hell! They ain't never gonna figure it out. They ain't even figured out *how* them hijackers managed to tip over a forty-five ton

carryall and burn it up thataway, much less *who* done it!"

"Or for that matter," I added, musing, "why?"

"What do you mean, 'why'," Pop's voice grew quieter. "They was hi-jackin', wasn't they? Stealin' Buzzy's cargo!"

I shook my head in the darkness. "It doesn't add up, Pop. Why would anybody go to all that trouble, smash up a ten thousand dollar car, wreck a carryall and kill two men, just to get sixty surplus MHD generators worth maybe two-fifty apiece, tops?"

That stopped the old man for a minute. Another empty clattered in the darkness, and the flare of a match illuminated the old man's face, his heavy white brows drawn together in thought, his lined and seamed face etched with concern. Pop looks like an old white-haired Indian when he's worried about something. Other times he looks like a skinny Santa Claus.

"Perce, like I always say, the value of junk depends on how much somebody wants it. Them generators ain't worth more'n two fifty to you and me, but somebody else must've wanted 'em pretty bad."

"Granted, Pop," I said. "But the surplus catalogues are full of brand new generators. The government over-procured on them when it looked like that South Africa business was going to get nasty, and now they're all over the place. Maybe the guys who bushwhacked Buzzy would've had to pay three or four hundred for them — I got a pretty good bargain out of Jacobs — but they sure as hell didn't have enough to justify stealing them and killing people."

That stopped Pop again, but only for a minute. "What'd you say you paid old man Jacobs for them generators?" There was a note of excitement in his voice.

"Two hundred."

"And they was new? Factory sealed?"

"The one I inspected was."

"One. You only looked at one?" Pop's voice held a familiar note of accusation.

"Heck, Pop. The others were all in sealed cannisters. What would have been the point of —"

"Perce, I done told you to watch that Jacobs. He's a sharp one. He wouldn't let you have them generators for no two hundred bucks if there wasn't somethin' wrong somewheres." He snapped his fingers. "Sure, that's it. You bought yourself one surplus MHD generator *and fifty-nine somethin' elses!*"

I was chagrined. I knew what Pop said made sense, and maybe I *had* been taken. Somewhat sheepishly I said: "I suppose you're right, Pop. I guess I'm lucky I didn't take all two hundred of them."

Pop exploded. "You mean he had more of them at that price. Why in the name of heaven didn't you clean him out?"

"But Pop! If he was cheating me, it's a good thing I didn't!"

Pop was half-way down the veranda stairs, when he turned back to inquire, "How many times I gotta tell you, Perce, *Keep the Stock Up!*"

V

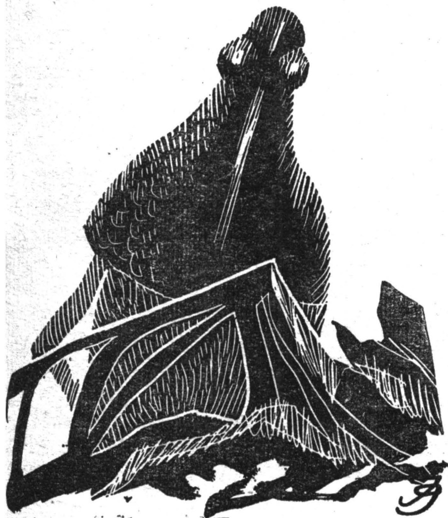
I took off after him. There was something wrong in the logic of Pop's argument, but I didn't care to pursue it further. He was headed for the shed with the pickup, and I ran after him. I knew where he was going. If what I had bought weren't two-hundred-and-fifty dollar government surplus MHD generators, *what were they?*

Were they — perhaps unknown to Jacobs — something valuable enough to kill for, as someone had quite obviously done? The answer just might lie on Jacobs' loading platform, where — forty-eight hours before — I'd seen two hundred of the now mysterious cannisters standing in neatly serried ranks.

Pop beat me to the shed and

backed the pickup out into the yard. He jumped down then and disappeared into the house, reappearing moments later with his arms full of weapons he'd salvaged at one time or another from junked military equipment and put into working order just for the hell of it. Pop didn't even own a hunting license, but he had enough death and destruction in his arms to outfit a banana-republic constabulary.

There was a BAR of world war II vintage, old but oiled and gleaming. There was a 55 mm bazooka of somewhat later date, a fairly new lazgun, one of the high-frenquency types like I'd used in Australia ten years before, and a 75-shot officers-issue carbine which was still standard in the Army. He dumped his load with a clatter in the bed of the pickup and dove back into the house to reappear in a moment with a crate of bazooka shells, a couple of hundred rounds for the BAR and two spare power packs for the lazgun. He dumped his load in on top of the weapons and climbed up into the seat next to me in the cab. He wasn't even breathing hard.



I went to full thrust and negotiated the lane leading to the Morgantown road at top speed before I said anything. When we'd settled down to a nice even one-fifty, I shouted to Pop above the whine of the rotors: "Hey Pop! What's all the armament for? You got enough there for an army!"

Pop struck a match on the pickup door and swallowed a cloud of cigarette smoke. "Perce, you seen what a mess that carryall was and what they done to Ed and Billy—"

He didn't have to say anything more. I knew what the weapons were for, and I was glad Pop had thought to bring them.

We sat in silence during the twenty-minute drive to Morgantown. The town was deserted; it was nearly midnight. Once through and on the other side, we whipped down the grade to Carson's Corners, where Buzzy had been waylaid the day before, and took the turn into Jacobs' access road with rotors whining and the outboard shrouding scraping clouds of dust from the dirt road.

The Jacobs yard was dark, but there was plenty of moonlight, enough to reveal the empty loading platform.

"They're gone, Pop. He must have sold them to someone else."

"Yeah." There was disappointment in Pop's voice. "But let's us talk to the old bum. Maybe we can shake outa him what was in them cannisters."

I parked the pickup, and we walked up to the dark shed that was old Jacobs' combined bachelor quarters and office. Pop banged on the door, but there was no flare of light or answering stream of profanity. I left Pop on the front porch and walked around to the rear. Jacobs' yard wasn't anywhere near as big as ours; according to Pop, he specialized in junked ductors, making a good living out of reclaiming cesium oxide and now and again taking on a hot vehicle for illicit resale. Still, the same moon that shone on our yard shone on Jacobs', and there was the same sense of desolation and look of ended conflict in Jacobs' shadowed junk piles.

The illusion of a battlefield was heightened by Jacobs himself—as I found him that night behind his home. Or at least pieces of him. I don't know if they ever found all of him. There was enough, though, once I sorted it out from the blackened ruins of his pickup truck. There was a head and most of an arm still in the smashed cab. The rest was pretty widely distributed

I threw up and then shouted for Pop. He's a tough old bird, Pop, but he got sick too when he saw what I was looking at. The empty platform and the carnage behind the house didn't leave much doubt as to what had happened. I still didn't buy the hijacker theory, but I walked around the pickup and pulled the lazgun out of the clutter in the bed and strapped it on anyway.

I rejoined Pop, who was rather futilely trying to cover up what was left of Jacobs with a piece of tarpaulin. He'd have needed several hundred square feet to have done the job properly.

"I guess we better give the Highway Patrol a call," I said.

"Yeah," said Pop. "But lets us look around a little bit first. Old Jacobs wasn't the sort to put all his eggs in one basket. There may be some more of them cannisters stuck around here somewheres."

Pop got a flashlight out of the pickup, and we went hunting. After a quarter of an hour we found them, twenty of them, standing stacked two-high in the little shed Jacobs had used as his workshop.

"These like the ones you bought?" Pop gestured with his flashlight.

"Yes. Identical as far as I can see."

Pop bent to examine the cannisters more closely. "They ain't Army cannisters, Perce. I ain't never seen none like this before. Looky here. Look at this sealing band."

I looked and then realized I'd never seen a seal like that before either, except maybe for the sixty I'd bought the other day, when I hadn't really examined them closely.

"But Pop, it's stenciled right on them: 'ONE EA MHD GEN MOD 2 MARK IV U.S. ARMY DELPHOS DEPOT'."

Pop directed the flashlight at the wall above Jacobs' workbench. There hung a stencil with yellow paint:

VI KRAM 2 DOM NEG DHM
AE ENO
YMRA .S.U
TOPED SOHPLED

"Old crook—rest his soul—sold you ringers, all right."

I went for the pickup and backed it up to the door of the workshop. We shifted our arsenal into the cab and loaded all twenty cannisters onto the truck bed. It was hot work; each cannister weighed the best part of three hundred pounds, and when we were finished the rear shrouding was belled out against the ground.

We got ready to leave, and the thought hit me. "Hey Pop, wait a minute! Last couple of times somebody tried to truck these cannisters around, they got chopped into little pieces. Maybe we better think a bit."

