

AT LAST... A CHEAP EDITION



ALIEN VIRUS

BY

JOHN RACKHAM

CHAPTER I

THE chairman was not a very good speaker. He was a small, slight man, with a gentle voice which tended to crack when he got excited. His audience, however, did not mind that, at all, nor did they worry unduly when he stumbled a little over the words he was using. He had a big name, a very big name, in formaldehyde and phenolic resin technology, but electronics and nuclear physics were out of his field, and he knew it. He was brief, therefore, and very relieved, when he had ended his own tribute to the speaker he was introducing.

"And so," he concluded, "I am happy to present to you Doctor Sven Norden—pick your own letters of the alphabet, he has them all——" There were appreciative chuckles "——the inventor of the space-drive unit which bears his name, and many other wonderful things, some of which he is about to describe to us now. Doctor Norden!"

He sat, gladly, and prepared to listen. A hissing secretary signalled to him from the side of the platform, but he refused to be attracted. Norden, squat, burly, white-haired, his iceblue eyes deceptively mild, acknowledged the restrained applause with a modest grin.

"I want to say, right off," he began, in his rumbling bass, "that I haven't been holding out on you because I wanted to. I've been lucky enough to make a few discoveries in my time, and there's no percentage in it for me to hide them. I just haven't had time to get these latest ones all figured out neat so that I could write 'em down, that's all. Not so as they make sense, anyway. Even now, I'm not sure that I understand it all, myself." His audience chuckled again. In that little lecture-room was

gathered the cream of the able in the world of science. Every one of the hundred-odd men and women present knew "Steve" Norden, and his almost uncanny facility for making discoveries "by accident".

"These latest ones," he told them, "really grew out of what I did a long time ago, when I was lucky enough to happen on a method of fissioning magnesium. I guess just about everybody knows about the 'Norden' pile—how it's well-nigh fool-proof—how it gives no radio-active end-products, just neat electron-energy by the car-load. You all know that it's standard drive in all our space-craft. I don't want to go into all that. What most of you won't remember, till I remind you, is that I figured out that reaction every way I could, before the first test-model was built, and the results, when they came, didn't tally with my figures. Oh, sure, the unit worked, it worked fine—and nobcdy gave a hoot for my figures."

There were one or two frowns in the audience, now, and the silence was absolute.

"It was a long time ago," he mused. "The pile was, and still is, a big success, it has made me a rich man, so who's going to worry?" He paused again, and there were many who wondered what "Steve" was up to, this time. "I worried," he told them, boomingly, "I liked the figures I had worked out, I thought they were right, I said so, at the time, and there were a few who were just interested enough to check them over; but nobody minded much. 'So what! it works, there's all the juice we need!' That was the general reaction." He paused again, to survey them with his clear blue eyes.

"Of course, at that time, Space Service was new, exciting, bung full of problems. There were plenty of other things to keep me busy. I like problems," he sounded almost wistful. "But, about six years ago, I began to get bored with Space Service. It was slick, smooth, efficient and dull. So, I pulled out, with the brightest bunch of technicians I could get hold of, and we started to look for that missing third; that one-third output that wasn't getting out-putted from the pile. We found it!"

The audience was absolutely still, now. The chairman, as interested as anyone else, caught a glancing view of his secretary, still signalling, excitedly, and waved him out of attention with an irritated gesture. "Why don't you go home," he mouthed silently.

"We discovered that the pile was putting out all the power my figures had predicted, but that one-third of it, the missing third, was being broadcast. Megawatts of power, friends, broadcasting on a tight band in the micro-wave region; so tight that if I told you the wave-length, you'd still have the devil of a job to detect it. We got it more by accident than anything else, and we wouldn't

have got it, even then, if we hadn't been looking for something of the kind." There were chuckles, again. This was typical of "Steve" and his so-called accidents.

"I don't have time to give you all the details of what we have found, but I would like to tell you about two of the more immediate applications. We had to figure out a whole new technique in radio transmission and reception. We have done that. We have also devised an efficient method of picking up and using the broadcast power. You all know what a whale of a lot of work is represented by those two simple statements. Let me just give you a few more figures, and then I have something to show you. First, then, this radio power-wave is detectable, by our techniques, over quite a distance. So far we have not been able to put a limit on it. We have managed to get strong signals from as far away as the outer asteroids."

A little ripple of astonishment spread over the quiet throng. "We are able," he boomed on, "to transmit, and receive, high fidelity, interference-free sound-radio, at that distance." The ripple became an audible gasp, "and full-colour, threedimensional picture signals over at least a million miles." gasp became a groan, and the distinguished gathering was on its feet, excitedly. The chairman banged furiously with his gavel. Amid the hubbub, Norden stood quite placid, immensely quiet, an almost mischievous smile on his ruddy features. As the chattering clamour died away, he groped in the baggy pocket of his short jacket, and produced a small, brightly-gleaming object, no bigger than a cigar-case. He stood it, on edge, on the table in front of him. With the other hand he produced, from the opposite pocket, a similar object. This time it was a cigarcase, as he proved by extracting a stumpy weed, which he lit, carefully. When it was going to his satisfaction, he hefted the case in his hand, held it a moment against that other object, as if for comparison, then slid it into his pocket. In the intense silence the little group on the rostrum, and the few in the front row who had caught a whiff of that atrocious cigar, fought to hold back their coughing.

"I promised to show you something," he rumbled. "This——" and he stroked the bright thing with pudgy fingers, "is a two-way set, a transceiver. With it I propose to let you hear, first of all, the voice of the technician who made it, one of my bunch, and my very good friend—we have called the whole new system the 'Z'-wave, after him—the best radio-technician I know—Tom Zennar. You hearing me, Tom? How did you like the build-up?"

From the little set there came, thinly, but quite clearly, a slow, deliberate voice. It said:

"Hearing you loud and clear, chief. I like the build-up fine, if only it was true. I'm not that good."

"Tell 'em where you are, Tom," Norden chuckled.

"Sure!" the voice came back, "I'm right here, in your office, about twenty, twenty-five miles off the coast of Florida—say, chief, didja know, some of the boys want to make up a deputation, to have the island officially named—they want it should be called Key Norden——"

"You tell 'em, from me," Norden growled, "that I'll fire the whole bunch out on their ears if they try anything so crazy," but there was no severity in his tone. When the chuckle from the set had faded, he added, "Stay handy, Tom, I might call you back." He turned his ice-blue eyes on the attentive audience. "I don't have to tell you folks just how far away Florida is from New York," he rumbled, "but that's only a starter." He picked up the set, and fiddled with it, delicately.

"You all know, either directly, or by record, the voice of Governor Clarke—of Canal City, Mars. Some time ago I sent the twin of this set, by a young friend of mine, to Clarke, with certain arrangements. If everything has gone according to plan, then Governor Clarke should be sitting at his desk, in Canal City, at this moment, ready to answer when I call. I'm going to call him, now." He moved a tiny control on the set, put it down on the table again, and said:

"This is Norden, calling Governor Clarke, Canal City, Mars—Norden calling from the lecture-room of the Minkovsky Foundation, New York, to Governor Clarke. If you're hearing me, would you go ahead, now. Go ahead, now." He looked at the audience again, and grinned. "That's to give him time to find his notes. You will realise," he paused. "That Mars is a few miles away. One hundred, sixty million, in fact—give or take a few, so it will be some time before the answer gets here. I make it about fifteen minutes each way, so we have half-an-hour. I'll try to answer any reasonable questions?"

There was an immediate response from the front row. It was an obvious question.

"The set is small," he explained, "because it doesn't need any power source of its own. It is using the broadcast power from the nearest pile. In this case, from any space-ship that happens to be anywhere between Space-Base and the orbit of Jupiter." The magnitude of the concept stunned the questioner into silence, but he had hardly sat down before another arose, from the body of the room.

"If you are transmitting a signal to a point on Mars," a long-faced, bespectacled man wanted to know, "you must use some form of beaming—but I don't see any," Norden grinned at him.

"It's there, just the same," he replied, cheerfully. "Remember

this, first. The set is never switched on, or off. The switch you saw was for the transmission modulation only. In other words, the set is continuously transmitting its own fractional value of the power-wave it is picking up. Next, imagine a coil, a rather special kind of coil—constructed to be sensitive to that particular value. In this case, the value of the set now in the possession of Clarke. That coil was, in the first instance, suspended so that it was free to move in any direction. It was then wrapped up in a tiny peanut valve, and fitted into the hook-up in this set, here. So long as that set with Clarke is in existence, this coil will point to it, no matter where it is. To speak to that set, all I have to do is cut in that valve, and energise the speaker. This, you see, is person to person radio, in the fullest sense."

As the bespectacled man sat, Norden went on to give details of the construction of the coil, and the circuits. "It's not perfect," he was frank to admit. "This little set has six preselected contacts, and that's about the limit, in a portable model. Any more?"

"Is it possible to screen, or shield, the power-wave being given out by the pile?" This one came from an older man, at the back of the hall. Norden recognised him as a physicist from Australia, and an old acquaintance.

"It's possible." The burly scientist grinned, ruefully. "But I wouldn't advise anyone to try it unless he's insured. We've tried, and we have found a method, but the results are still something of a puzzle to us. Right now, I can't tell you a lot more, except that I'm lucky to be here to tell you about it, and to add this. Last year a bunch of researchers got themselves into a peck of trouble with some trouble-makers on Ganymede. It's a long story, and you can get the details somewhere else. Cutting it very short, Space Service was able to rescue that crowd, safely, but not before they had tried to shield off the power from the piles they were using. That's why there isn't any Ganymede, any more." A quiet voice from the front row interrupted him. Three astronomers, sitting together, had been busy with pencils and paper.

"We make it twenty-nine point six minutes," their spokesman said. "Mars should be through, any second now." A hush fell on the little room, all eyes on the gleaming metal thing on the table. Moments passed. The silence thickened. Puzzled faces bent to scan wrist-watches, to raise eyebrows at each other. Norden frowned. He was on the point of speaking when the chairman's secretary achieved his brief hour of fame.

"Doctor Norden," he called, nervously. "I've been trying to tell you, all this time—Commodore Gale has been on the visorphone, to speak to you—there hasn't been any radio contact with Mars for the past eight hours—he wants to talk to you

about it!" There was a surge and rustle of excitement, in the middle of which, Norden, like a rock, stood quite still, his face blank with surmise.

"Zo!" he growled, and only that guttural reversion to his Swedish origin could betray how much his calm was shaken. He reached for the transceiver, reset it, said, in a huge voice.

"Quiet!" There was silence, immediately.

"Norden here," he growled. "Norden to Space Base, to Gale—you hearing me, Windy?"

"Steve—you old goat! where the thundering blue blazes have you been? I've been trying to raise you for the past hour——". The little set fairly crackled. He hugged it close to his chest, made a stabbing, pointing gesture with his finger.

"That's him, all right," he breathed, his ruddy face split by a huge grin. "Hear him go——?" The tension broke. Anxious stares were replaced by appreciative grins. He waited until the crackling, yapping voice had to pause for breath, then:

"Hey, Windy—not so loud—you've got an audience at this end. What's all the ruckus about, anyway?"

"Canal City radar beacon quit, eight hours ago," the harsh voice said, now flat and terse. "Can't say any more than that, in public. I'm catching the next transport to Mars. If you want to come along, it leaves in four hours, from now. What say?" Norden took a deep breath, let it out with a whoosh.

"I'll be there!" he roared. "Call you back—later." To the gaping savants it seemed like a conjuring trick, as he slid the little set into his pocket, hopped down off the stage and whisked away to the door, moving with a celerity that was amazing for one of his bulk.

"Sorry, folks," he boomed, over his shoulder, "some other time, maybe——" and he was gone. The sound of clashing gates in the elevator echoed faintly through the swinging door before the quickest of them had time to get to his feet.

On the flat roof of the Minkovsky Foundation, a young jet-copter pilot was rudely wrenched from his day-dreams of his Brooklyn girl-friend by the onrush of a white-haired, heavily-built cyclone in human form who almost fell into his little cabin. A rich rumbling roar hit his startled ears.

"White Sands-and move! I'm in a hurry!"

Several seconds later, as the little machine began to bucket in the hot risers from the canyon-like streets below, the young pilot got in a second breath, and began to unwind a little. It occurred to him to wonder just what the hurry was all about, anyway. He screwed an inquisitive glance at his passenger, and was just in time to see him get out the little Z-set and begin to talk:

"Norden to Gale—O.K. Windy, you can talk now, I'm all alone, barring the cab-driver." The youngster turned his eyes front. His ears reddened, but they kept listening.

"It's pretty bad, Steve. You know as well as I do that the radar beacon can't fail, not by itself. Either it's been shut off—and that's a contravention of Interspace Law, or the operator has quit—and that's ridiculous. The radio is off, too, but that's a minor detail. Reception isn't any too good at this opposition, anyway."

"Radio too, eh?" Norden growled. "Sounds bad, Windy. I was all set for a two-way with Clarke, for a demonstration. Didn't get a peep out of him." Gale's voice was grim.

"That makes it even worse than I thought, if the Z-wave has failed there must be something wrong someplace."

"But the Z-wave hasn't failed," Norden rumbled. "Else we wouldn't be jawing now. More like there's something wrong with the human element at the other end."

"Either way, it's something I want to know about. That's why I'm going myself, personal. I figured you'd want to be in on it, and it's your last chance, anyway. I've grounded all traffic in to Mars, until further orders, on a Solar Security priority." Norden whistled.

"Now hold on, there, old son," he growled. "Isn't that a bit extreme? It can't be that bad, surely?"

"I don't know whether it is or not, and I'm not taking any risks. You know who's on Mars, at this moment, don't you?"

"Well—" Norden temporised. "In amongst forty-thousand people there must be quite a few I don't know about—" He grinned, hugely, at the snarl that greeted his humour.

"You know damn well who I mean," the acid voice snapped. "Our own private merchant of disaster, Lieutenant Fairless. That young man and trouble, just can't stay apart very long. Whatever this is, he's in the middle of it you can bet."

"Sure, I know he's there," Norden admitted. "He took the set for Clarke's broadcast, for one thing. I don't think we need to worry about Frank, Windy. He can take care of himself."

"I know that. It's the unfortunate people who happen to be anywhere near that I'm worried about. It's not everyone that has a charmed life like that young hellion. You can laugh——" Norden did. He knew Frank Fairless as a good friend, a brilliant pilot-officer, an incredibly handsome young giant of an Englishman, with a gift for getting into unlikely situations, and just as gifted at getting out of them again. He recognised this unfortunate tendency as merely the result of a series of coincidences.

Gale, however, as Commodore of Space Service, chose to regard it as a deliberate and diabolical conspiracy on the part of fate, to make his life more complicated than it already was. At least, that was the impression he gave, but Norden knew Gale with all the intimacy of many years of association, and the sharp, acid manner of the little space-man deceived him not at all.

"You can laugh," the sharp voice repeated, "but there's something else, too, and this'll take the grin off your face. Fairless went in S.S.S. Hercules—and he has the puppet with him!"

"Ouch!" Norden grunted as if he had been hit in the stomach. "That's something else again. For once in a long while I agree with you, Windy. This could be serious. Still, no use getting excited—I'm comaing as fast as I can. Signing off, now—got a message or two for my own bunch. I'll be seeing you. Don't let that transport go 'till I get there." He made a delicate adjustment to the set, cursing under his breath as the little 'copter bounced.

"Norden to Zennar-Tom, you hear me?"

"Loud and clear, Chief-what's up?"

"Bad news, Tom, can't say just how bad yet. Do something for me. Get Miss Kate, and her 'gadget', load them all on to the fastest plane you can get, for Space Base, to catch the transport for Mars, due out in about three-and-a-half hours. Just tell her that I said it's urgent. Got all that?"

"Miss Kate—plus—to Space Base—urgent. You going, too, Chief?"

"Yeah. Tell her I'll be there, if I can make it. Can't tell you any more, Tom, but keep somebody listening, just in case I need help."

He shut off the little set, slid it into his pocket, and sat back in his seat, his eyes half-shut in thought.

"Hey, mister!" the young pilot could contain himself no longer. "That was really Space Base you were talking to, just now, and that was the big shot, Commodore Gale—huh?" Norden nodded. "Gee! Then you must be Norden—the Doctor Norden—?"

"I guess I am, at that," the burly scientist grinned. "Why?"

"Gosh!" The youngster was too full for comment. He looked round, at the blue of the sky, at his panel of instruments, at the haze of blades windmilling over their heads, obviously seeking some way of expressing his excitement. Inspiration came to him. "Say!—you wanted to go fast, didn't you?"

"I'm in a hurry, sure. I have less than three-and-a-half hours to get to White Sands, else I miss the transport." The young

eager face glowed, and Norden suddenly regretted his casual words.

"Right!" the pilot turned back to his panel. "I've often wondered just how fast this whistling windmill really can go—so, hang on to your long white hair, Doc—this is where we find out!"

It was considerably within three hours when the little craft bounced to a gentle stop in front of the squat, vibration-proofed offices of Space Base. Norden climbed out on to the pitted concrete apron, thankfully, and turned to watch the 'copter lift and wheel away.

"Long white hair, be damned," he growled, as the downdraught blew that same hair into his eyes. The roar of enginenoise made him turn again, and walk to the field runabout that had come to meet him.

"Hi! Uncle Steve!—hop in!" came the call from the redheaded girl at the wheel. He stared, blankly, at her, then at the harrassed face of the uniformed man at her side.

"What's the idea?" he demanded. "Since when have you been driving the field-truck?" He climbed into the back, and the motor roared into life before he had time to get seated. He grabbed a hand-hold, desperately, as she called:

"We're in a hurry, Uncle, and the sergeant doesn't like to go too fast." Her slim foot trod the accelerator flat to the floor. and the sergeant-driver shuddered for his engine as he saw the speedometer needle climb from zero to fifty-five in one sudden sweep. They howled across the sun-baked concrete, and screamed to a stop in the shadow of the towering arrow-head ferry-rocket. The girl was half-way out of the car before it had stopped moving. "Come on, Uncle!" she yelled, hitting the ground on the run. Her urgency was too infectious for Norden to resist. Despite his growing bewilderment and irritation, he was close at her heels, moving with thunderous speed. Puffing mightily, he climbed the vertical ladder to the hatch, grabbed the hand-hold at the top, and swung himself through the airlock. The door-motors had begun to hum as he fell into a padded seat. The man at the controls sat, unmoving, waiting for those doors to shut. eyes never left the red light which their closing would change to green, and without which his firing-button was inoperative.

There was a solid thump of cut-outs, and, in the same instant, a far-away hiss that grew rapidly into a throaty, shattering roar. Norden felt a huge, invisible hand shove him down in his seat. It swung, automatically, to the transverse-thrust position. He laboured for breath.

"Must be getting old!" he thought, amazedly. "Never knew a 3G to flatten me like this." Seconds later, when the jets cut

their thunderous song, and he was able to sit up, he had a second look at the man in the pilot's chair.

"Windy!" he groaned. "I might have known. Where's the regular pilot? What's this all about, anyway?"

"This thing only takes six," Gale snapped, "and your niece, with her precious 'toy' are equivalent to four. That thing must weigh close on a quarter of a ton. No room for anyone else."

"I knew that was no 3G blast-off," Norden growled. "Had me worried for a moment—thought I was getting soft. But what's the hurry? Have you had any more news?"

"You bet we have," the red-headed girl cut in, as Gale bent his head over his course-figures. "I got here about an hour ago, just in time to get in on a call from Frank, to the Commodore." She wriggled round in her seat to face her uncle, her eyes bright with controlled apprehension. "Uncle Steve—Frank's in bad trouble. He's paralysed."

"He's what?" Norden stared at her as if she had grown horns. Her clear eyes, as ice-blue as his own, met his stare steadily.

"He's paralysed—he can't move, except to breathe. If it wasn't for the 'pup' he wouldn't have been able to call us."

"But how—and what's it got to do with the trouble——" his voice faded as he made the obvious association, not liking it one bit. She nodded as she saw the understanding grow in his face.

"Yes, Uncle Steve—not just Frank, but all of them—the whole population of Canal City—paralysed!"

CHAPTER II

A T the time the Mars beacon failed Lieutenant Fairless knew nothing about it, despite Commodore Gale's gloomy assumptions. He was sitting in the small office that had been assigned to him, in the Administration Dome. In front of him, a pile of papers represented the whole of the work he had done in the fortnight he had been on Mars. There, neatly listed, for later analysis, were the details of twenty-eight possible candidates for the projected expedition of the Star-Jumper; twenty-eight men and women who might be selected to be, members of mankind's first venture out of the Solar System. Far to the north, in Workington, the other city of Mars, Lieutenant Henry Lester, space-mechanic and close friend of Fairless, was performing a similar service.

Lester, more commonly known as "Hank", was seemingly slow and unimpressive in appearance or intellect, but his uncanny sympathy with anything and everything that went on in the innards of a space-ship had earned him the title of the "best space-mechanic on three planets", and the job of recruiting suitable applicants in the technical field. Fairless thought of him, now, and grinned wryly to himself.

"It's not so bad for Hank," he mused. "At least he has Shel with him." He thought, for a moment, of Michelle Laurent, the lovely, dark-haired, dark-eyed girl who had been a competent secretary to Governor Clarke until fate had thrown Hank into her life. With the acuteness of feminine intuition, she had seen the sterling worth under the homely exterior, and now the two were awaiting the ratification of their application to mate. Shel was an obvious choice for "Project Star", for, in addition to her administrative competence, she was fluent in four languages, and could make herself understood in half-a-dozen more.

Fairless idled through these day-dreams, but they soon gave way to a more pressing consideration. He had just been visited by two men, not applicants for candidacy, but just visitors. They had stayed just long enough to say "Hello" and to shake hands with him. Somehow, it had seemed so important to them that they did shake his hand. There was something about those two men that didn't seem quite right. It bothered him. Fairless had a tidy, efficient mind. He didn't like mysterious things like intuition. He shoved aside the pile of forms, leaned back in the chair, and reviewed all that he knew of those two men, hoping to unearth the mystery that way.

They were Lieutenants, Pilot-Officers, like himself. names were Peterson and Slade. They were the only survivors of the ill-fated first survey expedition to Titan. They had touched down that morning, in their life-boat, leaving the research-ship, Survey 38, drifting at automatic orbit-anchorage, nine hundred miles up. They told a gruesome tale of strange and sudden disease that had struck down themselves and the six scientists. For some unknown reason, they alone had recovered, and, seeing no point in remaining, they had blasted off and returned to civilization. Mars was their first stopping-place. Soon, in a day or two, they would leave again, and go on, to Earth. In all, the expedition had been away nine months. He had heard all that over the public address system, just after they had arrived. was an unpleasant story, but there was nothing inherently suspicious in it. Fairless ran strong fingers through his crop of ginger curls, irritatedly.

"There was something!" he muttered. "I'll swear it. There was something not quite right about that pair." He got up, and began to pace the glossy floor of his little office, slowly, six feet plus of husky, efficient man-power, soberly clad in space-black trousers, tucked into the tops of flexible, highly-polished,

black calf-boots. Like everyone else in Canal City, or in the close confines of space-craft, he wore nothing at all above the waist, and the bright light of the concealed fluorescents gleamed on his rippling chest-muscles, as he came to a sudden decision, and reached for his uniform cap. The same light glittered on the gold crest, as he jammed the cap on his head at a jaunty angle and strode out of the office.

With long, raking strides he made his way along the corridors of Administration, heading for the intersecting tunnel to Traffic Control. His route took him past the office of Governor Clarke, chief executive of Mars. The hurrying Lieutenant pictured Clarke preparing his address to the gathering of scientists who would be waiting to hear him, and grinned, thankful to be well out of such publicity. He hastened on, into the Traffic Control dome, wondering a little at the unusual silence of the corridors.

"Wonder where everybody's got to?" he murmured, as he passed through section after section without meeting anyone. At last he came to the great hall which is the first sight the visitor sees on entering Canal City. It has been called, with some aptness, the "Foyer", for the impact of its luxury, glitter and air of calm indifference has much the same effect as the foyer of a supercinema. To Fairless, it was common-place, and he ignored it, hurrying across to the tube-control desk. To the very worried-looking officer in charge he said:

"Would you run out a tube for me, please, to H2?" he indicated the approximate area on the wall-chart. The officer modded, and turned to his controls.

"That will be number four door," he advised, and, as he spoke, a large, neon '4' lit up over the huge air-lock door indicated. Fairless turned to move off, but the man called him back.

"Say, Lieutenant!-you notice anything odd?"

"Yes, I did," Fairless nodded, idly. "The place seems somewhat deserted—doesn't seem to be many people about. Is that what you had in mind?" The officer looked even more worried.

"I just got here," he explained. "My turn of duty, you understand. I walked all the way from the south Residential dome, and I didn't see a soul—and I haven't seen my relief, either. Can't think where he can have got to."

"That is odd," the young pilot frowned. "He's not supposed to leave the desk, is he?"

"That's right. We're very strict about that, here. There'll be the devil of a row if this gets out. Still, I mustn't keep you with my worries. Your tube is ready. You'll be coming back?"

"Not for a couple of hours. You'd better pull it in again, when I'm clear, and I'll call you when I'm ready to return." He moved off, and paused to call over his shoulder, "I hope your

relief turns up." As he entered the big double-doored space, and passed through to the concertina-like pressurised tube, he wondered idly about the missing officer, but by the time he had reached the hatch of his own vessel, he had passed up the problem in favour of more pressing matters.

Once inside the little lifeboat by which he and Hank had landed from Hercules, he threw off his cap, and moved towards the control-room. To his intense surprise and bewilderment, he felt a sudden surge of nausea, of weakness—and the metal floor came up and hit him in the face. Most astonishing of all, as he lay in a helpless heap on the floor, his mind was quite clear and unaffected.

"What on—!" his intended growl came out as a feeble squeak, and that shook him so much that he cut off the exclamation at once. His magnificent body was refusing to obey him. Such a situation was so utterly new to him. that he refused to accept it. Putting forth every ounce of effort he could muster, he fought to bring his arms up from his sides, to press his hands to that cold floor, to push himself up. There was movement, very slight, very feeble, but movement! He tried even harder, forgetting everything else in that all-consuming strain. Then, as suddenly as it had come, the strange helplessness left him. He got to his feet, slowly, and, except for the memory of that immense effort, from which he was still breathing deeply, he was as normal and fit as he had ever been. He stared round the little compartment, but all was obviously as he had left it. It was a badly puzzled young man who fell back on the time-honoured excuse of all fit men for a momentary lapse.

"It must have been something I've eaten," he assumed. "Anyway, I'm all right, now—" but there was a frown on his handsome face as he sat himself down at a curiously designed, compact unit, and began to set up switches. At the back of his mind was a strange conviction that he had heard a voice, or was it a "voice" in his mind? It had said, cryptically "Not yet—not ready yet". It had been like the chorus of a million tiny voices, all exactly alike—yet, not voices at all. He shook his head, firmly, to dismiss such strange thoughts.

He fitted over that same, puzzled head, an intricate assembly of gleaming wires in plastic, arranged like a skull-cap, adjusting it so that the smooth electrodes fitted snugly at temples and nape of neck. Finally, he clipped an ultra-sensitive throat-mike into place, flipped over the main switch on the amplifier, at one side. While it was warming up, he settled himself, to relax, to watch the tri-dimensional view-screen before him. It began to glow.

In the forward crew-room of S.S.S. Hercules, drifting at orbitanchorage, nine hundred miles above the surface of Mars, a lithe, tall, "human" figure sat up, slid from its rest on the top bunk, and dived to the nearest observation port. As weightless as the ship itself, it hung there, looking out through the automatic polarising dimmers, its eyes relaying all it saw to that screen in front of which Fairless was seated. This was the "pup" that Gale had spoken of, the incredibly likelike metal and plastic image of its controller, containing within its uncannily humanlike shape the combined science and art of many people. It's perfect duplication of Frank Fairless, moulded by the finest sculptor-copyist that money could buy, was a marvel in itself. but that was only the beginning. Built into that body, and its synthetic, indestructible skin, were hair-fine sensitive relays. immensely powerful muscles set in a zirco-beryl-steel "skeleton". Much of the mechanical and electronic genius of Norden and his associates had gone into the design of that perfect body; hours of painstaking effort and experiment by his biologist, psychologist niece had accounted for the faithful duplication of nerve relays, and impulses. Every sub-threshold nerve impulse that left the brain of Frank Fairless, though too weak to produce a reaction in his own muscles, was picked up by that delicate web of electrodes, to be amplified and transmitted on a Z-wave to the puppet, so that it moved in response. Although relaxed in his control-chair, and motionless, he saw through its eyes, felt what it felt, heard what it heard, and, at his desire, so it moved. Powered as it was by the immense broadcast wattage of any Norden pile within miles, it was immensely stronger than any man, and almost completely immune to damage. all intents and purposes, as he sat in the little lifeboat on the surface, he was in the huge ship, nine hundred miles above. looking out of that port.

He saw, about half a mile away, the dark bulk of Survey 38-He nodded in satisfaction, kicked away from the bulkhead and made his way to the main control-room, pausing there to get a small oxygen-bottle. Thus equipped, he made for the main air-lock. Thirty seconds later, feeling the bite of cold as his "skin" radiated heat into space, he aimed for S 38, kicked off, and began floating swiftly across the absolute black between the two ships. As he drew near he saw that he was a little off course, but a short burst on the oxygen-bottle corrected that. Breaking his fall he seized a handhold on a ladder-rung, drew himself along the hull to the air-lock and let himself in. S 38 was a fairly new ship, but the layout was fairly familiar. He found cabin spaces, shower rooms, kitchen, observation blisters, power space, main control room, all dark and deserted but obviously normal.

Coming to the hydroponics space, he paused. This section was quite new to him, and he looked about with some interest. In his six years in Space Service he had never yet drawn a survey

duty, the only kind of trip which keeps a ship in space long enough to make hydroponic rooms necessary. He dived into the long, cylindrical room, even now still spinning automatically. It took him a little while to get adjusted to the feeling that the floor was all round him, anywhere outward from the middle, that he could walk, carefully, between the long rows of tanks, with his legs feeling one-quarter gravity, but that a jump would take him into the centre, where the gravity was still nil, and that if he jumped too strongly, he would fall past the middle and up—or down, to the opposite wall.

He scanned the long, shallow tanks, the ultra-violet booster lights, the automatic skimmer-blades, the centrifuges. All this equipment would be needed in the Star-Jumper. He was aware of keen disappointment. He had pictured luxurious greenery, the tanks full of rapidly growing algae, the constant, slow motion of the skimmer-blades, feeding back the algae to the centrifuges, at the dictates of their photo-electric eyes. Here, he saw a brownish, rank, spotty mess that looked not only dead, but mildewed. He had no smell-sensitives, so he was unable to apply that test.

"This can't be right," he muttered. "Something must have blown, a circuit-breaker or something." He went to the powerboard, and saw, at once, that there would have to be another explanation. A solid bank of greens glowed quietly there, not one red alarm showing. "Can't be that," he decided. It came to him that there had been too many unexplained mysteries just recently, and he decided that this was one he could check on, right away. He searched the various racks, and files, until he unearthed an operating manual. Referring to it from time to time. he checked the whole equipment, thoroughly, right down to the pressure-stove that was to deliver the compressed cakes of dried algal paste, ready to be eaten. He learned a lot in the process, and ignored nothing, even the rotation of the room itself, for the manual explained that it was an unexplained fact, but a fact, nevertheless, that plant-life just would not grow in null-gravity. At last he had to confess to himself that it was beyond him. All was in order. He pushed his finger into the surface of the water in the nearest tank. A skimmer-blade at once moved towards it.

He thumbed through the manual again, found the page which gave a description of the appearance, texture and growth-rates of various type-forms of algae. One type-number was firmly underlined. He read it carefully, then looked again at the brownish mass, spotted with grey mildew.