Pop didn't hesitate. "You might be right, son. But we can't do nothin' with these babies here, and maybe the guys that got old Jacobs will figure the same as we did and come back to see if there's any more."

I looked around the dark yard and shivered. Pop had a point. He fired the turbine and opened the door for me to climb into the cab beside him.

"No, Pop. You drive, and I'll ride shotgun in the back." Pop shrugged in that comical way he has when he's really under pressure.

"Okay. Choose your weapon, son."

I pulled the BAR out of the pile and took the belt of ammo he handed me. "Keep your eyes peeled, son."

I climbed in back and settled myself among the cannisters. "You too, Pop."

I wanted to look brave and nonchalant, and I poked a cigarette in my mouth with the kind of tough-guy gesture I'd seen on 3-D. But my lighter was out of gas, and I had to be content to perch on the cannisters looking every bit as frightened as I felt.

The rotors roared, and the heavily laden truck moved off on to the highway. We went through Carson's Corners wide open and whined up the grade outside of town at top speed. Once we passed the point where Buzzy had been bushwhacked, I began—foolishly—to breath easier. Then we were in Morgantown, and Pop had to drop down to sixty-five to make some of the turns in town. Once again in open country, he really opened her up. I was beginning to think we were home free, when something large and dark appeared a few hundred feet above the moonlit road behind us, blotting out a segment of stars.

I started to shout a warning into the wind, but by that time Pop had spotted the tank-truck blocking the road ahead, and he reversed thrust and slewed off onto the berm. The heavy truck sat down hard on its shrouding, skidded crazily, and clipped a couple of small pines, but Pop managed to wrestle it off the road and bring it to a stop to one side of the stalled oil truck. I caught a glimpse of the driver's body, mangled and torn, lying half out of the open cab door.

Now clearly visible, the black shape—something like a flat-

tened teardrop—slowed. A bright spot glowed high on its prow, and the tops of the pines along the road burst into flame. The beam from the strange craft swept across the oil truck. There was a massive blast and a wave of heat, and thick black billows of smoke began to pour across the road into the thicket which concealed us.

I shouted at the top of my lungs: "Take off, Pop! The smoke'll screen us." Hoping Pop would think I was still aboard, I rolled silently off the truck bed, the BAR cradled in my arms, and flopped to the ground. I opened up with the BAR. It was no match for whatever it was that had burned up the tank truck and the trees around us, but I figured it might give Pop enough cover to get away.

The BAR whacked away, although I had trouble keeping it elevated enough to bring the wavering stream of tracers onto the black ship. I heard the whine of rotors as Pop slid the pickup through the burning thicket and back up onto the road behind the burning oil. Then I came to the end of the belt, and I wished I had that 55 bazooka that was now —hopefully—rolling away from me at well over a hundred MPH. But I didn't. I pulled the lazgun and crackled away at the black shape now hovering closer and closer over me, and I thought of Pop and Buzzy and Phyllis and the kids and Oxford and the election and the girl I'd almost married, when I first went down to Washington in '78.

And then I don't remember any more. Not a thing.

VI

The first thing I became aware of —how much later I don't know —was the fact that I was lying flat on my back, my head elevated from the hard surface under me by a lump on the back of my head the size of a turkey egg. It hurt like hell, and I rolled my head to one side to ease the pain. There was a quick rustling sound not far away, and I opened my eyes, expecting—I guess —to see some starchy nurse and maybe Buzzy on the next bed.

But it wasn't a hospital. Or if it was, I was blind. I contemplated that thought for a while and found little comfort in it. Then my other senses came into play, and I realized that hospitals don't smell of chlorine and hospital beds are not entirely constructed of cold, hard metal.

I sat up, eyes straining in the blackness, and there was another rustle, a frantic scuttling sound which my imagination quickly translated into something horrible. I was scared, and I sat motionless for a long while, breathing as quietly as I could. There were no more rustlings, but I could hear something else breathing, something breathing in short, shallow gasps, like a wounded animal.

Something, I thought, *with a high metabolism rate.*

I should stay put, I thought. *Nothing has hurt me yet,* I thought.

And even as I thought it, my curiosity got the better of me. Or maybe it was the fact that I can't stand fear and uncertainty and prefer almost any resolution, even an unfav-

orable one, to continuing in doubt. I stretched out a hand in the darkness before me and touched something round and soft and warm which seemed to shrink away from me with much rustling and an intake of breath.

I checked the sensation of that touch against the card file of touches every man has in his head and very quickly identified it.

"I beg your pardon, Madam," I said. "Could you be good enough to tell me where we are?"

There was a gasp, much rustling, a fumble of arms around my neck, and I found a sobbing girl pressing her head against my chest. Her hair smelled good.

"Oh thank God! Thank God! I thought you were one of them." The girl shuddered in revulsion.

I held her tightly until her sobbing stopped. Then, as if suddenly aware of me as an individual and not just a pleasanter alternative to "them", she pulled away, and I heard more rustling. There was the snap of a purse and the frustrated rattle of lipstick and mirror. "Damn," she said. "I must look awful." She sniffed once or twice as women do, when wiping their eyes.

"I think you look just fine," I said, gallantly ignoring the fact that we were in utter darkness. "Do you have any idea where we are?"

"In their ship—I think."

"A big black job, kind of a flattened tear-drop shape?"

"Uh huh." She slid over against me again and fumbled for the security of my hand.

"How long have you been here?" I asked.

"I don't know. It seems forever. Since Wednesday morning, however long ago that was."

I began to put two and two together. "You own a white Jaguar?"

"Yes! How did you know?"

I told her about Buzzy and the carryall, about Jacobs and the cannisters and our attempt to get what was left of them back to our yard.

"These cannisters," she said when I had finished, "are they round, with rounded ends, like maybe sleeping-powder capsules?"

"Yes. That's a good description. But they're about the size of three fifty-gallon oil drums laid end to end."

"That explains it then. They can't talk, at least not so you can understand them, but they kept drawing pictures. I didn't understand what they wanted, but they drew a lot of pictures of those capsule-shaped things." The girl withdrew her hand—to gesture with I guess.

We sat in silence for a while, and some of the awesomeness of our situation began to sink in on me. Funny, you can talk blithely about creatures from outer space, about spaceships and first contact, and other esoteric matters. The reality is a hell of a lot more mundane, and its most striking aspect is more than that most simple and basic of human emotions: fear.

And then the girl told me how she had been driving along the Morgantown road, when the ship had appeared above her and settled on the road before her. She had

stopped; a hatchway had opened in the side of the ship, and the next thing she had known, she had been lying in darkness, sliding about on the metal floor of our prison as the ship apparently went through violent maneuvers.

"There's light sometimes. Not much, a dim, red light, but enough to see by. They showed me their silly pictures, but I didn't understand them. Once they handed me the tablet and a funny-kind of pencil thing, and I wrote my name over and over again, but all they did was waggle their arms at each other and draw more capsules and meaningless pictures.

"Then it was dark and then it was that funny kind of dim red light again. And there was a lot of flying around. Three times since I came here."

"That would have been the attacks on Buzzy, on old man Jacobs and on Pop and me."

"But if what they want is those capsules — cannisters — why didn't they just go get them from that man's junk yard? Why did they have to wreck your brother's carryall and kill that man and go after you and your father?"

I thought a bit. "I don't know, Miss . . ."

"Berenson. My name is Claudia Berenson."

". . . I don't know, Miss Berenson. Maybe it has something to do with the blackness in here. Maybe they can't see by the kind of light we see by. Maybe they can't tell where the cannisters are until they're in motion, or something."

We were silent again for a moment. Miss Berenson—Claudia—snuggled up close to me again, and I put a protective arm around her. She could have been any age, in the darkness, and ugly as sin. But from what I could feel and the sound of her voice, I had a hunch she was no old crone.

Then, as much because we were afraid as anything else, we started to talk, to tell each other about ourselves. She told me what it was like to be a fashion buyer for a big chain of women's stores, about how her brother had died during the Australian campaign, about going to school in Albany, New York, about her first date and how funny it had been, about the apartment she shared with two other twenty-five-year-olds in Manhattan, about her unhappy love affair in '84.

Darkness is a wonderful aid to confession, and I found myself talking about Australia and Oxford and the Party and the junk business and about my unhappy affair with Julia in Washington, and I discovered all of a sudden that talking about Julia didn't hurt anymore. Despite the mystery and threat of our strange meeting, I found myself cheered at the absence of old pain and the promise of . . . something new.

I was almost disappointed when the dim red lights suddenly came to life. As my eyes adjusted I was able to see what our prison consisted of. We occupied a kind of transparent bubble enclosing a roughly hemispherical space, perhaps a dozen feet across at its widest point.

It looked like it had been jury-

rigged from some sort of plastic material just to contain us; I could see where the edges of the bubble were crudely but effectively fused against the deck, against what I took to be the outer wall of the ship and against a rear transverse bulkhead. A cylindrical duct a few inches across led from the bubble to the ceiling, bringing sweet West Virginia summer air into us and offsetting the stench of chlorine.