"Diseased!" he thought "——now why didn't those two pilots mention this? It could be a clue to whatever it was that knocked out the rest of the expedition." He slid out of the slowly spinning room, and into the laboratory-space. Again, this was strange

ground for him, but this time he had a definite objective.

"Now, perhaps we'll get some answers," he mused, unshelving the little projector and several cans of self-processing films, all neatly and precisely labelled. He settled himself for a long job, and threaded the first film into the viewer. This was a superb collection of long shots of Saturn, at gradually lessening range. In quick succession, he ran off shots of the satellites, taken as the ship had begun to spiral down into the gravity-field of the great planet. First Themis, so dark-surfaced that, prior to lunar observation, its very existence had been a matter of dispute among astronomers, then Phoebe, with its retrograde motion, then Japetus, half gleaming ice, half jagged gloomy rock, giving it an odd, lop-sided appearance. Then the long drop to the inner planets through a shower of cosmic debris, to the orbit of little Hyperion, and then Titan itself. This reel was of especial interest to Fairless.

"Might have to jet-down into a methane-ammonia atmosphere, sometime," he murmured, "better remember this." He came to the reel marked "First trip out on to the surface", and threaded it in. On the tiny screen, he saw a thin-faced, white-haired man, with a waspish expression that made him resemble Commodore Gale so much that Fairless had to grin. He was sealing down the glassite helmet of his atmosphere-suit. The attentive watcher noted that the suits were sealed at the wrists, and that this man was not wearing gloves. That meant, obviously, that they must have checked the atmosphere, by samples, and found it non-injurious to the skin.

"This is Doctor Summerton, just joining Lee and Grundag in the air-lock. We find that the atmospheric temperature and pressure are high enough to allow us to be free of gloves. Test shows that there is no poison, or toxic content." The small voice from the speaker seemed to be quite unimpressed with the historic nature of the moment. "I will attempt to follow them with the camera as they descend the ladder to the surface." The view swung dizzily. The photographer was obviously going down the ladder himself. Despite the sensitivity of the film the picture was dim and oddly accented in the green register. The view steadied, on a scene of rocky, gloomy wilderness. The commentary resumed, now with a hollow sound. The speaker had evidently connected-in his helmet-mike.

"This first trip is to be a very short one, as we are merely seeking rock and soil specimens for analysis, so that we may make some estimate of the ecology of this strange atmosphere-soil combination." There came fragmentary bursts of speech, commands and complaints—one thin voice, which Fairless immediately tagged as Summerton, was being very snappish about the texture of the inside of his suit.

"How the devil are we supposed to get about in these things," he demanded, shrilly. "It's like wearing wire-wool underclothes—" then the sound cut off, hastily. Evidently the unidentified cameraman had considered a little censorship advisable. He ran the whole of the reel out, without finding anything noteworthy. He lifted the next, and saw that the can beside it was unlabelled

"This must be the last," he guessed. "They didn't have long, poor devils!" He threaded the film into the viewer, and a new picture began to flicker on the screen. It showed the interior of the laboratory, where he was now, and the three men, Summerton, Lee and Grundag, demonstrating the specimens they had collected; little plastic envelopes of rock, crystals, greenish-yellow soil, liquid—and then the view shot in to a close-up of a fragment of rock bearing a white, purple-streaked mass. The commentator said, in some excitement:

"This is the most unexpected luck. We have found life! Even at first inspection it is a spore-forming moss, or lichen of some kind. It may not look very dramatic to the layman, but it is life. Grundag is impatient to begin study on it——" The voice cut off, suddenly, and the picture swooped, to focus on the thin, wiry form of Summerton. It caught, vividly, the expression of stunned surprise on those sharp features—then followed, as the lean body slumped, sagged and fell, slowly to the laboratory floor. The voice came again, shaken with agitation.

"Something is very wrong—Summerton!" Picture and voice died together. The rest was blank silence. Fairless ran out the rest of the reel, but it was unexposed.

"That's that!" he muttered, grimly. "Not much help there. I'd better be getting back." He put the equipment away, left the laboratory, and made his way back to the main air-lock. He was watching the falling pressure, waiting for the automatic to open the outer door, when a sudden stab of blinding headache In that awful moment, he almost forgot which rocked him. was his real self, so intense was the cracking pain. Then, it was gone again, leaving him shaken and dazed. Fairless had not had a day's illness in his life, and there is an instinctive tendency in such healthy people to reject the idea that sickness can strike them, just as it does other people. Above all, however, he was a rational and sensible man, and he had to admit that he must be suffering from some unsuspected complaint, even though the admission was unpleasant to him. His one thought, now, was to get the puppet safely back to Hercules, and his real body into Canal City for medical attention.

He sighed with combined relief and annoyance as he slid the puppet back on to the bunk, and allowed the figure to relax. There had been no repetition of the headaches, or any other symptoms, for which he was profoundly thankful. In his chair,

in the lifeboat control-room, far below, on the surface of Mars he set away to move his hand, slowly, to the cut-out switch on the panel. A very slow movement was absolutely necessary, as the puppet was designed to react to the faint, sub-threshold impulses in his nerves, and a full-scale movement was a thousand times greater. He gauged the movement very carefully, and began. The puppet figure moved its arm smoothly, but sudden sweat broke out on his brow as he realised that his real arm was quite motionless in his lap.

His first instinctive reaction was to struggle, and, for a moment, the metal and plastic figure thrashed about in the distant crewroom, in response to the violent nerve-impulses he was sending out. Then, fighting down the panic that threatened to overwhelm him, he relaxed again, and tried to weigh up the situation calmly. With dogged persistence he went over the whole of his real body, trying to move an arm, or a leg, even a finger, or toe—but there was response from the synthetic body only. His flesh-and-blood, frame remained lifeless. His involuntary actions were still normal, he still breathed, his eyes still focussed, his heart-beat was steady, but any power of voluntary motion was gone. His nerves were still operating efficiently, as the response of the puppet proved, but his muscles were not obeying. For once in his hectic life, Frank Fairless knew fear, despair and utter helplessness.

CHAPTER III

THE mood of despair and helplessness did not last long. Lieutenant Fairless was not in the habit of giving up easily, and it was only a matter of minutes before his mind was at work, weighing and assessing the pro's and con's of the situation. On the one hand, his body was inert and helpless, almost certainly infected in some way, perhaps dying. It was not a pleasant prospect. Against that, however, he could put a few brighter points. He could still think clearly—mentally, at least, he was still alive—and he was still able to act, via the puppet. Action, any action, was better than giving up the struggle. He disciplined himself to dismiss worries about his strange affliction, and to think himself into the puppet more completely than he had ever done before. There were still problems, but they did not seem quite so insoluble, now that he had come to a decision or two.

In the crew-room, the puppet Fairless moved, sat up, slid from the bunk, and made his way to the main control-room. He settled himself at the communications board, threw in the main switch, and debated with himself while it warmed up. His first thought was to call his own Z-set, now in Clarke's office, but he decided against that. It would mean large-scale explanations,

and it was an understanding among the little group that had been responsible for its construction, that the existence of such a mechanism as the puppet should remain secret as long as possible. His next nearest source of aid was Hank, five hundred miles north, in Workington. Asking for help was a new experience for Fairless, but, in the circumstances, he had little choice. He cut in the beam-coil set for Hank's wave-length.

"Hellow Hank," he called, and was shocked to find that his voice was no more than a ghost of a whisper. He had forgotten his vocal-chord muscles. He tried again, forcing himself to shout loudly, and the voice came through this time, as a hoarse croak, a travesty of his normal tone but at least, it was intelligible.

"Hello, Hank! are you hearing me?" He waited patiently. A jumble of noises came from the speaker, then the familiar drawl of his friend, saying:

"Hiya Frank, say! you sound kinda funny—like you had a bad cold or something. What's new?" Fairless drew a deep breath, and, croakingly, explained the situation, briefly but explicitly. The set was silent until he had done. Then, the drawl forgotten, Hank's voice clipped back.

"Sounds grim—mighty grim. What you want me to do, Frank? I better get over there, right away, huh? Get you to a doctor——"

"It will be more a case of getting a doctor to me," Fairless told him, with grim humour, "but I think that would be best. How soon can you be here?" There was an urgent mumble of voices, then a clear, smoothly efficient, yet essentially feminine voice said:

"If we leave right away, we can be with you in about two-and-a-half hours, Frank. Can you hang on till then?"

"Hello, Shel," he croaked. "It doesn't look as if I've a lot of choice, but, look, there's no need for you to come—this could be a dangerous infection—it might be anything!"

"Forget it," she retorted, cheerfully, "Henry doesn't know the first thing about aid for the sick, and, anyway, I want to be in on it. It's so dull here. We'll be with you as soon as we can. Keep your shirt on. Don't do anything rash!" He had to grin. "Keep your shirt on" was a private joke between him and Kate, a reminder of their first, very stormy-tempered meeting. Shel had no real idea what the phrase signified, but she knew it would cheer him. Thinking of Kate reminded him that he could call Gale, on Earth, but he dismissed the idea, at once.

"Not much point in it," he thought. "It would take them three days or more to get here, and just because I've got the wobbles! Gale would slay me for that!" He thought awhile. He could take Hercules down to a landing in the pits, but there

didn't seem to be any immediate gain in that, and it would be a break with Traffic-Control routine. In any case, he would have to get the go-ahead from the traffic-officer before attempting any such move. He cut in the radar-and-radio board, watching for the direction-blip on the grey screen. It remained unhelpfully blank. Frowningly, he cut in the forward view screen, training it to scan the surface far below.

The thin haze of the rapidly shrinking polar-cap was almost directly below him. In something like two hours he would be directly over Canal City. The radar beacon should be clearly detectable, long before that. He waited. The screen remained quite blank. An hour later he was pointing the paraboloid aerial of the short-wave set directly at the gleaming cluster of domes. In the view-screen he could see the sunlight gleaming on that dot of a city. In his mind he pictured the glassite mounds, the dome that was devoted to traffic-control, the enormous basket-coil that was snuggled up under the highest point of that dome, the little control-room, directly under the coil, the two men who should be sitting there at all times, supervising the efficient transmission of the navigational signal, and the to-and-fro radio signals.

"Hercules to Traffic Control—Hercules to T.C.—your radar beacon not operating, please check—your radar beacon not operating." He sent out the call, again and again, but there was no response. His commonsense told him there would not be any reply, that the radar-beacon did not fail without some exceptional emergency, but he kept on sending, steadily, until the domed city was just a speck on the retreating horizon, and the great ship was swinging into the night-side of the planet. "Dead as a door-nail," he sighed, killing the set. "I hope that doesn't mean what I think it means." He reverted to the Z-board, reset and cut in the beam-coil for his own set, now in Governor Clarke's office. This was no time for delicate secrecy, he thought, as he called:

"Governor Clarke—Lieutenant Fairless to Governor Clarke—if you are hearing me, come in please, urgent—repeat, urgent—come in please." The speaker remained obstinately mute. He repeated the call, desperately, with the same negative result. He shut off the set, and sat thoughtfully, trying to scrape up some good explanation for this all-over silence that would avoid the horrible conclusion that was forming in his mind. The facts were too plain to be evaded.

It was only too obvious that there was something terribly wrong, and that it was connected, in some way, with his own helplessness. He recalled, now, the unusual silence, the deserted corridors, the missing T.C. officer, and it all began to fit itself together into a coherent whole, a horribly logical sequence. Some dread disease had struck, without any warning. In all

probability most of the twenty-thousand inhabitants were as paralysed and helpless as he was. He shot a quick glance at the clock. It was barely seven hours since he had left his little office, but it felt like always. He calculated again. Hank and Shel should be touching down soon. He cut in on Hank's set, again.

"Still O.K. Frank? Be with you in about ten minutes. Anything new turn up?" In the background he could hear the thrum of engines. He pictured the big, fragile-looking, sail-winged monoplane, especially designed for the thin air of Mars.

"It's worse than I thought, Hank," he croaked. "I've been trying to make some contacts, and the whole city seems dead. It must be some sort of plague."

"Oh no!" It was Shel's voice. "That's terrible—are you sure. Frank?"

"Can't be positive," he told her, "but the radar-beacon isn't working, I can't get any reply from T.C. on the short-wave, and I've tried to raise Clarke on my Z-set, but no answer nothing!"

"Man, oh man—do we have troubles." Hank's voice was gloomy, but his confidence in his friend quite undimmed. "What do we do now?"

"The smart thing to do," Fairless grated, "would be to turn round and go back, while you still have the chance."

"You can throw that idea right in the ash-can where you got it," Hank's retort was prompt. "We're practically here. Besides—there might be somebody left who would know what to do."

"That's right!" Shel backed him up, "we can't run away."

"But you won't have a chance!" Fairless raged. "It must be as violent as blazes to knock everybody out so quickly. Don't be crazy!"

There was no reply. Hank had cut off. About ten minutes later, his helpless body heard the click and zoom of the door motors, and the panting of his long-limbed friend, after his quick rush through the thin, chilly atmosphere. He imagined him scrambling out of the fur-lined coveralls, that were the standard protection for anyone venturing on to the surface. For thirty years the colonists had been labouring to restore oxygen to the atmosphere of the planet, but it was not yet sufficiently concentrated to make breathing easy, or the ambient temperature comfortable. He heard the gangling mechanic move to crouch beside him.

"Switch off the 'pup', would you, Hank?" the harsh, laboured voice came from the speaker in the panel, "just leave the voice circuit in, so that I can talk." Hank did so, shivering a little at the oddity of having his friend close by him, but quite helpless,

and hearing his voice after its fantastic two-way journey to Hercules and back.

"All off now. What's the idea, Frank?"

"I'm going to try and move this frame of mine," the voice came tinnily through the speaker. "Last time I tried it, the 'pup' went mad up there. Keep an eye on me, see if I do move. I'm trying my right hand first, now——" Hank leaned over, staring closely at the hand that lay limp and flaccid in his friend's lap. After a moment or two, he looked up. The handsome features were quite still and steady, the dark blue eyes staring straight ahead. Only the little beads of sweat on that smooth brow gave any hint of the terrific effort that was being made. Watching that hand again, he shook his head, gloomily.

"Not a twitch, Frank," he sighed, "not even a quiver." A long sigh came from the speaker, echoing the faint sibilance from the body in the chair.

"Well, that's it, Hank, old man," it said, with grim finality. "It looks as if I've had it, this time——"

"Don't quit now, Frank—we'll think of something—we've got to!" Hank's voice was almost a pleading. "Maybe we'll get a line on something from Shel. She's gone into the city, to have a look round."

"You damned fool—you shouldn't have let her do that," the straining voice came quickly. "She might catch it, whatever it is!"

"That's what I told her," Hank defended, "but she didn't take any notice—said they were her people, and she couldn't just leave them without trying to do something—you know how they are!" Fairless groaned. The fanatical loyalty and nationalism of adopted Martians was a by-word among the nations. "I didn't try to argue with her. I just told her to make for Clarke's office, to great the Z-set, and call us from there. She should just about be there, now." He fished out his own instrument, set it, and stood it on the panel.

"Does she know how to operate it?"

"Sure! I told her what to do. She'll call as soon as she can. We just have to wait, that's all. Say, Frank, what d'you make of all this?"

"I'm not quite sure," the loud-speaker mused, and Hank shuddered again. For an awful moment he had the uncanny feeling that he was with a dead man, getting answers from his ghost. "It's not like anything I ever heard of," the hoarse voice went on. "It could be a disease, a germ of some kind, and I don't know much about that kind of thing, but it's something very fancy. And there's something else. I don't know how to explain it, properly, but—I keep hearing voices—no, I'm not

going off my head," as Hank groaned, "I'm as sane as you are, and they're not voices, really. By that I mean, I don't hear 'em—it's as if they were in my mind—and they're not talking to me, but somehow chanting, together—as if there were millions of them. I don't know what to make of it." Hank had his own ideas, but, out of respect for his friend's feelings, he refrained from comment. The little set on the panel suddenly crackled, then that clear, firm voice came again.

"Henry-are you hearing me?"