The space into which our bubble intruded conformed roughly to the forward half of the flattened teardrop ship, I had last seen hovering over the Morgantown road. Perhaps thirty feet at its widest and sixty feet long, it tapered from a rounded prow back to the flat bulkhead, separating, I supposed, the crew's living and control area from that portion of the ship containing its drive mechanism and whatever cargo space could now be presumed to contain all but twenty of old man Jacobs' two hundred and twenty cannisters.

There were no windows or ports, but a row of flickering screens on the inner side of the curved prow gave a curiously distorted picture of woodland and hill. The ship—if the screens were correct—seemed to be nestled into one of the wilder groves that dot the northern West Virginia countryside.

All of this, of course, I observed in detail later. My attention was initially riveted on the four figures now climbing down from crude wire-like racks suspended from the ceiling of the craft. Claudia shuddered beside me, and I gathered that these were "them."

I couldn't blame her for shuddering. They looked pretty bad, and I wouldn't have found them substantially more appealing even had I known they were all registered voters in the 14th district. Maybe eight or nine feet tall, they were vaguely human in that there was a recognizable head and trunk. But there the resemblance ceased.

There were far too many arms and legs, and each was tipped with a writhing collection of small, pulpy tentacles. These "fingers" and "toes" seemed to obey their owner's commands to grasp a stanchion or turn a dial, but when their services were not otherwise engaged, they danced and waved with a weird life of their own. It was hard to tell colors in the red light, but our wriggling captors seemed to be covered with some sort of hard, chitinous material, its shimmering surface broken only by two slashes of bright cloth-like stuff, one draped across the chest and another bound about the uppermost "arm" on the left side. There is a kind of universal principle of clothing, and I would have bet my chances of ever getting out of there that one chunk of cloth indicated rank or status and the other covered whatever passed for pudenda among our chitinous friends.

As a sometime lawyer, I am not unschooled in the rules of evidence, the logical process of putting two and two together to make four, twenty-two, or 1,111, as the case and the nature of the jury demand. Hence I was puzzled by the great discrepancy between the physical confor-

mation of our captors and the ship and its outfitting. The chairs in front of the screens at the prow of the ship were mansized, not "thing" sized; there was a contour couch visible to us, and the contour was not that of a "thing".

So far as I could tell, the switches and knobs, the door handles and lock mechanisms, the height of various indicating instruments all seemed designed for some creature other than the "things." Specifically, it looked like the mysterious ship had been—or was designed to be —occupied by a two-legged two-armed biped, like say, you or me. I puzzled over this for a bit. And then two and two added up to suggest that the "things" had not come by their ship honestly. I filed this assumption for future use.

VII

My ruminations came to an end. One of our captors donned a transparent helmet, for all the world like an inverted fish-bowl, and slipped his uppermost arms and one leg through a harness containing what must have been gas bottles of some sort. He passed out of our field of vision through a hatchway in the rear bulkhead and reappeared a moment later through a lock mechanism leading into our bubble from the same bulkhead, bringing with him a puff of chlorine. We coughed and choked for a moment until the lock had closed behind him. Claudia skittered behind me, as I rose to meet him. There was none of that "take me to your leader" business. Instead our visitor gave out with a scratching, whistling noise—like a fingernail across a blackboard—and looked at me expectantly with several wide-set, many-faceted eyes. When neither of us reacted to his greeting with a similar sound, he gave an unmistakable shrug—a gesture which also must be well nigh universal, but one which is formidable when performed by a column of three shoulders. Then came the tablet and pencil.

First there was a picture of the ship and under it a series of curved symbols unlike anything I'd ever seen. The thing in the helmet pointed to the ship with one set of bunched tentacles and drew another bunch, stiffly gathered into a pointer, across the line of symbols.

"Wheeskrick," it said.

I bowed slightly, stabbed a forefinger at my chest and said; "Percival Sansoni."

The Wheeskrick chattered and whistled and handed me the tablet and scriber. I'd read a lot of science fiction and I figured I knew just what to do. I drew a circle and ten smaller circles in orbit around it. With an air of triumph and a proud eye cast toward Claudia, I placed a large X through the third circle out from the center.

The Wheeskrick whistled and squeaked again, took the tablet and scriber from me with two jellyfish-like tentacles and lashed me a good one across the chops with a third. The language lesson was over, and he was impatient with my attempts at rudimentary cosmography.

I staggered back before him,

mindful of the girl beside me and the necessity for belting him one in return. But I didn't know where to start in, and anyway, he was busy scribbling again. It was another picture of the black, flattened-teardrop ship, this time with a jagged hole in its side and little black Wheeskricks unloading cannisters from a hatchway onto a neat stack under what was quite clearly a tree.

The Wheeskrick chittered and whistled; the picture disappeared and was replaced with another displaying a crudely-drawn man loading cannisters onto a carryall, while behind a straight line, apparently representing the side of the ship, four Wheeskricks lay supine in complex wire racks. I began to get the picture.

The Wheeskrick manipulated something on the tablet, and the picture disappeared again; he began to draw another: a carryall lying on its side, crumpled but recognizable, and two Wheeskricks loading cannisters into their ship. Off to one side, the Wheeskrick painstakingly drew two stacks of cannisters, each stack twenty-one cannisters long and five high. He blacked in the last four rows of five with his stylus—the twenty cannisters not yet recovered.

Whistling and screeching, he drew another series of inexplicable symbols under the twenty blackened cannisters and translated them for me by reaching out with his middle-right-hand arm and belting me again, this time hard enough to knock me up against the inner surface of our bubble prison. Without so much as a parting whistle, he wheeled on three feet, tucked his tablet under his upper left-hand arm and exited through the lock, leaving us once again gasping and choking in the fumes of the atmosphere he entered.

Claudia knelt beside me and crooned over me, and although I wasn't really hurt by the Wheeskrick's blow, I groaned a little bit for effect. The dim light was perfectly sufficient to show me—beside the nature of our prison, the reaches of the interior of the Wheeskrick ship and the creeping horror of the Wheeskricks themselves—the delightfut fact that Claudia Berenson was a real looker, the kind of girl men dream about crooning over them when they have fallen honorably (and not fatally) on the field of combat.

But that wasn't getting us out of there. I stopped groaning, sat up and started thinking. The Wheeskrick's pictures had been pretty clear. So had his blows. Old man Jacobs must have stumbled on the Wheeskrick's cargo, when they had off-loaded it to repair some trouble in their ship. He'd swiped it during one of the sleep periods, sold it the way he sold other hot goods—quickly and cheaply—and now the Wheeskricks were doing all they could to recover it.

I began to get curious about what was in those cannisters, more curious than I had been before. Whatever it was, though, it was amply clear that the Wheeskricks wanted it back, wanted those other twenty cannisters and were prepared to knock me around until they found out where they were.

Well hell! They could have them. They'd cost too many human lives already. The problem was, how do you let go of a tiger when he has you by the tail?

Claudia had been thinking too. She had been in our cage a lot longer than I, with nothing to eat or drink, and there was a note of panic in her voice.

"All they seem to want are their silly cannisters. Can't you tell them where they are? Maybe they'll let us go then."

I thought about the possibility. Then I thought about what they had done to Ed and Billy and to the old man, Jacobs, and what they might do if they got to Pop's junk yard. I'd seen a lot of killing in Australia, some of it performed with the casual inefficiency of the aborigines,

but nothing to rival the way old man Jacobs had looked. Or Ed Vickers.

I shook my head. "I don't think they'd let us go. I think we're like some kind of annoying wildlife to them; I think they'd as soon kill us as look at us. Those missing twenty cannisters are the only reason you and I are alive now."

"But what can we *do*?" The panic in Claudia's voice advanced a half a dozen spaces toward "go".

"I don't know," I said. "Let me think."

While I was thinking, Claudia sat with her head back against the bubble, too frightened to sleep, too weary to look about her any more. I tested the walls, probing at the transparent plastic with my penknife. They were slightly flexible,

and I could penetrate the surface with my knife. But all I got for my pains was a whiff of chlorine, and I realized that we'd suffocate long before I could chop a hole big enough to let us escape. And even then, we would escape only into the Wheeskrick's chlorine-filled control room.

In the meantime, our captors were busy. One of them cycled his way out through a lock in the wall opposite our cage—his helmet and gas cylinders in place—while two others busied themselves assembling dozens of small tripod affairs, each a hand high and two hands across the base. When they had finished, the two went back through the after bulkhead and reappeared with one of the cannisters. One by one they tested the tripods by waving each toward the cannister. There were bright blips on the screen before the fourth Wheeskrick.

An hour after he had left, the Wheeskrick with the helmet returned, a struggling calf in his arms. The Wheeskricks dragged the strangling animal over to our bubble and proceeded to disassemble it before our eyes. I had a sobbing girl, her head buried in my shoulder again, to contend with. The obvious instructional session of the Wheeskricks was not lost on me, and I began to think even harder.

But I didn't come up with anything. Not for a while. There was another sleep period of complete darkness and another period of dim red light, during which three of the four Wheeskricks disappeared through the outer lock, their arms

loaded with the little tripod detection devices.

I could see what would lie ahead; I'd watched men break in Australia. There would be hunger and—judging from what had already occurred—some more abuse. Then would come the time when they'd start in on Claudia, maybe like the calf, and I'd begin to think that perhaps if I started doing some fancy drawing on their tablet for them they'd let us go and maybe not hurt Buzzy and Phyllis and the kids and Pop. Just take their damn cannisters and go. That's what I'd begin to think after a while, and I knew I'd be wrong. The dim red light winked out for the second time, and I thought even harder.

I had long since assayed my pockets and found nothing other than some loose change, my penknife, and my fuel-less lighter. I gave Claudia a try.

"What do you have in your purse?"

"Why . . . I don't know. A few dollars, my comb, some cosmetics."

"Dump it out," I said, "and tell me item by item what's in it."

There was a clatter, like a slot machine paying off, and Claudia began to finger her possessions in the blackness to identify them.

"Let's see. There's a comb, lipstick, mirror, . . . uh . . . four, no *five* bobby pins, compact, eye pencil, one, two, three, four, five, six . . . six coins, a can of hairspray, billfold, a couple of . . . uh . . . stamps, I guess, a box of aspirin tablets, car keys, apartment keys, nail file, a screw thingumajiggy out of my radio that I've got to get a new one of, subway pass, handkerchief, two . . . three coughdrops, master credit card, and . . ." Claudia broke off.

"And what?" I asked. I should have known better.

"Uh . . . a box of . . . uh . . . contraceptive pills."

"Oh." I said.

It didn't look like a very promising collection, but I added it to my mental assay of my own pockets, and we lapsed into silence.

Then I had it. It was a long shot. I didn't know if it would work, or if it did, whether we would survive it or not. But I remembered that calf and old man Jacobs and Ed Vickers, and I figured it was worth the chance.

The dim red light came on again, and the Wheeskricks began to clamber down from their wire perches. I pulled Claudia to her feet.

"Pull your collar up around your ears and stand up as close to the outside wall as you can." I thought a moment and stripped my jacket off and draped it over her head. "I'm going to try to blow us out of here, and if it works, get a good lung full of air and get to that outer lock as fast as you can. I think the top button makes it open."

She nodded dumbly and did as she was bid. I watched the Wheeskricks. One of them had donned his fishbowl and tanks and was headed back toward the entrance to our bubble.

I fished the can of hairspray from Claudia's purse and depressed the plunger on top. The small bubble began to fill with scent and with

finely atomized particles of highly flammable lacquer. I heard the inner lock door start to open just as the spray can fizzed out of gas. I joined Claudia at the wall, fished my fuelless lighter from my pocket, held it as far behind my back as I could, shouted "hold your breath!" and thumbed the striker.

There was a whoosh of flame and a thumping explosion. The entering Wheeskrick never knew what hit him. The plastic walls of our prison blew out like an over-inflated balloon, and the shirt sleeve over my right arm burned with a merry flame. I ignored it and propelled Claudia before me through the ruptured bubble toward the outer lock.

One of the Wheeskricks brushed past us, headed to aid his colleague in the ruined bubble lock, confident that his buddy—who was approaching us as only a nine-foot, six-legged wheeskrick can—would make short work of me. I was pretty confident he could too, but I figured Claudia, at least, might make it. The fourth Wheeskrick never budged from his position in front of the detection screens, which shows the relative priority the Wheeskricks put on recovering the rest of those cannisters.

Claudia reached the outer lock, hammered the uppermost button with her fist, and the door started to swing inward. I was making full speed toward her, my lungs bursting and eyes streaming from the chlorine, when a tentacled limb caught me on my burned right arm and the massive weight of the Wheeskrick brought me up short. I let his pull swing me in a short arc, and I brought my left fist around in an old style haymaker, knuckle out, aimed for the center of the patch of yellow cloth on the Wheeskrick's chest. If Sansoni's Universal Theory of Clothing were wrong, I would do him little damage. You may wound a soldier in his pride if you shoot him in the epaulette, but you reallly stop him if you get him in the pants.

The theory proved correct. There was agonized screeching and whistling, and I tore myself loose from his writhing grasp and leapt the last few feet to the open door of the lock. Claudia slammed the door behind me; the pumps cycled swiftly, and we lay gasping and choking in the sweet afternoon air. I was dizzy, but I figured the Wheeskricks couldn't open the inner lock door until the outer was closed, at least not for a while, and with the last of my strength I ripped one of Claudia's shoes off her foot and wedged its heel into the crack between the outer door and its jamb. I wanted to make sure that door stayed open until we felt like leaving there.

VIII

We lay gasping and retching for several minutes in the mouth of the strange ship's airlock, and then it occurred to me that the Wheeskricks would soon be out after us. They had helmets and gas bottles, and no doubt there was some way of getting that inner door open without closing the outer one.

"Come on, Claudia, we've got to get out of here."

Claudia choked, slipped her other

shoe off and slid with me over the lip of the lock and dropped the three or four feet to the ground. We'd taken only two or three steps toward the dense woods which surrounded the Wheeskrick ship when a bright pencil of light sprang from somewhere above and behind us and a fresh, green juniper a few inches before my nose burst into flame. I pulled Claudia back into the shadowed swell of the ship's flank.

"Looks like they don't want us to leave," I said. Claudia began to sob quietly. I felt a little like it myself. It looked as if we had jumped splendidly out of the frying pan and into the fire. I slid down beside Claudia on the grass, threw a well-done right arm around her quaking shoulders and started to think again.

I thought very hard. *We take three steps out of the shadow of the ship where their damn screens can* pick us up, and ZAP, they burn us *down. We wait here, and they'll come out after us, and this time—outside the ship—they won't be shy about using their weapons.*

We were damned if we did and damned if we didn't.

Then I remembered something out of OCS. The old, grizzled infantry officer who lectured us: "If you find yourself on foot against an enemy tank, the safest place to be is up on the tank. They can't get you there, but there is always a chance you can get them."

I pulled Claudia to her feet and then in best platoon-leader style said: "Follow me!" We skirted around the swelling of the ship toward the rear, where the tear-drop diminished to a series of blackened tubes, apparently the business end of the ship's drive mechanism. I boosted Claudia ahead of me, up the tube mouths, until we were both on hands and knees on the pitted upper surface of the ship. I could see the slightly elevated turret from which the ship's lazbeams were projected, but even if their basic sensor system were in the same turret, they would not dare fire at us without running the risk of scorching their own tail.

We advanced on the turret. I rather cavalierly swatted Claudia on the fanny when she let it elevate too much; we would be far ahead if we could take them by surprise. After a hundred feet of abrasive crawling we had reached the turret, and I could see the objectives of the ship's sensors. There were six of them, each—I would suppose—with a sixty-degree coverage of the area around the ship. We kept low, beneath the muzzles of the lazbeam projectors, and I pulled that precious, junk-laden purse from Claudia's shoulder. There was a lipstick, and it was only a moment's work to obscure the objectives of the ship's eyes with a thick, greasy layer of the stuff. Like Pop says, one man's junk is another man's salvation.

We took the quick way down, sliding and scraping across the sharp prow and dropping the last eight or ten feet to the grass of the clearing. We didn't pause. Three leaps and we were on the verge of the woods. Another scrub crackled into flame a yard away, and I turned to see one of the Wheeskricks in the lock en-

trance, a weapon in his hand. We ran on.

After ten minutes, Claudia was breathing like a broken piston, and I wasn't in much better shape. We went to ground, and I could hear the Wheeskrick thrashing around in the underbrush a hundred yards away. But now we were in our element, not his. We lay silently, and he passed us by, half blind in the high actinic light of our sun, laboring under the drag of his breathing apparatus.

We lay like that, Claudia's head pillowed on my shoulder, for hours. I figured with what I had observed of the Wheeskrick's vision, we weren't much better off in the night than in the day, but we needed the rest; Claudia — now three days without food or water — was in bad shape.

At dusk, while she slept, I worked my way slowly around to a thick wild grape growing up a nearby pine, severed a three foot chunk of it, and brought it back to her. She drank greedily from the hollow core and rested; I figured she would be good for an hour or two of travel. Our ace in the hole was those twenty cannisters. As long as they weren't moved, the Wheeskricks couldn't find them — or so I hoped. And if Claudia and I could make the thirty miles to my home and Pop's ingenuity and those cannisters, we might have a fighting chance.