"Loud and clear, honey. What's the picture where you are?"

"It's very bad," she said, quietly. "Not a soul about. I'm in the Governor's office. He's here, but quite unconscious, heart beating, very slowly—I can't move him, he's stiff, like rigor"—the firm voice shook a little, and Fairless hastened to reassure her.

"He's not dead, Shel—I can testify to that," he told her, in his awful croak, "but, unless we can do something he might as well be. Isn't there anyone, anyone at all?"

"I doubt it," her reply came, hesitantly. "But I'll try—over the telephone exchanges and the P.A. system. If there is anyone that should raise them. I'll call you back." Hank knocked on the panel with his knuckly hand.

"Now whadda we do?" he demanded. "Supposing the whole city's got it—supposing there isn't a soul left—what then?" A harsh chuckle came from the speaker.

"You could emulate me, Hank," it advised, "although I haven't any choice. Just relax—take it easy and conserve your strength. It looks as if we're going to need all the resources we've got."

CHAPTER IV

LTHOUGH Fairless had spoken in jest to his friend, he took his own advice seriously. Perhaps because of his enforced inaction, his mind was working with crystal clarity, ranging incisively over every aspect of his remarkable predicament, and the state of the situation in general. One inescapable fact had to be faced and taken into account above all else. Even in this abnormal state, his body would need food and drink. He was not yet pressingly aware of any great need, but he could not reasonably hope to escape it very much longer. He would have to have nourishment, but how it was to be done was a problem to which he had no ready answer. Therefore, until that problem was solved, it was commonsense to relax. Even if his muscles were set like steel, it was still possible to save

the mental effort of trying to cope with a problem until he had more data. There was still Shel's report to come in, and there was nothing to do but wait.

Deliberately, therefore, he set himself the task of going over his body, mentally, relaxing all the little strains and stresses he could find, searching his consciousness, from head to foot, willing himself to be calm, to stop worrying. The result was an oddly pleasant feeling of lightness and comfort, very like the sensation of being in null-gravity. His mind, now free from driving urgency, returned to the problem of this devastating plague as if it was an academic problem, seeing it as a whole, and chewing over it with a complete absence of emotion.

"It must be a virus of some kind," he told himself, seeing a mental picture of myriads of tiny, spiral-shaped things, each one wriggling happily inside a big translucent bubble, a globule with a dark nucleus, "a virus, needing a living cell of some kind to live in, and preying upon the cell-structure like a parasite." Somehow, the term "parasite" no longer had its unpleasant connotation, but seemed like normal, good sense, and desirable behaviour. He felt sympathy with such a cell, felt that he would enjoy and appreciate the privilege of supporting this little viruslife, that he would seek out other cells, to make contact with them, and let them share in this service. He saw a picture of that, too, quite clearly. There was an immense, curved surface, made up of many millions of such "slave" cells—it came into close contact with a similar surface, of which the cells were uninhabited. There was a brief moment when the two surfaces were pressed together, a feeling of exultation, then the two surfaces retreated from each other—and now there were "guests" in both groups of cells.

A small, critical part of his mind sounded a warning; these things he was seeing and thinking were pure delusion. Something clicked in his mind, and he came up out of that half-dreaming state, to a sudden, shocked awareness of what he had been seeing. These thoughts were not the product of his own mind! How could they be? He knew nothing about virus diseases, or their shapes, their method of propagation from one host to another, or anything like that! What was he doing, thinking about viruses, anyway? In that instant, he was keenly alert again.

"Hank!" he called urgently through the speaker, "I'm being got at again. Heaven only knows how, but someone or something is putting thoughts into my mind—all about this disease. I know quite a lot about it, now. At least, I think I do. It could be just hallucination, or dreams—but, somehow, I'm positive it's true what I've just seen."

Hank stared at that immobile form, dubiously.

"What didja find out?"

"It's a virus, and it's transmitted by contact, by skin contact."

The little set hummed into life, interrupting him.

"Can't raise a sound, anywhere," Shel reported, "I've called all the departments, and put out a general call on the P.A.—and no reply. What do I do now?"

"Have you touched anybody?" Hank almost howled into the little instrument.

"Why, yes, of course. I had to check pulse and respiration, stuff like that—why?" Hank groaned, but Fairless, though hoarse, was quite calm and efficient again.

"You'd better join us, here, right away. You got it—but it takes about two hours to reach the knock-down stage, so you've got time to reach here, if you hurry."

"Oh!" The gasp was very quiet, and there was a silence. Then, "What about Henry. Henry! are you there?"

"Guess I've got it, too, honey." Hank's face was a strained mask but his voice was deliberately quiet. "There's nothing we can do about it—better get back here, quick."

"All right," her voice was hushed, but steady, "I'm on my way, but what's the use?—and how do you know so much, all at once?"

"Hurry along, Shel," Fairless ordered, "and carry the set, I'll explain as you go. As to how do I know—call it intuition, if you like but I do know. The paralysis is caused by a virus, and it's spread by skin-to-skin contact. When you come to think of it, this place is just about made to order for such a scourge, with everybody wearing no more than just a skirt, or shorts, all the time. I've got a pretty shrewd idea how it got here too, and why it's spread so quickly, but we'll worry about that later. Just now I want you back here as quick as you can make it." There was a confident authority in his croaking that made Hank feel better just to hear.

"I'm in the T.C. hall now," she called. "Oh! what do I do for a tube. There's no control-officer?"

"Calm down," he said, roughly. "You've got furs, haven't you? Get into them, and use the surface-door. It's quite a distance, but you should be all right if you run for it. Hank will be standing by, here, to help you in." A few anxious moments later he heard the scuffle as Hank helped her through the airlock, and into the control-room. He could hear her panting, but helpless as he was, he could not see the glow in her eyes as she clung to the long-limbed space-mechanic for a brief moment.

"It wasn't so bad," she gasped, unzipping her fur-lined suit, "but I'd never have thought of it by myself. We're so used to

going through the routine of Traffic-Control, that I never even considered just dashing across the open surface." She turned to Hank, again, her eyes trying to avoid the horribly inert form in the chair. She gave him a brave smile, as he looked at her, awkward in his distress and concern.

"Don't worry, Hank," she said, softly, and it was a measure of the seriousness of the moment that she used his nickname. "No matter what happens, we're in this together," and she held out her hand to him. He took it, gripped it, tried to return her smile, and gazed at her as if to burn the memory of her loveliness into his mind. She was dressed very simply, in brief pleated plastic skirt, and soft moccassins, their bright blue contrasting with her golden tan, and accenting the highlights in her blue-black hair, as it swept to her naked shoulders. She would have been a vision in any man's eyes, but, to Hank, she had never looked lovelier than she did at that moment.

"Don't stare like that, dear," she chided. "We're not dead yet. Frank has a plan—I'm sure he has." She turned, stead-fastly, to the helpless giant in the chair. His voice came hoarse, but prompt.

"I owe you an apology for letting you in for this, but let's not waste time. We're going to get out of it, or die trying. Hank, you get yourself into the control-chair. Shel, you on the viewer—you're going to be navigator. Between you, with my help, and a lot of luck, you're going to fly this crate back to Hercules."

"Fly it!" Hank blurted. "You must be out of your mind, Frank. You know I'm no pilot—I can't fly the damned thing!" But he sat himself in the control-chair, just the same, gazing in horrid fascination at the serried ranks of controls. "I know what these are all for," he muttered. "But how in blazes do I keep my eyes on all of 'em at once?"

"You don't—now shut up, there's a good chap, and we'll have a dead run. Cut in the pile—now the pumps—check for green—all green?—set for firing. Now, when you hit the firing button you're going to start counting—one—two—three—four—at that speed, get it? That's your acceleration rate. See that right-hand control with the shaped grip, and the needle about three inches above it? You want that to advance one notch, every fourth count—now, let's try that, once through——"Hank, his attention sharpened by desperation, made a good pupil. After three runs, he professed himself satisfied. Shel had grasped the main principles of the viewer-sight plotting board enough to be able to give continuous readings. They took off.

It wasn't the best take-off in the world, but it did get them up and out of the atmosphere, all in one piece. It was Shel's first flight into space, but despite the weird, frightening sag in her stomach, and the leaden heaviness of her hand and arm, she kept her attention on her controls, realising that this was no time for mistakes. With Fairless mentally holding their hands, the little ship stood on its tail of fire and went away from the plague city, up into the rapidly darkening sky of Mars, once a dead planet. Now, unless the desperate and daring comrades could achieve near-miracles, it looked like being a dead planet once again.

With Shel's sharp eves watching and reporting the speed and altitude readings. Hank fired the laterals at the precise moment. and H 2 swung off into a path which would bring her into curving intersection with the orbit of Hercules. As the thunder of jets died. Hank snatched a free moment to slip across to the puppet control-chair, and trip in the main switch, giving Fairless full control over the puppet once more. In the silence of the great parent-ship it moved from its chair, and began making ready to receive its lifeboat. The idling pile swung into full power, baydoors swung open, and the rear-viewer was swung round until the image of the oncoming little craft was clearly visible. Now the task was one which called for all the co-ordination of hand and eye that the young pilot could muster. Literally in two places at once, he guided his sweating, tensely-listening friend during the delicate business of bringing his craft alongside and manoeuvring it into the dark bay in the side of Hercules, where the magnetic grapples were all set to receive it, and make it fast. Both Hank and Shel relaxed, and realised they had forgotten to breathe. as the clack of magnets told them that the parent-ship was now in charge.

"Gosh!" the dark-eyed girl sighed. "I'm glad that's over. It's made me feel sort of empty inside, with the relief. You did that very well, Henry. Don't you think so, Frank?"

"He certainly did," the speaker agreed, warmly. "A very smooth job, Hank, old man. You're a born pilot."

"Aw—'t weren't nothing. I was only doing what I was told. I wouldn't like to do it all over again, all by myself, no sir. What do we do now, Frank?"

"As soon as I pressurise the bay-space, you two go aboard, to the after crew-space. Get some food packs, and have a good meal. You're both hungry anyway, by now, and Lord only knows when you'll get the next meal after this. When you've done that, break out a pair of atmosphere suits, the all-over kind, hang a good big label on each one, DISEASED—KEEP OFF, get into 'em, pick yourself some place comfortable to lie down, and stay there. That's your little bit done."

"How about you, Frank?" Shel asked, soberly. "How will you manage, and what are you going to do, anyway?"

"I'll be all right," he grated. "First, I'm going to have the Pup move my body and this control-unit into our main control-room. That's all I can do for my real body, for the moment.

Then, as the Pup, I'm taking this little craft down again. There are two people down there I have a very great longing to meet. They are a couple of pilots."

"A couple of what?" Hank stared. "What the devil have a couple of pilots to do with us?"

"Remember the Titan expedition?" the harsh voice asked, and Hank nodded. So did Shel.

"We heard all about that, in Workington, over the telephone. Only the two pilots survived. They landed this morning—was it only this morning? It seems like a lifetime. Are those the two you mean?"

"You've got them, first time. Peterson and Slade. I shan't forget their names." The voice in the speaker was hard. "They've brought back something filthy from Titan, and they've been running round Canal City, ever since, shaking hands with everyone they could get at——"

"But—Frank!" The gangling mechanic was distressed. "Why in hell would they do a thing like that—a couple of Space Service men? It doesn't add up!" He ran out of words, abruptly. He was not given to deep displays of emotion, but the thought that there could be such renegades in the ranks of the Solar System's most exclusive and honourable service was like a physical blow to him.

"I don't know why they should do such a thing," the hoarse voice had gone grimly cold now, "and I don't think I'd care to know. Shooting would be too good for men like that. The reason why I want them is just this. They had what we've got. The rest died of it, or so they say, but they survived, they got better. That's information that may be of value to us, and the twenty thousand poor devils back there. I'm going to get those two men, bring 'em back here, and then we'll shove off for home, for Earth—for help." Hank chewed his lip thoughtfully.

"Supposing you miss them. That's a quite a city, down there, Frank. It could take you for evermore to search it, and we may not have that long. How about that?"

"I think I can help there," Shel put in, quickly. "This is what comes of being the Governor's secretary. If you go in through the foyer, and over to the tube-operating desk, you'll see, right at the top of the main board, a red-coloured switch. It's never used now—nor has been in my life-time. Back in the early days, when there was a constant danger from atmosphere-plant failure, some one had the bright idea of fitting it. When that switch is made, the main doors which lead from the domes to the surface cannot be opened. If any attempt is made to operate a door, an alarm bell rings. It's all rather pointless, now, but the switch is still there. Governor Clarke was talking about it, just the other

day. He said it was a way of discovering cowards, and it was a testimony to our people that the alarm had never been rung." She glanced at the figure in the chair, forgetting that it could not move to acknowledge her information. The speaker was silent.

"Hank!" she whispered, in sudden fright, "Maybe he's-"

"Sorry—I was watching the gauges," the hoarse voice came again. "You're pressurised now, you can get out. Thank's for the tip, Shel, it should make all the difference." Hank led the girl to the airlock, helping her as best he could in her struggle to adapt the null-gravity action.

"Just let yourself float, and hang round my neck. There's nothing to it, once you've had a bit of practice, but we're in a hurry just now. Ready? Right, here we go!" He kicked off into the darkness, aiming expertly at the ring of light that led to the interior of the ship. As they reached the door-way leading off to the crewspace, they saw Fairless waiting. Even though she knew it to be the synthetic figure, Shel could not restrain a gasp. It was like leaving someone behind, and having them pop up in front again. Hank, however, was more used to the puppet. His mind was full of practical matters.

"You want any help, Frank?" he demanded, "Shel can manage on her own for a little while."

"No—I'll be all right. You two go along. You'll just have time to have that meal." He turned, but Shel called him back.

"Frank, do we have to go all the way back to Earth. What about Workington? Couldn't they help?"

"I had thought of them," he confessed. "They have science, in plenty—in lots of ways, but do they have the medical men?" She bit her lip. It was a fact that, of all the sciences, medicine, was the least, on Mars. The colony could boast the finest scientific brains in the universe, or at least that part of it that was known, but where there is no pressing need, there is little incentive to effort, and the first Mars colonists, thirty years ago, had been picked for their good health, as well as their abilities.

"I see what you mean—and this is going to be tough to crack, I guess. You're right, Frank," Hank grinned.

"When you know him like I do," he cracked, "You'll know that Frank makes a habit of being right, eh, feller?" and he ducked, swiftly, as the tall space-pilot aimed a friendly swing at him.

"Easy there, boy, I don't want no love-taps from that hunk of power. You don't know your own strength." He swung a hamlike fist to thump against that brawny chest, with such vigour that Shel gasped again, but the 'man' just smiled. Hank returned the smile, tightly.

"Don't take too many chances, feller," he growled. "Man, are

We depending on you!" and he turned and glided away down the corridor, towing Shel with him. 'Fairless' watched them a moment then the need for haste surged back to him. He dropped himself down and out to the life-boat. In a matter of moments he had released the control-unit and his own helpless body and was negotiating it across the space, and through the corridors of the giant skip. Even though there was no weight, the massive equipment still possessed inertia, and he had need of all the immense strength of the puppet by the time he reached the main control-room. When he had bolted it down securely, and given his own lifeless body a gentle pat on the shoulder, he felt a load off his mind. He was now free to take a chance or two.

He had secured the air-lock door of H 2 behind him, on leaving it, with deliberate intent. He proceeded now, to exhaust the bayspace, the air thus being conserved. The puppet had no need of air. and the way things were, he saw no reason to waste such a vital commodity. Back in H 2, and at the control panel, he deliberately wasted more precious seconds checking the instrument-panel thoroughly, and the fuel gauges. Not only his own life, but the fate of twenty thousand people rested directly on him, and he was not minded to fail because of a simple, avoidable mistake. little arrow-head shaped ship slid out of its bay, jets whispering, and began the long drop, down to the surface. Deprived of the radar beam, he had to make his jet-down by viewer, instruments. and instinct, but to the grim Lieutenant, the landing was the least of his worries. That was strictly in the line of his job, and his training, and was carried out with his usual meticulous precision. The problem ahead, as he left the little ship and made his way to the T.C. dome, was much more serious. Finding two men, who in all probability, didn't want to be found, in a city big enough to give more than ample accommodation for life and leisure for twenty thousand people, a city moreover, of corridors and enclosed spaces—it was not going to be easy.

He had been thinking things over in his mind. If his belief was correct, that these two men had been responsible for the plague, and had deliberately spread it around, then it seemed more than likely that their intention was to go on to Earth, and repeat the foul routine there. The reason why of it escaped him for the moment. Even thinking about it inspired a cold, deadly rage in him, that two men wearing the uniform that he was proud to wear, could do such a thing. He forced himself to be calm, to realise that they would be likely to do one of two things. They would either try to get to Workington, and that would be difficult, as the plane had gone back, and the overland route was no picnic; or they would head direct for Earth. He dismissed Workington. The shift of workers would soon be returning from there, anyway, and the job would be done, automatically. Earth seemed to be the only object. To achieve that, they would have to come to the

landing pits, to pick up their life-boat, S 2, and to do that, they would have to pass through the T.C. area. He went over to the tube-desk, found the switch, closed it.

Under the bright red handle was a plate, which read 'Emergency—close this switch in any report of air failure. Not to be reopened except by direct orders signed by Chief of Air Section' He mentally blessed Shel for her good memory.

"Now," he mused, "I can go looking for them, or I can make them come to me. All I have to do is to throw the fear of death into them, and they'll make a break for it, and they'll come this way, and the bells will ring out, and it will be funeral bells for them." He paced off to the public address booth, in the trafficorders section, his mind toying with the desire to wonder just where they were hiding, anyway, and what they were doing. He guessed they were filling up on food, and left it at that. "That's what I would be doing" he thought, ruefully. "Gosh, am I hungry!" Reaching the booth, he slid the button over to 'record'.

"Calling Peterson and Slade—Lieutenants Peterson and Slade—Peterson and Slade." His voice was really a croak, now. Leaving it at that, he stopped the recording, slid the button over all the way, to 'repeat', switched on the microphone, and he could hear his own voice, booming through the silent corridors, repeating the cryptic message, as the tape fed slowly through the scanner-head, clicked, spun quickly back, ran slowly forward again. He grinned, thinly.

"Not too much information there," he thought, "Let them sweat it out. It won't do them any harm." He moved off, hastily, through the intersection of the Administration dome, and cut a similar tape there. Then he turned his steps in the direction of the centre, the Pleasure dome, and the dining rooms and cafeterias. Here, in the bright open spaces of the huge room, he saw his first bodies. They were in profusion, sitting, lying, sprawled in every possible travesty of a position, hundreds of still, wax-like figures, pathetic and somehow grotesque, the smooth, tanned bodies, in their gaudily scanty garments. His rage against the two men became murderous. He was in the act of setting another tape in motion, when a fiendish, nerve-twisting clamour tore the silence to shreds. It was so stridently insistent that he ducked, instinctively.

"Not much danger of anyone sleeping through that," he gasped, "That would scare the life out of a stone image. I bet it's doing my two rats a power of good." He set off at a good pace, back towards the Traffic Control dome. "No great hurry," he told himself. "Let them get good and scared—they can't get away," He had just reached the inter-section leading to the T.C. dome when, shockingly, the hideous clanging stopped. "Hell!" he muttered. "They've found out how to shut it off. Come on,

Tinman, this is where we hurry!" and he broke into a run, his metal-thewed legs taking him in huge giant-strides through the deserted corridors.

CHAPTER V

E burst into the foyer at top speed, skidding to a stop as his eyes flitted across the doors. Then he really went into highgear, as he saw the centre main door swinging ponderously shut, and, inside, a glimpse of two cowering figures. A flood of bewildering thoughts crossed his mind, but they did not stop him from acting instantly. With one great leap, aided by the reduced gravity, he dived for that closing door, arms outstretched. The two astonished men inside watched in awful fascination as that cometing figure swooped on the steadily closing gap. They saw him hit the floor about six feet short, heard his outstretched palms slap that smooth, glassite surface, violently, so that he literally bounced off it under the thrust of mighty arms, to surge, head first into the gap. His head and side-twisted shoulders grazed through, then the remorselessly moving weight of it trapped him by the waist. Ten tons of solid steel, ringed with sealing gaskets, moved unfeelingly.

Peterson and Slade, safely inside, saw the heavy door appear to pause—and waited for the hideous crunch. jawed, and staring, they saw that grim, herculean figure wriggle urgently, saw him put out a firm hand on either side, and push. Fairless felt the hard edges of the door, and the surface it was trying to meet, bite into the palms of his hands, and he offered a silent prayer to Steve Norden. The low, half-heard hum of the door-motor climbed a couple of octaves, suddenly, as if in indignation that anything should dare to get in its way. Norden had once expressed the opinion, when speaking about the puppet, that it could take on a bull-doser and win. Fairless hoped, desperately, that his confidence would be justified. The whine of the motor climbed another fraction. He thought of the thousands who were depending on him, of the many millions on Earth who were in direct and deadly danger, and forgot all else except the necessity to shove.

The whine of the motor became a sudden ugly scream, then there was a clash from the nearby control-board as a circuit-breaker dropped out. The motor died, swiftly, and the massive door swung easily away from him. He realised, inconsequentially, that his real body would have a nasty bruise around the waist, as a result of that tremendous squeeze. "Sympathetic reaction of the tissues," Kate had explained to him, on a similar occasion, once before. A bruise, he told himself, would be a trifling price

to pay, and the sudden remembering of his helplessness shot such minor thoughts out of his mind. He fell the rest of the way through the door, intent on the two men he was after.

From that low angle he saw booted feet move, divined their purpose just too late to avoid the kick that took him full in the face. It made his head sing, and the tears come to his eyes, but the real head, and those real eyes, were several hundred miles away, and though they could feel with exquisite clarity, they were uninjured as their metal and plastic duplicates. That kick also helped him in his scramble to his feet, and it was a truly horrified pair who shrank back into a corner of the air-lock as he advanced on them, grimly.

"I want you two," he said simply. "It will save a lot of time and trouble if you come quietly." He hoped they would take his advice, and not struggle as he feared he might not be able to resist the temptation to hit hard, and he wanted to take them alive. To his distress, they fought back savagely. For several ticklish moments he was wading through a storm of kicks and punches, none of which affected him in the slightest, trying to herd them into a position where he could get a safe grip on both of them at once. At last, despite their struggles, he managed to get a handful of hair in each hand, There followed a loud, satisfactory thud, and the two men were no more trouble to him.

It took him a few minutes to locate the circuit-breaker, and replace it, so that the great door would operate normally. He had many things to wonder about. How did those two manage to find that switch so easily? How did they know how to operate the tubecontrols? Fairless had been in the city quite a lot, and in and out of those doors many times, yet he could make very little of the array of switches on that board. However, these were mysteries he had neither the time nor the inclination to begin solving. There was one more job he had to do, and he did it promptly.

A busy, intent face showed in the visor-phone, as he got through to Workington.

"I want to speak to the Superintendent. It's very important. Tell him, Lieuteant Fairless, on behalf of Governor Clarke——" It took but a few minutes to convince the startled man at the other end that all possible was being done. Fortunately, he was known, and respected, and his final words were accepted without question. "Remember, on no account whatever, is anyone to go near the City, until I can get the true details of the plague, and how to handle it. You'll be informed, as soon as anything is known." He broke the connection, with their anxious good wishes still echoing in the little booth. Then, with an unconscious man under each arm, he raced across the concrete, in the icy chill of the rapidly deepening twilight, to H 2.

"A bit of cold won't hurt them," he thought, savagely, as he

got them aboard, and secured them with lengths of spare insulated wire. Seated once more at the controls, he took a deep breath of relief.

"All right," he gritted. "Now —let's go and get some help!" Seconds later the little craft was screaming skyward, riding a bellowing tower of fire and flame, to its rendezvous with the parentship. There were more precious moments wasted as he secured the little ship, got the two stunned men into atmosphere suits, and dumped them, safely tied, in the forward crew-space. By now the pangs of hunger were beginning to be intrusive, but he fought them off, grimly. He settled himself at the Z-board, cut in the main switches and the beam-coil that was set for Commodore Gale.

"This is what I should have done in the first place," he reflected. "Let's hope it's not too late, now." The ammeters lifted and steadied. He began calling.

"Lieutenant Fairless to Space-Base, Earth, to Commodore Gale, calling Commodore Gale—if you are hearing me, Sir, I want you to listen carefully, this is urgent, very urgent." In precise, thoughtful terms he described everything that had happened in the past few hours, omitting nothing, even to retelling the strange delusions he had had. It was an effort to speak of them calmly, but the possible importance of any factor, no matter how odd, was too great to be discarded. He spoke steadily, continuously, for twenty-five minutes. The strain of his laboured voice was tremendous, and he was glad when he could truthfully say "I think that's all, Sir. I'm waiting your orders." He had hardly done, when the first reply came. At first there was the sharp, acid snap of Gale, in acknowledgement.

"Hearing you loud and clear, Lieutenant—" then the sweet, soft notes of Kate's voice.

"Me, too, Frank—go ahead——" Then there was silence. He could picture the pair of them, leather against velvet, listening intently to his words which were only just reaching them. He realised that he had a little time to spare, and shot off to make a quick check-up on his friends. It took him but a moment to be sure that they were stiff, and helpless, just as he was. Before speeding back to the control-room, he caught up a couple of plastibulbs of fortified soup. They were the self-heating kind, and all he had to do was to find some way of forcing their contents into the muscle-locked mouth of his helpless body. He could foresee some grim moments, possibly choking himself, if not worse, but it was something that had to be done. He got back to the set in good time, grinning wryly as he heard Gale cursing under his breath.

For all his waspish manner, however, the little man had not reached supreme executive rank without the ability to hold his own in a crisis. Fairless was not surprised to hear him get off the mark, promptly, as soon as the message had ended.

"Heard and understood. I am assuming that you hear me. Proceed, at once, with all despatch, for Earth—for Lunar Hospital. I am on my way there, now; will have all in maximum readiness for your arrival. Get going—report, as soon as you can, your E.T.A. Luna—and, good luck, Lieutenant!" The mere sound of the old man's crackling confidence seemed to lift a weight from the young pilot's shoulders. In reply he said, merely, "Right. I'm on my way!" and switched out. There was nothing else to wait for. With the comfortable feeling of being on familiar ground once more he hit the firing button. The great ship swung out of orbit, jets flaring, to head in towards the sun, to come as close to that blazing luminary as its desperate pilot dared, into a cometary path to intersect Earth's orbit on the other side. Frank Fairless was in a hurry, and in no mind to dawdle on the great circle path that was the usual course.

Meanwhile, the little party in Gale's charge had reached Satellite Three, and had transferred to the waiting Mars-Earth luxury liner, 'Canada'. There had been some long faces when Dale had informed the group of waiting passengers that their journey was off.

"Make up your minds, ladies and gentlemen," he told them sharply, but with cold politeness, "This ship is not going any further than Luna, at the moment. You can do as you wish. The choices are, stay here on the satellite; return to Earth, or travel, with us, as far as the Moon. You have fifteen minutes to decide." There had been a babble of indignant protests and questions but he had stilled them with an imperious hand. "I'm sorry if you are inconvenienced," he declared, not sounding in the least sorry, "but this is urgent—so urgent that, unless we are extremely lucky it may be many years before any of us sees Mars again, if ever." They took off in the half-empty liner for Lunar Base, alerting the hospital staff for their arrival, telling them just enough over the radio to set the whole medical section afire with conjecture and curiosity.

Lunar Base is in three sections, and almost entirely sub-surface. Only the massive dome of the observatory, with its glittering meteor-shield, can be seen from space. A honeycomb of reinforced cells, some natural, others adapted by the hand of man, under the hollow floor of Hipparchus, it is a perfect example of concentration, efficiency, and maximum use of minimum space. Once the liner had been stowed in safety, the passengers went their several ways, the frustrated Mars travellers to the bleak, sterile comfort of the rest and recreation centre, Gale, Norden and Kate, with the mysterious package, to the hospital sector. There were many curious glances cast at the bulky, oddly-shaped crate that needed to be so carefully manhandled to the 'heavy

duty' lift, and more than one eminent savant raised astonished eyebrows at the way in which the slim red-haired young woman was helping to hump the hefty item. By its size and mass it was probably machinery; to go by the obvious care she was exercising, it might have been eggs; from the air-holes conspicuously drilled in the sides, it contained something alive. Gossip and speculation gets around faster in a hospital than in any other human gathering, and this was no exception, but, in the face of these apparent contradictions, the guesses were wild to the point of fantasy.

It was natural, therefore, that the summons to the long, low room which served as the doctor's dining-room, to hear the full details from Commodore Gale, was enthusiastically obeyed. The little, sharp-featured space-man had never had a more attentive audience than the fifty-odd men and women who represented the finest surgeons, physicians and pathologists to be found anywhere. He had climbed up on to one of the long, plastic-covered tables, the better to study them, as they crowded round. He swept them with his steady, raking stare. Then, without any preamble or introduction, he said, flatly:

"I'm going to put this right in your laps—if you can't crack it then we're well and truly sunk!" The utter candour of the statement cut right through all formalities, and established the manto-man atmosphere he had intended. "At this moment, ladies and gentlemen," he went on, quietly, "a ship is heading this way, from Mars, from Canal City. On that ship are five people, and something else. I don't know what that other thing is. It is my hope that you will be able to tell me. That's why I am here. I have been in touch with the ship, with its pilot, by radio. The pilot is one of my Lieutenants. He is not without some degree of fame in his own right. I expect some of you will have heard the name before, in other connections. That man is Frank Fairless!" There were several appreciative nods from the audience. Gale eyed them, and his expression was sour.

"He'd give me hell if he could hear me saying this, but I want to have it on record that I have every confidence in his ability, a great admiration for his courage and daring, and the utmost respect for his judgment. I want to stress this, because what I'm going to tell you is a first-hand report of what he has told me—and you might find it just a bit hard to take, at first. Right—let me tell you this. At this moment, Lieutenant Fairless is in full possession of all his mental faculties, his nervous system still responds to the orders and commands of his mind, but—his muscles don't. He is quite helpless. He is paralysed!" There was a buzz, and a wave of puzzled frowns. He raised his hand to check them.

"So, too, are two of the four passengers he has with him." he went on sombrely "—and so, also, are the twenty thousand odd Martian colonists, in Canal City—all paralysed!" Now he had

their absolute and undivided attention, and went on to tell them, quietly, but incisively, all the details he had learned from the little Z-set in his pocket. "The Lieutenant is able to communicate with us through a system of nerve-impulse amplifications developed by my friend, and colleague here, Doctor Norden, with the aid and assistance of his niece, Miss Kate Norden. able to control the ship by a similar method. The details of that may be of considerable interest to many of you, but it will have to wait. More important is the gist of the last message we received, just before we put down here. Fairless says that he has managed to force-feed himself and the other two victims of the virus. A lot of our insulated cable is set in the latest silicone rubber. He has used lengths of this rubber as tubes. and the regulation plasti-bulbs of liquid food as pressure-units. He describes the process as 'a bit unpleasant.' Knowing that young man's gift for understatement I can guess just how it must have been." He paused, nodding at the sympathetic shudders that he could see.

"It's an interesting detail," he resumed. "It means that those unfortunate people are not likely to starve in the forty-eight hours still to go before they get here, but——" and he snapped out the word "there is no one to perform a similar service for the stricken population of Canal City. Fairless has gone to the trouble, very thoughtfully, to capture and bring with him, the only two people known to be immune to this horrible scourge, whatever it is. It was a very wise action on his part, and I'm sure you will agree with that, but it's going to be a waste of time. Time, ladies and gentlemen, is the one thing we have not got a lot of." He scanned the tense faces.