We kept off the roads until we reached the outskirts of Carson's Corners, which are about a nine-iron shot from the inskirts. There is a truck stop in Carson's Corners, and I slicked my hair into some semblance of order and went in alone and bought a sack of hamburgers to go. We hunched together in the shadows behind the stop and ate greedily, while I watched for a chance to steal a ductor. I hated to do it, but I figured we could square it later, and my first assumption was that the Wheeskricks would be looking for two people on foot.

I toyed with the idea of calling the Highway Patrol, but when I thought of the problem of trying to convince anybody who hasn't seen the Wheeskrick ship that there was such a horror loose in the county, I gave up. Even if I could convince them, what could they do?

A middle-aged couple parked their '84 Buick with its turbine still turning and headed for the rest rooms. I bundled Claudia through the door and crept silently out of the parking lot and onto the highway. At the edge of town I waited until a trucker pulled out toward Morgantown and drove in the shadow of his tailgate into and through that metropolis. My second assumption was that the Wheeskricks could very well be up there a few hundred feet in the air, their black ship all but invisible, prepared to jump any single car going down that road alone.

Outside of Morgantown, the trucker turned off on the Washington Pike, and I drifted to the side of the road under a spreading maple. We waited until midnight, but nothing else came along. I could feel that black ship up there, detectors alert, waiting for something to pass

down the road. Then somewhere behind us, on the outskirts of Morgantown I suppose, a drive-in theater let out. For a few minutes the road was crowded with ductors, and I swung out into the midst of them and let them convoy us all the way to Pop's yard. I parked the stolen ductor behind the pile of defective zinc coffins, which graces the area between the road and the house, and sat there for a while, too weak to move.

After a bit, I helped Claudia out of the ductor and into the house. Buzzy was home and so was Pop. Phyllis came down in curlers and a robe.

We must have looked a sight. "Jeez! Perce," said Buzzy.

"My lord, son!" said Pop.

"Oh you poor thing," said Phyllis, reaching out to Claudia.

"Pop!" I said, lapsing into my childhood West Virginia speech, "don't move them goddamn cannisters! Not an inch!"

And then I dropped where I stood. I guess I was pretty tired.

IX

The real secret of Pop's success as a junk dealer — apart from the philosophy and principles I have already described — lay in his genius for putting two or more pieces of useless machinery together into something that would bring a big price. Pop had a reputation all up and down the Eastern Seaboard, and the way it worked was this:

Suppose a widget manufacturer in Brockton, Massachusetts, gets a sudden rush order for a million biformed widgets with knobs on to be delivered (under time penalty) within sixty days. His production capacity is based almost entirely on the number of fully-automated widget-making machines he has in service. And if he hasn't got enough to allow him to fill the lucrative order, or if one of his machines is broken down and can't be repaired in time, before he says "no" to the order, he gives Pop a call.

"Mr. Sansoni, can you haywire together a widget-maker with a 400 widget per hour capacity? I'll need it by Tuesday."

Maybe Pop has never heard of a widget, but he always answers in the same way. "Sure. Send me the prints and tell me how long it's gotta last." And that's Pop's secret. Send him the blueprints for a widget-machine, and he'll make you a widget-machine —out of junk. It may not be a very efficient widget-machine and it may not last a hell of a lot longer than the requirements of the job (although it's surprising how many improvement patents Pop has sold — metaphorically speaking — to widget-machine manufacturers), but the widget man gets something that will do the job, and Pop turns low-cost junk into high-priced industrial machinery.

That's why we have an 8000 foot landing strip out back of the yard. My earliest memories are of great cargo aircraft lumbering into that strip to pick up some complex piece of haywire Pop had spent the night crating for shipment. Of course, now the strip is mostly weeds and scrub pine; the flitters don't need anything

like that kind of space to lift off from.

Anyway, as you can see from all this, I wasn't much use in the real operation of the family business. Sure, I could help out occasionally with a bit of wiring, and I wasn't bad with a cutting laser. But next to Pop and Buzzy I was all thumbs, and I didn't have that trick of seeing how you could take the turbine from a '79 Olds, two refrigeration units mounted back to back, the fusion chamber from a field generating plant, and most of the guts from a surplus radar set and put them all together into a workable widget maker. Besides, I'd been gone too long and I didn't know where anything was anymore. And in a junk yard the size of ours, that's as important as anything else.

And that's why it was that I found myself working as combination bookkeeper and purchasing agent for the business, along with handling Pop's occasional legal problems. Pop didn't mind giving up the bookkeeping, but he hated to miss out on the fun of acquisition. Still, he and Buzzy had all they could handle right there in the yard, and I started running around to surplus auctions, plant dismantlings, and other junk yards — like old man Jacobs' — bidding on this and that, doing my bit to *Keep the Stock Up*.

I hadn't given up on my political career. Not by a damn sight. But my only chance was to run as an independent for the Senate seat that would be up for grabs in the fall of '86. I have a good name in the state, and I figured that if I could run a big enough campaign, I could be pretty sure to beat both the regular Party candidates, which would go a long way toward breaking the power of the courthouse gang that had tossed me out.

But such a campaign takes money, lots of it. I figured I had about a year to earn it, and a third share in the family profits — unfair to Pop and Buzzy as it was — seemed like the best way to go about it. I didn't really have much hope that I would be able to accumulate even half what I would need to do the job right, but I had to make the try with whatever resources I could muster.

Sometimes, after a long day passing out my own campaign literature to uninterested housewives at some shopping center or shaking hands with too many limp individuals at some surplus auction, I felt like I was more of a junk man than Pop ever was, trying to salvage something useful out of the old rags and bones that my political career had become.

Funny thing about the sleep of total exhaustion. When I awoke the morning after our escape from the Wheeskricks, my mind was full of campaign worries, thoughts about speeches and posters and 3-D time and how I was going to pay for it all. And then I came fully awake, heard voices outside my window, and the full memory of the events of the past three days came rushing in on me.

I dragged myself out of bed, a little surprised to find that I wasn't a good deal more stiff and sore than I was, and peeked out the window.

A State Trooper was driving off in the ductor I'd swiped the night before, and I could hear Pop explaining to another Trooper something about "them no-good juvenile delinquents" and how they must have abandoned it here and so forth. Pop is not without imagination in a pinch.

I showered and shaved and went down to the veranda, letting my nose guide me to the stacks of flapjacks and bacon there. The kids were already off playing in the coffins in the front yard, and Pop was just coming in from his talk with the Troopers. Claudia, despite her three-day ordeal, looked fresh — like a million dollars in small, unmarked bills — and she was helping Phyllis turn out the flapjacks and bacon.

Funny thing. We didn't say anything at all to each other at first. She just turned toward me from the stove and kind of lifted her arms, and before either of us quite knew what we were doing, I had my arms around her and she had hers around my neck and we kissed. I guess it lasted a pretty long time.

Buzzy was grinning. Phyllis looked like she was going to cry a little bit. Pop looked mildly disgusted. "When you're all done, Perce," he said, "I'd 'preciate it if you could tell us where'n hell you been since I last seen you on the Morgantown road."

I flushed a little bit and looked at Claudia. She was cool as a cucumber and went back to slicing bread and feeding it into the toaster.

I filled in Pop and Buzzy between bites of flapjack. I told them about the Wheeskrick ship and the Wheeskricks and how it looked like they didn't really *fit* in their ship somehow. I told them about how old Jacobs had swiped the cannisters and about my theory that the Wheeskricks couldn't see very well in our light and depended on their detection system to locate the cannisters. I wound up by stating the problem as I saw it: getting the cannisters back to the Wheeskricks without incurring a visit from them. I guess I had in mind some sort of remote-controlled ductor we could send off down the road loaded with the twenty cannisters.

Pop's look of disgust deepened. "I ain't *about* to give them things nothin'," he said. "Not after what they done to you and Buzzy and poor old Ed and Billy."

"But Pop," I said, "those cannisters *belong* to the Wheeskricks. And anyway, you can't very well call up the Highway Patrol and expect them to believe anything as wild as this."

"I ain't goin' to call up nobody," said Pop. "And as far as the cannisters belonging to the Wheeskricks, didn't you say it looked like they didn't really fit in that ship? Like maybe it was built for someone else? I bet they highjacked that ship just like they coldcaulked Buzzy here."

I got legalistic and quoted something out of Blackstone to the effect that two wrongs don't make a right and that even if the cannisters were stolen property (several times, that is: the Wheeskricks stole them from some rightful owner, and Jacobs stole them from the Wheeskricks), we still didn't have any legal title to them.

Pop thought a minute. "All right, Perce. You want it nice and legal. I know a little sumpin' about the Law. What do you call it when a guy unloads cargo on your property and has to pay for storage?"

"Demurrage," I said.

"Yeah," said Pop, a note of triumph in his voice. "And what happens if he don't pay when he unloads his stuff?"

"Well," I said, "under the Law Merchant, the wharf owner can claim up to the value of the goods for non-payment, providing . . ."

"See!" said Pop, fairly cackling in triumph. "Them's our cannisters until some court decides different, and I'll bet anything it's up to the Wheeskricks to take it to court, certainly not us."

"My God, Pop, you can't apply common law to a situation like this."

Pop paid no attention. "And just think what them cannisters must be worth!"

The word "worth" struck a responsive chord in me, and the legalisms began to give way to shysterisms. I needed money, and this could be the windfall that would pay the printing bills and maybe buy some 3-D time, and . . . . And maybe it was sheer rationalization, but the memory of that tank-truck driver suddenly arose in my mind. It seemed to be a fixed part of the Wheeskricks' *modus operandi* to set up a violently constructed roadblock whenever they wanted to intercept cannisters on the move. My idea of a remote-controlled ductor would be almost sure to cost at least one more life.

I became very silent as Pop and Buzzy began to talk about ways and means of moving the cannisters without activating the Wheeskrick detection system.

As they talked I became aware of Claudia again, and I broke into their technical plotting.

"All right," I said. "I'll go along with you. But you better figure from the start that the only way to get out of this in one piece is to suck those birds in and eliminate them, and if there's going to be that kind of rough stuff around here, we better plan on getting Phyllis and the kids and Claudia the hell out of here."

For a change, Pop and Buzzy agreed with me, and the three of us started to hatch plans which would get the women and kids off the premises.

Phyllis responded first with a sweet and dulcit: "Cut the crap, Buzzy, I'm not going anywhere."

Buzzy subsided meekly.

Claudia just looked at me and grinned. "Now Claudia," I said, "there's no reason in the world . . ." My voice trailed off.

Pop looked at Buzzy, and then he looked at me. The look of disgust on his face deepened. "When your mother was alive, why when I said something, she . . ." Pop stopped and shook his head. "Keerist," he said and went back to drawing diagrams on the table top. Claudia and Phyllis started cackling at each other and resumed their work at the sink. For a lawyer who was once pretty good at trial work, I was not batting very well that day.

X

By noon the Wheeskricks problem was still without a solution, but Pop had shrouded the parked pickup containing the cannisters with several layers of copper screening, carefully grounded to the pickup frame, just in case the cannisters were radiating something the Wheeskricks could detect.

Pop and Buzzy argued most of the morning on the best way to get the Wheeskricks. Buzzy was in favor of rigging the pickup for remote control as I had suggested and then laying for the Wheeskricks ship with a couple of 75 mm recoilless rifles. But I piped up about the women and kids and said I wouldn't have anything to do with a shooting match. Pop just grunted and gave Buzzy his pitying look. "I ain't never had no chance to get me a space ship before and I ain't about to shoot this one full of holes."

Then they debated running a heavy cable out into the boondocks well away from the house and wiring the cannisters good and hot to ground. Pop almost bought that one, until I pointed out that while we might fry the first couple of Wheeskricks who caught the loading detail, it'd still leave one or two inside to fight back, burn up the countryside with their lazbeams or, at the very least, shag on out of there when their buddies got cooked.

That stumped us for a while, and you could see the gloom gathering. To lighten things a bit I suggested that maybe what we needed to get all the Wheeskricks out of their ship

at once was a good supply of lady Wheeskricks. Nobody laughed. Pop said: "The way you described 'em, how do you know they ain't already lady Wheeskricks?"

He had me there, and the gloom deepened.

We sat there like three dummies while the women busied themselves in the kitchen with lunch. I wanted to be done with the whole thing, to take Claudia and shove off for far places where there were no life-or-death problems. With Claudia there, and the promise of what might be, I was even losing some of my despair about the election. Some of it, but not all.

Then Pop got his idea. Phyllis was pulling and heaving on the long dining table on the veranda, trying to pull it apart so that an extra leaf could be inserted. But the catch was in an awkward position, and the slides were old and sticky. It wasn't until Claudia came and got a firm grip on the far end that Phyllis was able to pull her end out enough to open up the space in the middle.

"See," said Pop. "There're just some things that take more'n one to do." He pulled an old envolope out of his pocket and began to sketch with the stub of a pencil. "Looky here, boys. We gotta build us something like this and drop it down over them cannisters."

And by evening we were finished. Pop had welded up a kind of bottomless cage, a shallow affair made out of reinforcing rod and channel iron. It was just wide enough and long enough to fit down over

the cannisters stacked two high and ten long. In the center of the top of the cage was welded a cast iron collar, part of the clutch housing from an '83 Ford, through which Pop had bored four radial holes. Out in the strip, half a mile from the house, Buzzy and I sank the massive piston from an old pneumatic lift into the ground and anchored it upright with a couple of yards of concrete.

Along the top of Pop's cage ran four spring-loaded rods designed to extend inward from each corner, through the holes in the collar, and into matching holes bored in the pneumatic piston and lined with insulating ceramic. Once lowered over the piston with the rods seated through the collar into the piston, there would be only one way to remove the cage and get at the cannisters underneath: someone had to be at each corner to pull back the rod. Four corners meant four Wheeskricks. At least that's the way Pop had it figured.

But it didn't quite work out that way.

It was nearly dark when we had finished. Pop had run the old M-70 out to where we had planted the piston, the cage dangling from the M-70's A-frame. We stashed a thousand KVA MHD generator in a little patch of brush a hundred yards away and ran a heavy cable out from it to the cage. One lead Pop bolted to the cage; the other we tack-welded to the piston for a ground. The earth was moist from recent rains, and if the Wheeskricks were even halfway decent conductors, they should get a good jolt. At least that's the way we figured it.

Pop looked everything over and nodded with satisfaction. All that was left to us was to run the pickup full of cannisters out, unload them under the dangling cage, and lower it into place. Judging from the time it had taken the Wheeskricks to detect us when we had driven from Jacobs' yard two nights before, we would have a good quarter hour before we could expect them, after we once moved the cannisters.

Buzzy was all for going ahead with it immediately. But Pop wanted to give the concrete a little more setting time, and I reminded Buzzy about the Wheeskricks vision. "We're going to need every break we can get," I said. I was feeling pessimistic and more than a little scared. I wished we could persuade Phyllis and Claudia to take the kids and leave.

We slept fitfully that night, and at five in the morning Pop was up and dealing out weapons from his store in the basement. I took one of the 75-shot carbines and looked longingly at the 55 mm bazooka. But I remembered the hard, pitted surface of that ship and gave it up. Pop probably would have objected anyway.

As if we'd been practising it for weeks, we drove the pickup out to the cage and off-loaded the twenty cannisters in a matter of minutes. In my mind's eye I could see those Wheeskricks huddled in front of their detection screen whistling and chattering as the blips began to appear.

Pop pulled the M-70 into position and lowered the cage down over the piston. The four rods sprang home with a solid snap. Buzzy cast off the winch line, and Pop took off in the M-70 for the brush patch with the generator.

Buzzy and I went to ground in a drainage ditch fifty yards away in the opposite direction and began to survey the sky in the direction of Morgantown.

It was just a little after sunup and a fine day. There were chicken-hawks wheeling in slow, precise circles over the woodlot down by the stream. Cicadas were beginning to saw away in the heavy dew, and from somewhere way off to the north there came the faint, casual clank of cowbells as some farmer turned his herd into pasture. The faint whine of the MHD generator was the only other man-made sound.

Then right on time the Wheeskrick showed up. Their ship was low, not more than a couple of hundred feet off the ground, and it zigzagged slightly, like a hound coursing after scent. Then it locked on, flew swiftly to the strip and settled silently a few yards from the stacked cannisters. There was an eerie silence, and then the turret winked into life, and the M-70 glowed cherry red and began to burn. Its fuel tank went off with a shuddering blast, and the A-frame crumbled into ruin. The turret winked off. Buzzy and I dug our noses deeper into the grassy bank of the drainage ditch. I hoped Pop had had sense enough to dig in in his brush patch.

The round hatchway in the side of the Wheeskrick ship swung open, and two came out, their goldfish bowls shining in the morning sun. They looked around carefully, saw no sign of life, and stepped down to examine Pop's handiwork. They heaved at the cage and jiggled it and then spotted the spring-loaded bolts. One of them loped around to the far side, pulled back one bolt and stretched to reach the other on his side. His waving tentacles were inches short.

He rejoined his fellow and waved three tentacled arms in a curious pattern. We could hear his whistling and screeching through the goldfish bowl and fifty yards away. There were two formidable Wheeskrick shrugs, and one of them did something to the top of his goldfish bowl and pointed a waving bunch of tentacles at the ship. The hatch closed and a moment later reopened. Two more Wheeskricks joined the first two and watched attentively as the first two gesticulated and wiggled their tentacles.

As the four took up their stations at the corners of Pop's cage, Buzzy dug me in the ribs. "We got 'em. Perce! We got 'em!"