"By the time that ship gets here, it will be four days. If we can start back right away, it will be eight days, all told—and, although I'm no medical man, I know that the human body can't go without food and drink for that length of time without suffering considerably, and every day over that makes it just that much more dangerous. In simple English, it's up to us to crack this thing before that ship gets here. We want to be ready and all set with an antidote; or whatever, to try out as soon as ever they jet-down, and we have to do it on the evidence we've got. That's all I've got to say, at the moment, but I'll be here to answer any questions. Just answer me one first. Can you do it?"

There was a silence which grew and thickened in the little room. It was broken by a tall, balding man wearing clear, rimless spectacles. Gale, looking at him, thought that he had never seen such calm dignity on a man's face before. He climbed on to the table beside Gale, and said, in a soft voice, with academic lack of emotion:

"Thank you, Commodore, for a very lucid exposition of the problem. I feel it will save a lot of time if we sort ourselves out

a little before we do anything else. Would all those who have no qualifications in this particular field clear the room. The work of the hospital must go on. Those who remain will be those who have any specialised knowledge of virus, toxins, paralysis, transmissible infections—or anything else that may help."

"Thank you," Gale said, looking up at the tall man with respect. "That's certainly thinned them out a bit. May I ask who you are?"

"My name is Bannister. I'm the Medical Superintendent."

"Fine! I'm glad to know you, Doctor. Now, do I get an answer to my question?"

"Did you really require an answer?" Bannister looked at him in faint surprise. "I thought you were merely being rhetorical. There is no positive answer as to whether we can achieve anything. There never is in medicine. We can try, that is all." He turned to survey the small group which remained. "I feel that we shall want to ask you a lot of questions, Commodore, and this is hardly the place. If you will follow me, please?"

"Surely." Gale nodded, and the tall man led the way to a ward, long, cool and deserted.

"Because of our unique facilities," he confided to Gale, as they paced along, with that peculiar sliding tread that all who have experience of reduced gravity soon acquire, "we specialise in chest and lung diseases, tuberculosis and asthma and so-on. We find that the low gravity-field, and the facilities for ultraviolet and X-irradiation afforded by the absence of atmosphere, is of great benefit to such cases in itself—the environment helps even more than our skill. We are all the more grateful to you, therefore, for providing us with a new problem, with something we can really get our teeth into." Gale drew in a deep, appreciative breath.

"Smells good!" he commented. "Plus oxygen, eh?"

"Precisely," Bannister nodded. "We reduce the pressure considerably, but make up the difference by increasing the oxygen percentage. That helps also. Now, I think we are all here. If you will sit there, Commodore, and your party beside you. I think we may begin."

"Can I have that description, again—of the virus?" This was from a keen-faced man, who, by his accent, was a Canadian. For what seemed like hours, Gale sat patiently, and answered their questions as well as he was able. If he felt any irritation at their lack of urgency he did not show it.

Norden, with his usual immense calm, seemed to have lost all interest in the proceedings. He sat back in his chair, his eyes half-closed, as if dozing. By his side, his niece, Kate, her impetuous nature fretting under the enforced inaction, kept fidgeting

in her seat. She knew this detailed investigation was absolutely necessary, that there was very little else that could be done until the experts had grasped all the possible clues, but she could not help wondering what was happening to Frank. She thought of him, all alone, not knowing whether any moment might be his last. He might even be dead, while they were sitting here, debating what to do about it. She shifted in her seat, again, crossing and uncrossing her long, slim legs.

Suddenly there was a hoarse, intruding voice. Gale went for his jacket-pocket like a gunman going for a shoulder-holster draw. He got out the little set, and held it up.

"Quiet, now," he rapped, "this could be more information coming through. He said he would call if he got anything new

There was a sudden hush; the harsh, labouring voice was clearly audible:

"---to Gale. I have more news about the virus. It's just as crazy as the rest, but it might be important. All I hope is that vou can make some sense out of it. I'll give it to you just as I got it. I was trying to sleep, just now. I thought I might as well. there's damn-all else I can do, now. I think I dozed off, I can't be sure. Something queer came into my mind, something quite alien. I began to get all sorts of strange pictures—of scenery that I am sure I have never seen, nor anything like it. I got the impression that I was very small, very small—but that there were millions of me-if you can imagine that. I had that sort of feeling before, as I told you. Then there was the feeling of achievement, a tremendously exciting thing, mingled with a sense of escape, of conquest. I felt as if I had managed to escape into something much larger, more potent than I had ever known before. 'Larger' and 'potent' aren't quite the words I want. It was more an awareness of greater opportunities for fulfilment.

"It seemed that, behind me, in the past, there was a long stretch of years and years of stillness, of limited, creeping movement, and a deadly dull, dim sort of existence. It was not the 'not knowing' but the fact that there was nothing to know. But now, it was all so different, so splendidly, wonderfully different. Everything was big and powerful, thrilling and new. The feeling of being able to move about seemed to be very important. I can't help thinking that that is a delusion of my own, a sort of wish-fulfillment, because of my condition.

"There was, too, a sense of time. I got the impression that there was something terribly important about the period ten days. Just why it should be ten days I don't know, but it was quite definite. This doesn't make sense to me, and I'm only reporting it because I feel that this information must be coming from somewhere, and it may mean something to someone. It sounds

crazy, but I have the positive conviction that it is all true. Don't ask me how. I should add that it was very real, and very disturbing, so much so that I shall try to keep awake from now on. We're all well, as far as I can tell, otherwise. Don't forget about the ten days. Fairless to Gale, out."

The aseptic sanity of the cool ward seemed to unbalance, eerily. Even Gale's severe features seemed to shrivel woodenly, as the laboured, intense voice ceased. He shot a side glance at Bannister, but that calm man was looking expectantly at a dark, heavily-built, saturnine man at the back of the group. There were several other heads turned in that direction.

"Let's have your professional opinion first, Weyl, before we pass any comment on the content of that message," Bannister invited. Kate sat up with interest. She noticed, from the corner of her eye, that her uncle was paying attention, too. Bannister said, aside, to Gale:

"Doctor Weyl is, without any doubt, one of the world's best known analytical psychologists. I'm sure you will be interested in what he has to say. Go ahead, Weyl." The dark-faced man rose to his feet, slowly, his fleshy face unfathomable. Weyl of Paris, Kate thought, and remembered the months she had spent studying under this man. At that time she had thought him the image of the popular conception of Mephistopheles. Now, in a black, skin-fitting suit of antiseptic plastic, the standard theatre garb for doctors, he looked more like the Prince of Darkness than ever.

"The man is English, yes? from London, I should say. That makes a difference, sometimes. He is under a great strain, he is tired, he has undoubtedly seen, or heard, delusions of some kind. His diction, however, and his use of words, his ability to differentiate between the real and the illusion; these are all normal. I cannot explain the phenomena he describes, not without much more data. But—without doubt, he is not insane. He is as normal as you or I. I believe that is the sort of thing you wanted from me, eh?" He grinned at Bannister, and that white-toothed smile transformed his face to one of heavy geniality. Bannister nodded, gently.

"Thank you, Weyl. I think we are all prepared to accept your opinion on that. Now, gentlemen——"

"One moment, Doctor Bannister." Weyl had remained standing. "If I may ask a question of the Commodore. You can send a message to the young man on that instrument, yes?"

"I can, sure," Gale replied. "Why?"

"The young man is undergoing a severe mental stress. He has the feeling of being alone, that possibly his mind is going. You heard that, did you not. This is too great a load for the

mind to carry for so long. I would suggest, I would advise, that you transmit to him a message, a message saying that there are a lot of people listening to what he is saying, that you have confidence in him, that he is not going mad, that I say this, and I am an authority. I do not like to advertise my abilities in such a manner, but, for this once, I wouldn't mind. You would do that?"

"It'll take about eight or nine minutes to get to him," Gale reflected, rapidly, "but it sounds like a good idea to me, and thanks, Doc., that was a kind thought." He caught up the little set.

"You can tell him, too, that it will be all right if he goes to sleep. The dreams won't hurt him," Weyl added, as he sank back into his seat. Gale nodded, and applied his fingers to the delicate setting.

"Hold it a minute, Windy." Norden was on his feet, his rumbling voice startling the little audience. "You're not sending any such message to Frank, not 'til you've heard what I've got to say!"

CHAPTER VI

In the roar and hubbub that followed the amazing declaration, there were three calm people. Weyl sat quite at ease in his chair, and smiled a faint, knowing smile; Bannister blinked his eyes a little but he might have been observing microbes under a microscope for all the emotion he showed. Norden, the cause of it all, stood squarely, grimly, meeting Gale's angry eyes with a look that made the little man cool off suddenly. Even Kate was tugging, angrily, at her uncle's sleeve.

"Uncle Steve," she stormed. "You don't know what you're saying. Do you want Frank to have a breakdown?" He turned on her.

"Be quiet, Kate!" he ordered, and his voice filled the room, "It's you, and the rest of you, who don't know what you're saying. When that ship gets here, I want Frank to walk out of it. If you have your way it will be something quite different. Now, will you shut up, and listen to me?"

"I think Doctor Norden merits a hearing," Bannister observed, in a mild tone, but with an undercurrent of authority that stilled the room. "Would you mind going ahead, Doctor. I confess that I am curious to hear your objections to a course that seemed to me to be eminently sensible." Gale was the only one present who was not subdued by the quiet voice.

"Steve, you old fool," he snarled. "If this is another of your childish attempts at drama, then you picked a damn bad time for it."

"You know me, Windy." Norden's customary grin was frostier than usual. "I have to do things my way." He rocked a little on his wide-spread feet. "I want to tell you folks a story, a story about a virus. Now, the funny thing about stories is that it all depends on the way you tell 'em. I gues Doctor Weyl will agree with me, there. He's the most expert listener here." Weyl nodded, sardonically. "I'm not disagreeing with your diagnosis, Doctor," Norden assured him. "I'm in agreement with you, there. Frank Fairless is as sane as anybody in this room, but—his intuition tells him not to go to sleep. And I'll back his intuition against any of your diagnosis. That's why I want to tell you this story of a virus.

"This virus started on Titan. It killed six men, first. Then it let off the only two who could get away from that satellite. It got as far as Mars, to Canal City. In a matter of hours it had spread itself through the whole city. Now it's on its way to Earth. That's the brief side. Think about this virus a moment. It stops muscular activity, but it lets the victim go on breathing. Put it the other way round. It hits the host hard, but it leaves the nerve-system open, so that it can communicate. Are you beginning to see? Are you beginning to get the meaning of the dreams of cell-shapes, of contact, of ages of static existence now all changed to something big, and powerful, and mobile? Is it making any sense to you now, or are you all so scientific that you have lost your power to imagine things you have never seen before?"

"You mean——" a strangled voice broke the stunned silence, "it is intelligent, an intelligence—a virus?"

"I mean just that. An intelligent virus, from the desolation of Titan, and it's out to take over the Solar System. It's already taken half of Mars, the half that counts, and it's on it's way here. now!"

"But—if it's all that intelligent——" the voice was more in control now, as its owner, a cytologist of renown, began to collect his wits, "if it's all that intelligent, why does it kill it's hosts?"

"Who says it kills them?" Norden demanded, promptly. "So, all right, it killed the survey team, maybe. And how do we know that? A couple of pilots told us. It didn't kill them, did it? And, when you come to think of it, those two men couldn't have spread that virus more efficiently if they had been trying to do it. In fact, as Frank has told us, he didn't like to think such a thing of two space-men, but he had to come to the conclusion that they had done it on purpose. Ask Commodore Gale, he's sitting right there, if that's conduct in keeping with the traditions

of men of the Space Service. You don't need to ask him. The standard of those men is too well known.

"You might say, these men were unconscious agents, that they did it by accident. All right. Ask him this. Is it customary for men who have come back from an unsuccessful trip, a disastrous trip, to stop off at another planet, and go round shaking hands with everybody? You don't need to ask him that, either, do you? Your own commonsense tells you different." He raked the doubting audience with his ice-blue eyes.

"You mean that these men are creatures of the virus?" It was a dark-haired woman who spoke now. "That it controls them?"

"I mean just that. Does the behaviour of those two men sound like normal to you? It doesn't to me, not on your life. That virus is in charge of those two, it's got power, and mobility, for the first time, and it's using it. I guess, maybe, it has lived, all this time on Titan, in a weed, or something like that. It has to have a host, to live on. It's a parasite. It said so, to Frank!"

"By Jupiter, the algae! the chlorella in the hydroponics tank," a startled voice exclaimed. "So that's what happened to it!" This was from a white-haired biologist, sitting near Kate.

"You're beginning to catch on." Norden's voice was savage. "I guess you'd know more about that than me, but I do know that algae has cells, pretty much like humans, and that it can adapt to almost any environment, so why not algae on Titan?"

"But intelligence—in a virus—it does not sound possible," Bannister was mild, but unconvinced. Norden threw a stopper at him.

"Any time you would care to define intelligence—I'll be very interested," Bannister frowned.

"Very true," he admitted. "It is difficult to say where intelligence begins, and where chemistry leaves off. But—even granting you that this—this virus may have a rudimentary form of intelligence, are you not exaggerating its powers? You are implying that it can think with a high degree of reason. Isn't that going a bit far?"

"I don't think so, at all," Norden replied, flatly, "I'm just going on the evidence that we have. Those dreams that Frank keeps having. Aren't they a sign that there is as much intelligence there as in any animal, and more than some? And think of the way it has learned, so quickly, the many things about us, that we need to breathe, that we shake hands, that it takes a time to get itself to the point where it can knock down a human, and it waits 'till it's ready before it does it. Wouldn't you class that as a high degree of reasoning?"

43

"Oh, come now," the dark-haired woman rejected the suggestion. "You'll be telling us, next, that it can pick the brains of its hosts."

"You're beginning to catch on, too!" he grinned, and there was nothing of humour in that grin. "What do you think those two guys were doing in the city, while Frank was looking for them, hey? He thought they would be hiding. What was there for them to hide from? No ma'am, they weren't hiding, they were learning—learning all they could."

Her expression showed that she did not, and could not accept the idea that he offered. He stared at her, and his hard grin became wider, more savage.

"Would you stand up, please," he asked, suddenly, surprisingly. She looked at him, uneasily, but obeyed. Kate, sensing that her uncle was about to be dramatic again, stared shrewdly at the woman, trying to foresee what was coming. She saw a tall, attractive woman whom she knew to be a toxicologist, about twenty-four or five. The black plastic suit, fitting like a coat of paint, revealed her slight, almost frail physique, and her deep, full chest. That combination of characteristics betrayed her origin as plainly as if it had been hung on a label around her neck.

"My eyes tell me you are a Martian," he boomed. "That is correct, is it not?" She nodded, silently, her face a study in bewilderment. "Medicine, the one science your people have not developed," he said, softly, "so that you have to come to Luna to study it, fortunately for me. But, let us be sure. You were born in Canal City?"

"I was," she replied, evenly, "and I have lived all my life there, except for the past year."

"Good!" His voice was even quieter now. "Tell me, you have heard about the air-alarm switch that Fairless used. Did you know about it, prior to this discussion?"

"I'm afraid not," she admitted. "That must have been before my time, or when I was too young to know about such things."

"Thank you, I'm glad you said that," he boomed, triumphantly. He pointed to her as she sat down. "She didn't know about it. I reckon to know Canal City pretty well. Windy and me were there when it wasn't much more than just a project, and I didn't know about that switch, either. But, those two pilots knew, or they found out. And they knew how to operate the tube-controls, too, or they found out. Strikes me those two either knew an awful lot they didn't have any business to know, or they were finding things out awful quick. You can take whichever answer you like, but it comes to the same. Intelligence!"

He swung his defiant gaze over the little assembly. There was an uneasy silence, until Weyl came to his feet.

"Magnifique!" he declared. "I must congratulate you, Doctor, for a masterly exposition, and offer you my sincere apologies. I confess I spoke somewhat hastily. You are quite right. This virus is 'picking the brains' of its hosts, and in that case, the less that the young man knows, the safer he is likely to be. We will not send a message."

There was no mistaking the sincerity in the guttural tones. Bannister peered at him, in faint surprise.

"Weyl, you mean you accept this synthesis of the situation?"

"Absolutely. Many points had been troubling me, until I heard them put together with the proper emphasis. Now, I am ashamed that I did not see it for myself." He turned to Norden again. "You should have been a psychologist, my friend, you would have been formidable!"

"Maybe—maybe not," Norden grinned. "Most of that was guesswork, you know. I trust Frank's intuition. It's saved my life, before now. It was that intuition that put him on to those two guys in the first place." Weyl put a hand to his head in a typically Gallic gesture, and muttered "Guesswork!" to himself. Kate clutched at her uncle's arm.

"Forgive me, Uncle Steve," she whispered, and Gale put out a hand.

"Me, too," he growled. "I guess I wasn't thinking straight."

"Forget it." The stocky scientist was embarrassed. "I haven't got all the answers, not by a long way." Weyl turned back, excitedly.

"The ten days!" he growled. "You have seen the significance of that, yes?" Norden shook his head.

"Nope," he admitted, "I can't fit that in, at all."

"Ah, so!" the black-clad psychologist beamed. "Then that is a point that I might be able to clear up. I think I know." He spread his long arms. "Quiet, please, one moment." The buzz of chatter died. "I can only guess—just as my friend does——" he bowed to Norden. "But I think you will agree that this is the right of it. I think that the period of ten days is a critical one, that it is the time necessary for the virus to establish full control over its host. After that time, it is the master, and the unfortunate human is the slave." Norden hit his palm with a bunched fist.

"You've got it!" he roared. "That's it, for sure. Say! you realise just what that means, don't you?"

"But certainly," Weyl nodded, his dark face grim. "My friend. at this moment there are five people coming this way,

who are carriers of this evil. Five only. In—eight days, is it?—in eight days time, there will be twenty thousand!" He glared at the little assembly. "I tell you, twenty thousand highly intelligent people, all slaves of this evil, and they will all be looking at us. At this moment, we have a chance to stop this thing. If we are not quick, we will have no more chance than that!" He snapped his strong fingers. "My friends, we have got to get cracking."

CHAPTER VII

THE "pilot" at the control panel scanned his instruments, wearily. This tremendously accurate copy of his body was able to portray every movement and gesture of the original, but even its delicately precise structure could not do justice to the sagging fatigue that dragged at his mind. The skin remained fresh and healthy, the features alert, even though the mind controlling them was shrieking out the desire to give up, to let go. In one quarter of the screen before him he could see the silver, green half-crescent that was Earth—so small that he could have covered it with his palm. To one side of it was the tiny, white blob that was his destination. There was nothing for him to do. The necessary course-data had long ago been fed into the auto-pilot, the proximity-landing-settings had been adjusted to the built-up values for Earth-Luna, clearly marked on the dials. There was nothing to do but report in. Untiring puppet-fingers went to the radio switch.

"S.S.S. Hercules to Lunar Base," he called, hoarsely, and the weariness could be detected, now. "Hercules to Base, Lunar—arriving in twenty-eight minutes, fifteen seconds, in sight and on automatic. Come in Luna." The speaker crackled, and the familiar voice of his superior officer said:

"We have you in sight, Lieutenant. All ready and waiting for you. Just sit tight, 'til we come and get you." Then his voice became a shade less formal. "There's nothing to worry about son—I think we have this thing licked. Just you get down all in one piece, we'll do the rest." The confidence in that snapping voice was almost a tangible thing. Fairless felt some of the fatigue dropping from him.

"Thank you, sir," he croaked. "That's the best news I've had in a long while. That makes me feel quite a lot more cheerful."

"All right. I'm going over to the hospital side, now. You'd better cut out, and listen in to the Z-set. I think Steve has something he wants to say to you." The hum of the short-wave died as Fairless cut it off, cut in the Z-board, set the beam-coil marked "N" into the circuit. A deep, rumbling voice came to him:

"Hello, Frank—you certainly got yourself into something, this time, son. Had any more dreams lately?"

"No fear!" He felt a grin tugging at his weary face, "I've been strictly awake. It might sound crazy to you, but I had the feeling that if I went off to sleep properly I might not wake up again."

"You're not so crazy," Norden boomed. "Say—are you likely to drop off before you get here?"

"That's a damn silly question, if ever I heard one!" There was a rich chuckle from the set.

"Just wanted to make sure. You figured out where all those dreams are coming from, yet?"

"I think so," Fairless hesitated. "It's the virus, isn't it?"

"Hah!" Norden managed to combine disgust and appreciation in that one syllable. "You got it, first time, Frank. These dummoxes here, good doctors they might be, but they ain't got any imagination. Some of 'em don't believe it yet. Still, I'm working on 'em. Somebody else here wants to talk to you." A familiar, feminine voice came in.

"Hello, Frank-how are you, boy?"

"I'm fine," he wheezed. "Just a bit tired, that's all—but, you shouldn't be here, Kate—it's dangerous!"

"Stuff! I'm qualified, and I'm here, and don't you try to keep me out. This is the most exciting thing that's happened in months!" He had to smile at the sharp determination in her voice.

"All right," he conceded, "only—keep well clear—don't take any chances!"

"Get who's talking about taking chances!" she mocked, and the set clicked, as she cut out.

He turned again to the screen. Earth's image had grown and slid to the far edge. In the centre, the Moon was a distinct disc. He heard the lateral jets began to spit, and switched to rearview, as the huge ship began to change ends in space. A few minutes later he was able to take fresh, and more precise course-and-distance co-ordinates for Luna. He fed the new data into the auto-pilot computor, saw the setting-needles swing the merest fraction. The radar-blip from the Lunar base was now a steady white line of light down the centre of the tracking-screen. He sat quite still, as hundreds of pilots before him had done, fingers at the ready on the manual cut-in, just in case the autos failed. They were practically fool-proof, but, in space, once is too often for a failure.

Every pilot-officer in the Space Service has the awful example of Commodore Gale to think of, as a reminder. That little

terrier of a man had risked his life many times, along with Norden, in the testing of this same equipment, when it had first been designed and installed, in the early days of the Service. The final test had ended in a smash that had put them both in hospital for many months, and had cost the little man his legs. He had been desk-bound from that day until the time when Norden, with the experience gained from the puppet model, had made him a new pair of legs, stronger, swifter and more reliable than his own had ever been. The mere memory of that story made every pilot coming in to land keep watchful eyes on his autopilot.

The pock-marked face of the moon was filling the screen now. and sliding past like an unfolding scroll. In a tight spiral, the great ship swung into a circuitous path, into the dark blackness of the night-side, retarding jets shuddering, then, ever more slowly, into the light again, dropping, squirting white plumes of fire which showed across the screen in rippling heat-waves. shaking and twisting the image. As it reeled slowly past he saw the black, rugged deeps of Rheita Valley across the screenthen slipping off the bottom edge, as the first sight of the ringwall of Wilkins Crater slid into view, filled the screen, slid off, the grey-brown, arid surface moving more slowly—Catharina to the right—the jets were thundering now—dead ahead, right on target, the ringwall of Hipparchus, etched in black shadow, growing, spreading—the view blurred as the jets howled their powerful song. Eyes on the gauges, as they danced, shivered, on the reds—and then, a surprisingly gentle bump. He was The silence hurt. down.

The intercom crackled. "Lunar Control to Hercules-check!"

"Hercules to Control-check. All yours," he croaked, feeling a sag of relief. He was done, now, Outside, though he could not see, he knew that there would be four little radio-controlled caterpillar-mules ploughing the dust, one heading for each of the four great landing-feet, to grip, lift and trundle the whole. bodily—to stop in the middle of the great steel-and-plastic circular plate which fitted like a lid on the top of the sub-surface debarkation space. A faint vibration told him that the plate was sinking, down into the exhausted cavern below. It reached bottom, the little mules moved again, rolling the ship clear, so that the plate could rise and seal off the opening again. He was watching the outside-pressure gauge, now, as it began to lift, slowly from the zero it had been indicating for so long. Long before it had reached the ten pounds p.s.i. which was standard for Lunar installations he heard the zoom of his door-motors. a green light on his panel winked out, and its red counterpart flashed on.

"Someone in a hurry," he muttered, getting up from the

chair, and hurrying to the air-lock. He had just reached it when a red-haired, bright-eyed young woman rushed out, and into his arms, impulsively.

"Kate!" he gasped, fending her off. "You crazy idiot—keep away from me—you're not even covered——" and his heart sank, as he tried to evade her slim arms. "Don't you realise that this place is crawling with germs?" She giggled, mischievously.

"Keep your shirt on," she mocked. "I'm not that mad. This isn't me, silly!" He stared blankly, then caught her meaning.

"You finished your puppet! Gosh, that's a relief—you scared the life out of me for a minute." He grinned, and handed her a vigorous thump on her tanned shoulder. That blow, which would have felled a man, merely rocked her. She wrinkled her synthetic nose at him, and hit back, solidly, her seemingly soft, feminine fist jarring his chin.

"Pretty good, huh?" she demanded, pirouetting in front of him, and he had to agree. From the soft shoes, white slacks, the sun-tanned, peach-bloom skin, clear blue eyes, framed in rebellious masses of violently red hair, it was the exact duplicate of the real girl.

"I'm not sure," he murmured, huskily. "Whether this one isn't even better than the real thing!" and ducked, swiftly, as she aimed a swinging right-hander at him. "That makes us even," he chuckled. "You shouldn't have scared me like that. Now, what's the first move?" She was immediately serious.

"We have to get all the specimens out. Your body and your control-unit, first. Come on, let's make a start."

There was quite a crowd outside the transparent observation-wall of the theatre. All those not directly concerned with the tests had been relegated to the status of audience, and were keen to see just what would happen. Inside, there were several unconventional features, and the audience was having audible difficulty in making up its collective mind as to which was the more remarkable. The sterile white table, usually the centre-piece, had been pushed to one side, and its place taken by a chair, its frame of glittering, heavy stainless steel. It probably had a professional description, but was commonly known as the "trap", the massive, self-locking bands for wrists, chest and ankles being an adequate reason for the name. Norden and Gale were in the forefront of the spectators, and the burly scientist was studying that chair with a quiet sneer on his ruddy face.

"If they think that thing's going to hold Frank down, they're due for a big shock," he confided to the little space-man, and Gale nodded. He knew something of what the puppet could do.

His own legs were powered by the same kind of units.

"Might be interesting," he commented, dryly, "but some-body might get hurt."

"Not to worry," Norden growled. "Kate will be keeping an eye on things. That's the only reason she's in there." That was one of the other unorthodox things in the theatre. In the midst of the dozen plastic-clad clear-helmeted doctors and nurses. glowing luminously under the battery of U.V. lights, "Frank Fairless" and "Kate Norden" stood together, watching the preparations with obvious interest. They were quite unprotected. and, in that virus-suspected atmosphere, that was a frightening thing. Then, for the more morbid, there was the oddly-designed control-unit, in one corner, with the still, motionless figure of the real Fairless in the chair. There were many eves that went from the rigid figure to the tall man who stood beside the redhaired girl, and found the uncanny duplication quite impossible to accept. Beside the control-unit, on low stretchers, were the other four members of that unfortunate crew, and even here. there was an oddity. Two of the figures were motionless and still, but the other two were securely bound, like prisoners. The little crowd of watchers had so many things to be curious about that they tended to ignore the lecture which was being given by the physician in charge.

He was a man of slight build, his black suit, now bronze in the U.V. lights, distinguished from the other doctor by a red band round each shoulder. His helmet was fitted with a microphone, and he was talking into it with great seriousness.

"We are about to try an experiment," he explained. "For the benefit of those who are not familiar with the action of the antivirus, Polio-X, I will give a brief explanation. Poliomyelitis is but one of a number of virus diseases which are all similar in characteristics. Essentially, the virus, is parasitic, it cannot live by itself, but must have a host, a cell-structure of some kind on which, or, I should say, in which to live. So small as to be on the limits of optical visibility, they eluded detection for many years, and the details of their structure was unknown. Then, with the invention of the electron-microscope, and the extension of studies in tissue-culture—"

Fairless, glancing about, idly, caught sight of a familiar face, and nudged Kate.

"Look over there," he whispered. "Isn't that Nurse Winfield? Remember—that little 'do' we had with Lacey and Orloff, and the pirates?" He winked across at the helmeted nurse, her white-plastic suit glowing greenly in this light. She smiled her recognition, and nodded. Kate attempted a wave, and cut it off hurriedly, as she intercepted a freezing glare from the anaesthetist. Fairless

smoothed out his grin, assumed an innocent, interested air, and went on listening.

"Then we were able to develope a mutated strain of the virus, now known as Polio-X. I would like to stress, here, that the name is completely misleading, as the prefix 'polio' is of no significance whatever, with regard to the disease, but merely means 'grey'. However," he sounded as if such a thing would never have happened if he had been in charge, "the name has stuck, so we must use it. Polio-X has many peculiarities, some of which make it particularly suitable to our purpose. It was found, by experiment, that the virus, when introduced to the body, produces all the symptoms of complete paralysis, of suspension, of function, but extremely rapidly, and in waves, or spasms." A nurse came up to him, carrying a hypodermic. He paused, took it from her, and gestured to Fairless to take his seat in the chair.

"The spasms are extremely violent, and extremely rapid, and it is in that feature that the virus has proved to be most useful," he went on. "Because of its extreme vigour, it is as if the virus burns itself out, completely, in a matter of minutes. At the most it is no more than an hour before the effects have completely disappeared. Because of the short space of time, no permanent damage is done to the tissue-structure, so the patient is not harmed in any way. In addition, it is found that all other virus infections which may be present have been similarly accelerated, are burnt out, and the body is free of infection. It is a matter of common knowledge, now, that poliomyelitis, and similar infections are almost unknown, due to the discovery of Polio-X. Had it not been for the fact that we keep a strain here, in culture, for the express purpose of lectures and instructions, we would not be able to perform this experiment."

He touched a switch on the back of the "trap" and the massive restraining bands clicked into place round Fairless. He glanced down at them, then looked at Kate, and grinned. She returned his grin, and began to sidle over to the control-unit.

"For the benefit of those who may be wondering," the lecturer announced. "I should explain that Lieutenant Fairless, who is a victim of this strange virus, is completely paralysed, and is over there. This is merely an automaton, operated electronically from the nerve-impulses in the body of the victim. In this case, where the paralysis is complete," he went on pedantically, and Fairless stifled a groan of impatience, "the spasms will not be apparent in the patient until recovery is almost complete. There may, however, be reflex actions in the automaton, and it is for this purpose that we have arranged for restraint."

He moved, purposefully, towards the rigid body in the chair of the control-unit. Norden, outside, struggled to hold back a snicker, and Gale leaned forward, eagerly.

"This should be good," he muttered. The hypodermic was poised, it plunged deep, the man in the "trap" winced, then stiffened. The astounded audience watched, and gaped, as the heavy chair began to buckle and twist—there was a harsh scream of tortured metal as the chest-band burst out of its hinges—the raving body came up out of the seat, its arms straining—there was another crack, and a wrist went up, wearing a bright, glittering shackle still tightly round it. It all happened so swiftly that Kate, although she had been waiting for just this, dived for the cut-out switch on the puppet-control panel and got it over just in time to hear a third crunch. In the dead silence that followed that switch-off, she turned, to see the giant puppet figure, still gripping the ruined chair, fall slowly to the floor.

"Keep clear, everybody," she warned. "If I can remember this panel, I may be able to isolate the voice only, but I might make a mistake. Just a minute." She wound a row of verniers back to zero, put the main switch over, screwed one up slowly.

"How's that, Frank?" she asked, softly, and a low, choking rattle came from the fallen puppet. She turned a little more, and the rattle became a groan.

"I'm all right," it mumbled, "but I feel as if I had been in the wars—I'm all hot——" and there came another gasping groan. She went over to the puppet figure and bent to examine the bands.

"Can we have these unlocked?" she demanded, "it's quite safe, now it's switched off." The dazed physician, still holding the hypodermic in his trembling hand, came out of his stare with a start.

"I'm afraid that's not possible," he stammered. "Not right away, that is. The bands are self-locking. There is a special key, but it is outside. I'll send for it—nurse!" He made a sign to one of the nurses close by, but the red-haired girl stopped him.