I heard the faint whine of the generator deepen into a growl as Pop threw the breakers in.

The Wheeskricks went on about their business. They released the bolts and started to lift the cage up and off the piston. There was a flash of fire as the collar of the cage brushed against the piston. I heard the clatter of breakers going out and then being shoved back in manually.

The cable leading to Pop's brush pile glowed red and broke into smoking flame. Whatever else they were, the Wheeskricks were dandy dielectrics, and if they felt anything at all from the jolt Pop was giving them, they didn't show it.

But the glowing cable showed *them* something. They pitched the cage to one side and opened fire at Pop's brush patch. I got the carbine in position and started plugging away; Buzzy blasted with his lazgun. I took my time and aimed for fishbowls. I shot two, and two Wheeskricks lay rolling and gasping on the ground. Buzzy's lazgun hung on a third until he went screeching and whistling toward the rear of the ship, stumbled, and fell rolling, his fishbowl and tank bouncing away from his grasp.

The grass in front of us flared, and Buzzy cursed. His hair was burning, and he dropped the lazgun to beat out the flame. The remaining Wheeskrick made a dash for the open hatch, and without really thinking I was on my feet and running through the burning pastureland to intercept him.

Wheeskricks are faster than people, and he beat me by a good ten yards. I snapped a few rounds from the hip as I ran and saw him spurt rusty fluid and drop pulpy tentacles, still writhing, on the ground. Then I was at the hatchway, thrusting the carbine barrel into the rapidly diminishing gap between hatch and jamb. The barrel glowed red, and the stock began to smoulder; but it was good steel, and the Wheeskrick abandoned his attempt to burn it out of the doorway. I heard the inner lock open and choked at the rush of chlorine. I took a deep breath, pried with all my might on the ruined carbine and plunged into the red dimness within.

The Wheeskrick lay just inside the inner door, viscous fluid pouring from one ruined shoulder. His five remaining arms scrabbled at the lock on the door, trying to shut it. Blinded by the chlorine, I flailed at the figure before me. Something hard smashed me in the face, and I felt teeth loosen. I jabbed with the carbine, caught a glimpse of yellow and jabbed again. Something pulled my feet out from under me, and I fell heavily, swinging as I went. There was a crunch of plastic, and then fire flared in my face, and I saw the fire envelop the Wheeskrick and my own clothes start to burn. As I started to take a deep breath, I felt hands — not tentacles — dragging me back toward daylight.

XI

Claudia was giving me mouth-to-mouth resuscitation, when I came to a quarter of an hour later. I kept my eyes tightly closed and enjoyed the treatment. But she must have been able to tell from my more regular breathing that I was on the mend, and she stopped. I opened my eyes, looked up at her tearstained face and the blue sky and the chickenhawks beyond.

"Oh Perce!", she said. I smiled and winked one bloodshot eye.

We went back to the resuscitation treatment.

After a bit, I thought about Pop and sat up. Three Wheeskricks lay where they had fallen around the cannisters and at the rear of the ship; the fourth was hanging dead, half out of the hatchway. Pop was cursing in a steady monotone as Phyllis rubbed some kind of salve onto his burned neck and shoulder. Buzzy was holding a handkerchief over his nose and peering in over the dead Wheeskrick at the interior of the ship. I got to my feet and hobbled over to them.

Buzzy looked around as I approached. Most of his hair was missing, and the bandages on his burned back were singed black. "You okay, Perce?"

I felt for the burned places on my cheek and forehead. "Yeah, but I'm glad I had my campaign pictures taken before this started."

Buzzy turned back to his inspection of the ship. "It's going to be a while before we can get in there to look around."

"I'm in no hurry," I said. "I been in there too much already. All I want to know is how much dough we can get for it." Buzzy, who at the moment was full of the purest scientific curiosity, looked blankly at me. "Oh yeah. Your campaign."

We walked to the cannister pile, but Pop was already ahead of us. He had horsed one of them free from the pile and was examining the sealing band. "Here, Buzzy. Take a look. I'll be dipped if I can figure out how this thing opens."

Buzzy bent over the strip to inspect it and then pulled a pair of pliers from his coverall pocket. He got a good grip and pulled. His face grew red and his knuckles white. The end of the strip didn't budge. He stopped and wiped his hands on his coveralls. "Maybe this isn't a sealing strip." he said. "Maybe there's something else."

Together the three of us rolled the cannister over and over, examining every inch for some means of opening it. "No wonder old man Jacobs sold you these things so cheap Perce," said Pop. "He couldn't figure out how to open the cotton-pickers."

I thought back to Jacobs' yard. "He must have opened one," I said, "or found one already opened. There was the one he'd put the MHD in."

"Say," I said, "that one wasn't open along the end at all, come to think of it. It was split right down the middle."

Pop got down on his hands and knees and took his glasses off. Without his glasses, Pop has about four power magnification in his near-sighted eyes.

He found the hair-fine crack that ran the length of the cannister, and mid-way along it he found a slight indentation. "Looky here, boys," he said, laying his thumb in the indentation.

There was a soft, chiming sound and the quiet hum of delicate machinery. Pop sprang back in surprise, and the cannister slowly split open along its seam, the two halves swinging slowly back from each other until they both lay horizontal.

From where I was standing I could see only one half; it was

packed with a fantastically complex mechanism, like three running yards of swiss watch, digital computor and heart-lung machine all carefully fitted together. All that had been covered by olive-drab Army packing paper at Jacobs, but I marveled at Jacobs selling the cannisters off as he did. He must have known the Wheeskricks would be coming after the cannisters and unloaded them in sheer panic.

I looked at that cannister and saw dollar signs and campaign posters and 3-D time. I looked up at Pop, across the cannister, and saw shock. I moved toward him and looked back at the cannister.

A man lay in the other half. An old fellow, maybe sixty or so. His eyes were open, and he was grinning at us. He was naked as a jay bird.

He sat up, did something to the maze of instruments in the cannister's other half and climbed to his feet, stepping gingerly out onto the grass. He looked about him, taking in the ship, the dead Wheeskricks and the five of us. Then he bowed to Pop, crooked his elbow and swung it in a short circle in some sort of ceremonial gesture and said something like "Sally Constantinople." Pop, who has dealt with a lot of odd ones in his life, didn't blink an eye. He crooked his elbow and waggled it in the same sort of stiff gesture and answered: "Sally Constantinople, to you, buster."

The naked old man laughed, a nice human laugh, and walked with a quick and springing step to the hatch of the ship. The chlorine had pretty well dissipated now, and we all crowded in after him. He looked at the jury-rigged sleeping rack of the Wheeskricks with a frown of disapproval and then strode to the complicated control area, seated himself in one of those very human-looking chairs and began to examine various instruments with practised sureness, occasionally snapping a switch or turning a dial, nodding with satisfaction at the results he read off.

He rose then, and we followed him back outside to the pile of cannisters. He carefully picked over them until he found what he was looking for and began to heave one clear from the others. He was an old man, and Buzzy and I leaped to help him. In the same way, he found two more, and we helped him line up all three on the grass.

He thumbed all three open. Out of two stepped men, one middle-aged and one who looked about as old as Buzzy. From the third came a girl.

Funny thing about women. Neither Claudia nor Phyllis had said a word during all this, exhibited no surprise at the masculine nudity, but when that girl rose, displaying firm breasts and smooth shanks to the West Virginia sun, both women started off for the house. "I'll bet they're hungry," said Phyllis, eyeing Buzzy with a speculative look. "Yes," said Claudia. "And cold, too. We'd better get that poor girl something to cover up with." It was at least eighty by that time in the morning!

Well, that was the end of the business. We helped the three men

and the girl carry the cannisters into the ship and stow them in the after cargo compartment with the other 200. We helped them tear out the Wheeskricks' make-shift sleeping racks, and we brought up a couple of milk cans full of spring water to top off their tanks. They ate the sandwiches Phyllis and Claudia brought, but declined the offer of clothing with polite smiles.

Then we had a session with a pencil and one of my yellow legal pads, and they drew pictures much as the Wheeskricks had done, explaining how they had been underway for a long time, maybe even hundreds of years—the time symbol was confusing. As passengers on the ship, they had no way of knowing just how it had happened, but the evidence they now had suggested that the Wheeskricks had somehow taken over the ship at some way-station, killed the regular crew (Jacobs' empty cannister?) and stolen the ship and its encapsulated passengers. I couldn't understand why the Wheeskricks wanted the passengers so much, and the pictures that appeared when I tried to ask didn't help much.

But that was the end of the business anyway. By noon, all four had waggled their elbows at us and said "Sally Constantinople" to us several times and had smiled great appreciative smiles as they presented Pop with a small ceramic vase—a real work of art, I'm sure—and entered their ship, which now, with new inhabitants, didn't look nearly so formidable and frightening as it had before.

There was a shimmer of air under the ship, a faint whine and then a rapidly diminishing dot in the sky. The chickenhawks stopped their circling for a moment to watch and then went back to work. The spot disappeared, and I stopped craning my neck and lowered my gaze to more mundane things.

Claudia and Phyllis were gathering up paper plates and empty beer cans and shooing the children back toward the house, just as if they'd finished a perfectly ordinary picnic in the State Park over at Olney. Pop was bent over a spade, excavating a grave for one of the Wheeskricks. Buzzy slumped over toward us, the doleful look on his face matching mine.

Pop finished his work and pried the dead Wheeskrick into its shallow grave. He looked at me, and then he looked a Buzzy. "What's the matter boys? You both look so down in the mouth you'd think you been eatin' baby ducks." Pop cackled at his own wit, but neither of us cracked a smile.

Buzzy shook his head in sorrow. "I don't know, Pop. Just disappointed I guess. When I think what we could have learned from that ship, from anything in that ship! If they'd just have given us anything but that damn vase."

Pop said: "The trouble with you, Buzzy, is you just ain't no art lover." He had something up his sleeve, but I was too depressed to notice it. He

looked at me. "And what about you, Perce. What's got you so unhappy?"

I shook my head. "I guess I'm just disappointed too, Pop. I should be thankful that we all got out of this business more or less healthy, but I guess I was kind of counting on getting something out of it, something we could raise a fast buck on." I felt ashamed of myself. My motives weren't anywhere near as honorable as Buzzy's pure love of science.

"I guess I wanted that Senate seat pretty badly," I said. "And all we've gotten is four dead Wheeskricks to bury."

Pop leaned on his spade and gave us that "how-did-a-smart-old-man-like-me-get-such-stupid-sons" look. He stripped the lid off a fresh can of beer and downed half of it at a gulp. Then he strode toward the brush patch, beckoning Buzzy and me to follow. He pulled back the limbs of a scrub cotton-wood and there in the weeds lay four cannisters.

Buzzy said: "Jeez, Pop. How'd you manage that?"

"I snuck 'em back off the ship while they was eatin' Phyllis' sandwiches and drawin' pictures for you boys."

I felt sick inside. "Pop" I said. "Don't you know that there are four human beings in there! You can't *do* this!"

Pop took a long pull on his beer and heaved the empty can off into orbit somewhere up near the chickenhawks.

"Aw heck, Perce. What do you think I am?"

"I'm a junk dealer, Perce."

"These here are the empties."

END

Thrilling New Story by a Favorite Writer!

EDGE OF NIGHT

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These and many others will be in the next exciting issue of *If* — don't miss it!

Dear Editor:

When I first saw the table of contents in the April 1966 issue of *If* I almost fainted. *Our Man in Fandom*, my father's mustache, shades of Sergeant Saturn! What is Kiwi Carter trying to pull? But just the same I leafed to page 75. I was determined to bear it out; when I finished page 79 I had changed my whole opinion. Yea, Kiwi Carter, good show and all that. Let's have longer articles in this series, I'm for them. By the way please pass the xeno.

Oh, I read the rest of the issue too. It was of course great, wonderful, even good. The Laumer/-Brown serial looks promising. But I must congrat you on your first; it was one of the best I have seen. Let's have more of Kiwi Brown; he is good. Do you know a good fanzine or a good SF or fantasy club looking for readers or members?—William Costella, 23 Proctor Circle, Peabody, Massachusetts 01960.

* * *

Dear Editor:

This is one of my very infrequent letters to editors, and if you think it is going to be another of those *If*-is-a-wonderful-magazine letters in Hue & Cry, then you are wrong. It won't. Still, you will find enclosed a bank check for a renewal of my subscription. I have tried to figure out why I want to subscribe to a magazine I don't like, and I think I have found the answer. *If* is the most exasperating magazine I read. Every issue gives me 166 pages to complain about, and as I am an all too kind, sweet and forgiving character, I have to brush up on my deficient nastiness to be able to survive.

Take Robert A. Heinlein. You print three of the novels of the best all-round science-fiction writer to date — and they have to be three of his worst. *Podkayne of Mars* jumped from culture to culture and dissolved into good sf's worst enemy, the Big Chase. *Farnham's Freehold* was talkative, long-drawn and disorganized. I had high hopes for *The Moon Is a Harsh Mistress,* but it turned into another discussion protocol. Oh, the details are wonderful, as always with Heinlein, but the presentation is a flop. Only very few novels survive a first person singular treatment, but ever since Robert Graves's *I, Claudius* authors seem unable to resist it.

Graves's story could not be told in any other way, because the story was the man who was supposed to tell it and who, because of his position, could have no other way to tell it than in an autobiography. But the revolt of a lunar colony is not a story which could be told from only one single viewpoint. And therefore the autobiography's all inherent faults show glaringly, made infinitely worse by Heinlein's choice of narrator. Professor de la Paz would have written an autobiography to set the record straight for future historians, and he would have enjoyed writing it. Stu LaJoie would have written for the fun of it. Wyoh would have written to give the others the honor due them . . . and every one of them would have written an even more enjoyable story than Manny's because they all would have placed more emphasis on people for the reason than they all understand and work people better than Manny does. A lesser author would have had Manny write the kind of story Stu LaJoie would have written, but Heinlein is that rare than, an author with consistency, and having made the worst possible choice he sticks to it . . . Even a Heinlein flop is better than 99% of most sf, and the novel was certainly the best thing printed in *If* for years — but as usual with *If* it came out worse than necessary.

Start doing something about *If*! Discontinue *World of Tomorrow*, which is even worse, if you cannot get time otherwise, and make *If* grow in something else but wordage. Science fiction should not have to become as stereotyped as the Western. It should not be predictable. If you cannot do something better out of *If*, then by all means leave editing to someone who can and use your time writing. You are too good a writer to waste your time being an indifferent editor.

My best wishes, anyway! — Sten Dahlskog, Tuna Backar 17 A, Uppsala 16, Sweden.

● Funny thing about Heinlein. In his incompetence to make the right basic decisions about how to write a story, he nevertheless manages to make his characters come so much to life that every reader knows at once what he should have done to make the story better . . . and no two readers agree!

There was a lot more to that letter, by the way, but we only had room for about 20% of it (unless we bring out another magazine called *Famous Fan Letters*); we appreciate your letters, friends, but we'd appreciate them even more if they were short enough to print entire.

That about does it for this month. Our "first" is H. B. Michel this issue. Next issue we start a two-parter by A. Bertram Chandler in which he blends two themes he's touched on before — the Rim Worlds, and those wonderful mutated rats from *Giant Killer*. After that . . . well, stick around and see!

— The Editor

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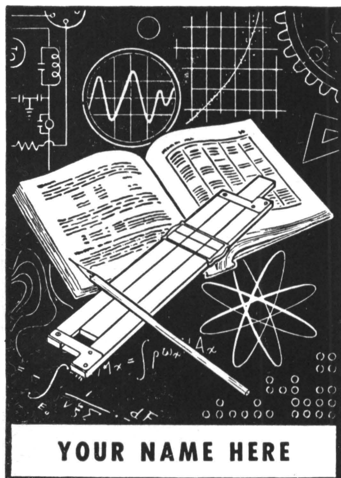

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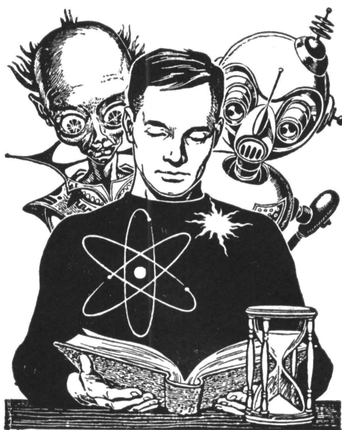

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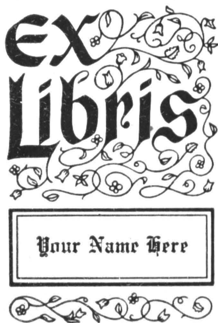

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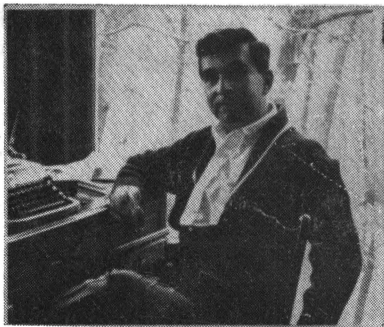
By Max Shulman



Frankly, I don't know. But this I *do* know: when I was running the Dobie Gillis show, I often paid $2,500 and more for scripts turned out by people who should have been arrested for impersonating writers.

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*Bennett Cerf, Bruce Catton, Faith Baldwin, Bergen Evans, Mignon G. Eberhart, John Caples, J. D. Ratcliff, Mark Wiseman, Rudolf Flesch, Red Smith

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