"Never mind," she brushed it aside. "The chair's pretty well ruined. It won't matter if I finish it off altogether." She turned her attention to the prone figure. On the other side of that glass wall, Norden was chuckling to himself.

"Automaton, hey? I tried to tell you that chair wouldn't hold him, didn't I? Now just you wait and see what the latest model can do, 'cause you ain't seen nothing yet." He chuckled again, gloatingly, as Kate took the steel fetter that was around that brawny wrist in her slim fingers, and it fell apart like so much cardboard. In a dead, awe-stricken silence, the staff of the theatre saw "her" rip off all the bonds and drop them in a neat pile of twisted, ruptured metal. Then she took the rigid figure under one arm and carried it over to the control-unit, propping it against the panel.

"Your patient, doctor," she said, calmly. "Ask him how he's doing now?" and she bent to turn up the speech-volume a little more. The dazed doctor did as he was told, putting his ear close to the mouth of the lay figure. Over his helmet-mike, the audience heard a gasping, a series of tortured protests and wailing cries; moans that told of despair and defeat—all wordless, all growing fainter and fainter, and, interspersed with them, the ever stronger exultation, the returning life and vigour of the man. They realised. without any need for explanation, that they were listening to two voices: the death-agonies of the virus-mass-mind, and the returning freedom of the human who had been so near to being lost. The wailing became fainter, died away; the man in the chair shuddered. moved, raised his hands to his head and removed the odd head-He leaped to his feet, staggering as he failed to allow for the weak gravity-field. His whoop of delight rang through the wall of glass and infected the people on the other side. He seized the scandalized doctor by the shoulders and waltzed him

"I'm all right!" he yelled, and slapped the man soundly on the back, almost knocking him over. He danced across to Kate. "I wish it was really you," he laughed, "but this is almost as good," and he hugged her happily. She whirled him round so that he was facing the glass screen, pointed out Norden and Gale, and made the O.K. sign with finger and thumb. Her other arm hugged him until he grunted in protest.

"Steady there, Katie," he chuckled. "I'm only human, you know—gosh, how good it feels to be able to feel again, to be able to move—but," his face was sober, suddenly. "Hey! we're wasting time—what about Hank, and Shel?"

"That's all being taken care of, Lieutenant—here they come, for their injections." It was nurse Winfield, at his elbow. "May I be the second to offer my congratulations," she smiled, her voice hollow through the helmet. "That's just one more debt we of Mars owe to you." He grinned cheerfully at her.

"Not a bit of it," he denied, "I was thinking of my own skin, as well, and you played your part, here, with that Polio-X."

"We took an awful chance with that," she told him, soberly. "If it hadn't worked we'd have been sunk. We've been busy for the last forty-eight hours, raising gallons of the culture, just waiting for this moment, just waiting to see if it would work."

"Gallons?" he looked at her.

"Gallons!" she repeated. "There's a ship out there, ready and waiting, with every nurse and doctor we can spare, and I've got to hurry else I'll miss it, myself."

"Mars!" he said. "Of course—you've got to get there quickly, but, just a minute!" she had turned to go, but paused, enquir-

ingly. "Aren't you going to wait for us? Hank and Shel will be fit in a few minutes—well, an hour, anyway—and I'm all right, now——" He shot an enquiring look at Kate, but she shook her head.

"Not this time, Frank. Don't you think you've done enough? and you need to sleep anyway. This is routine—we've got something a whole lot bigger than that to think of." The white-clad nurse nodded.

"You sure have!" she agreed. "I have to go now. Good-bye, and the best of luck. You're going to need it."

"Just what did all that mean?" he demanded. "Something I've missed?" Kate sighed, and swung him round, to watch Hank and Shel, on the white tables, being injected.

"Ease down, Frank, and I'll tell you." Her lovely face was serious and quietly grim. "With any luck the problem of Mars is solved, the virus is licked, but what about the place it came from, what do we do about all the millions upon millions of the little devils still left on Titan?"

CHAPTER VIII

"JUMPING Jets," he groaned, as the magnitude of the idea flooded his mind. "I hadn't even thought of that. We have to do something, else, sooner or later, the virus is going to escape again." His eyes narrowed in thought. "How long have you been bothering about this?"

"The brains have been aware of it for about twenty-four hours," she sighed, "but nobody's come up with an idea, yet." They watched the forms of their two friends gradually regain freedom to move. He saw Gale waving to him, through the transparent panel.

"I think the 'old man' wants me," he muttered. "I can't go out there like this. I may be still infectious or something. What do I do, Kate?" She shrugged, despairingly.

"I'm very fond of the Commodore," she said, "but there are times—oh, never mind. I suppose you must. Get your puppet going, and we'll both go and see what he wants." A moment later he was back in the chair he had feared he was never to leave alive, and together, the two synthetic beings went out into the throng that gathered around them at a safe distance. They made smiling excuses to the interested and intrigued medical men, and joined Gale and Norden, who were standing a little apart.

"Nice to know you're fit again, Lieutenant," Gale snapped,

coming as near a broad smile as his sharp features would allow. "A fine bit of thinking on your part. We're not out of the wood yet, though."

"So I gather from Kate, sir," he said. "What's the next step?"

"We were hoping you would have an idea or two on that score, yourself, Lieutenant. You seem to have had all the bright ideas, so far."

"Not this time, sir. I'm sorry, but I can't think of a thing," Fairless apologised. "I'm pretty tired—I haven't slept in I don't know how long." Kate could contain herself no longer.

"Commodore Gale!" she said, with quiet fury. "You should be ashamed of yourself. Frank is just about dead on his feet, after all he has been through. I am going to take him away, right now, and put him to bed. You just work your own brains to the bone, for a change!" Gale was about to retort in kind, but Norden nudged him.

"I guess she has a point there, Windy. Frank's done his little piece. No sense in driving him into the ground." He paused, and they all listened as a far-away roar made the ground tremble under their feet. "There goes 'Canada'—and I bet she's carrying the strangest passengers and freight she ever did," he growled. Fairless shrugged sheepish shoulders.

"Katie's the boss," he murmured, "and I do feel a bit worn. I had thought of one thing, though. Peterson and Slade are actually in the power of the virus. If it has picked their brains, maybe they know as much about it, too. You should get quite a lot of information from them, when they have been cured." Norden chewed his lip, thoughtfully.

"You may be right, at that, Frank," he rumbled. "Sounds like a starter, anyway. We'll work on that angle. You go get yourself some sleep—damn, I keep thinking it's you I'm talking to—say how are you going to get your flesh and blood out of there? I know plastic can't transmit bugs, but won't your body be infectious?" At that moment a white-clad nurse approached, briskly.

"Doctor Bannister's compliments, sir, and I am to tell you that the other two have completely recovered." This was to Gale, who gave a curt nod of acknowledgement. She turned to Fairless. "I am to tell you, Lieutenant, that our tests have shown that it is quite safe for you to leave the theatre now. Your human body, that is." He smiled at her, and then at Norden.

"Thank you, nurse," he said. "That's how, Steve—I'll just walk out, and you've no idea how nice it is to be able to do just that."

"One moment, miss," Gale called the nurse over. "This test of yours—just what does it mean. I notice that you are no longer

wearing your helmet." She smiled, and shook her head so that her masses of pale gold hair rippled over her shoulders.

"It's very simple, but it is also very important. We have managed to establish that this virus is very like our familiar ones, that it is a true parasite and cannot live without a host of some kind. It can *only* be transmitted by actual cell-to-cell contact, and not in any other way. Does that help you at all?" He shook his head, grimly.

"I understand you, perfectly," he assured her, "but it doesn't help. In fact it just about kills a little idea I was hatching. Thank you, all the same." She smiled again.

"You're very welcome." The two old friends stared at each other gloomily, as she left them.

"Not so good, is it, Windy," Norden growled. "I can guess what you were thinking. We have Polio-X. We know it kills the other virus. You were thinking there might be some way of spraying the stuff, hey?"

"That's right." Gale gritted. "How did you know?"

"I thought of that, too, that's why." Norden admitted. "We have ourselves quite a problem, old man. We have one virus which we know will kill another virus, but how the hell are we going to get the two to come together?" Gale contorted his face into horrible frowns, as he sought to devise ways and means. Suddenly he brightened.

"How about plants?" He swung on Norden. "Didn't you say that algae are cells, and that they could carry a virus?"

"It's an idea, Windy—it might be the idea we're looking for, but I'm not enough of a botanist to be able to say. Let's go see the Superintendent. He should be able to tell us!"

They found Bannister in the theatre, watching the securing of the two pilots, Peterson and Slade.

"The 'trap' is completely ruined," he complained, mildly, "and it's the only one we have. We have had to resort to using ordinary old-fashioned straight-jackets." He listened to their suggestion carefully, but shook his head when they had done. "I'm afraid it wouldn't work, gentlemen," he sighed. "We have no method of knowing just what type of algae would be able to survive the atmosphere of Titan. It is most important that the cells must be living. Neither do we have the time, or the necessary facilities to produce such a strain, even if we knew the characteristic. In all probability the substance that the research team found was not plant-life at all, in our sense of the word. You recall what happened to the chlorella in the hydroponics tanks?"

"Then that's out," Norden growled thumping his fist into his palm. "Damn it—there must be some way!" He hushed as

Bannister raised a hand. The injections were just being made in the two pilots.

"This experiment is a very critical one." Bannister had lowered his voice to a murmur so that only the two men could hear him. "These subjects differ from the previous ones in that they have been completely dominated by the virus. It is very probable that there has been some chemical change induced in the cell structure, or some new co-ordination patterns established in the nerve-system during the time the virus has been in charge."

The two men were beginning to jerk and strain on their tables now. The plastic clad staff were kept busy holding them down. Strangely, they made no articulate sound, but the grunting gasps of their efforts were clearly audible. Helmets had been discarded, and the theatre was full of the muted murmur of voices, through which Bannister kept on, quietly, unhurriedly. "In the other cases, the destruction of the Titan virus was accomplished without any observable damage to tissue or cell-structure. In these advanced cases it seems to be too much to hope for. It is almost certain that some changes have been made, if only to facilitate control. Presumably, something must happen during that tenday critical period."

The two men were in violent spasms, now, straining and groaning. Norden, scientist though he was, felt sickened at the sight. Even the grim, acid-faced little Commodore was beginning to look uneasily pale. Bannister, like his colleagues, remained quietly and keenly alert, his eyes intent on the progress of the experiment.

"I'm very much afraid," he murmured, "that the subjects are not going to survive the injections. Neither man was in very good shape, to begin with. There were obvious signs of neglect of their personal well-being. They had not eaten adequately for some time, nor had they had a sufficient amount of rest. I think we can put that down to the virus, too. You will notice one interesting point. Neither man seems to be able to speak coherently. I should imagine that is due to the virus-intelligence not having learned to talk. No doubt it let the men do the talking when the occasion was safe for them to do so, and, now that it is threatened, it has taken over completely." That soft, calm voice paused, and Norden shot a quick sideways look at the gentle face on his right. He saw utter relaxation, and academic interest, but there was a something else, a cold, inflexibility of purpose in the dark, steady eyes. Norden looked away again. How could he have been so blind as to think this man mild, and gentle? If there was any way of hitting this foul virus, this was the man to find it. The stocky scientist made a mental mark against the name of Doctor Bannister. Such a man would be an asset on Project Star. The two men were very silent and

quiet now. The medical men moved in with a battery of complex machines and devices, and Bannister excused himself, went to join the throng.

Fifteen minutes later he came back, his face grave.

"Bad news, my friends. One, Peterson, is quite dead. Slade is still alive, but only just. He appears to be in the same state as the original victims; complete paralysis, shallow breathing, very weak pulse. It would seem that the virus, in the violence of its defeat, has completely destroyed all ability to move. X-ray shows a condition which I can only describe as a partial withering, an accelerated atrophy of the muscular tissue." Gale frowned.

"That mean he can't talk?" he demanded. Bannister nodded. "I'm afraid it does," he sighed, and Norden was suddenly tense.

"Any idea how long he's likely to be like this?" he queried.

"That is almost impossible to say. A week or two, if we can feed him; maybe a little more if we are very careful."

"The information we want—it may be right there," Gale raged, "and we can't get at it!"

"Don't be too sure, Windy," Norden rumbled, suddenly. "Just stay here. I'll be right back!" He turned and hurried away, out of the theatre, leaving Gale and Bannister to stare after him. He tramped the long corridor to the room which had been allocated to Kate, rapped on the door, slid it gently to one side, and poked his head in. On a little low bed, in one corner, he saw Fairless stretched out, fast asleep, and sitting by him, her eyes suspiciously moist, was Kate. She stared at her uncle angrily, but came in answer to his wave, her eyes opening widely as he whispered in her ear.

Gale's eyes widened, too, as he saw the burly scientist return, trundling the puppet-control unit in front of him on its rubbered wheels, the lifeless, life-like image of his niece, stretched out on the top of the panel.

"Steve!" he gasped, in sudden hope. "D'you think it'll work?"

"It's a gamble, Windy—but it might come off. Doc, would you get some of your staff to gimme a hand? I want this doll sat up at a table, someplace near, with a pencil and some paper—and Slade settled in this chair, right here. Can you do that?" Bannister laid aside his bewilderment and nodded.

"At once, Doctor Norden——" and he signed to the two nurses who had been quite openly listening, nearby. Gale felt quite distressed at the way their practiced hands laid hold of the image of Kate; he could not avoid the feeling that the lovely girl might wriggle at any moment, and start raising objections.

Competent though they were, they were in difficulties with the limbs until Norden came forward, apologetically.

"Sorry, ladies," he rumbled, "I should have remembered." He made quick adjustments to the controls, and the figure went limp. They arranged it sitting, pencil in hand, and the eyes focussed on the paper. "That's just fine," he praised. "Now,, let's have Slade——" He caught Bannister's look of quiet puzzlement.

"You see, doc," he explained. "There's just a chance that this condition of Slade's might be the same as it was with Fairless; no power in the muscles, but nerve-impulses still functional. This little toy works on sub-threshold impulses—you know, the little impulses that go ahead of any movement-command——"

"I do know about sub-threshold impulses," Bannister assured him, gravely, without the ghost of a smile. "But, go on——"

Norden had the grace to grin. "of course, you would know," he coughed. "Excuse me for being obvious. Anyway, those impulses are picked up by the electro-magnetic mechanical muscles in the toy—and it moves. I chose this one, rather than the image of Fairless, for a very good reason. The Fairless one was the first model. It is tuned precisely to his values—it just wouldn't work for anyone else. We learned quite a lot in making that one, and this one is a refined version. It is much more powerful, as you saw, and it is much more delicate, more sensitive. It can be adjusted. If Slade has any nerve-power left at all, we should be able to get some movement."

The inert man was now in position, sagging limply in the chair. Instructing the two intrigued nurses to hold him steady, Norden fitted the intricate skull-cap over the helpless head, adjusting it with care so that the smooth metal electrodes hugged the flesh of the nape of the neck. He made quick adjustments to the settings, then switched on. The screen began to glow, showing the image of the table-top, paper, pencil and slim sunbrowned hand—as seen by the puppet, close by.

"I've hooked in the eyes, and the right hand only," Norden grunted. "Here goes!" He bent over the helpless man. "Slade! I believe you can hear me. If you can, I want you to think of moving your right hand, just try to move it—and watch the hand in the screen."

No one breathed. The screen showed the hand absolutely still—then, suddenly, it moved, twitched—and was still again. It began to write, clumsily, slowly, but quite legibly:

"Is this me—doing this?" There was a tremendous sigh of relief and astonishment. Gale took over, authoritatively.

"Good man, Slade!" he barked. "That's you, right enough. Listen to me a moment—you know who I am. Am I right in

assuming that you have heard all that has been said and done while you have been here, and that you know what we want of you?" The pencil wrote, simply:

"Yes." Gale took a deep breath, pulled out all the psychology he had acquired in many years of being in command of gallant and brave men.

"Lieutenant Slade," he said, and his voice shook. "I am your superior officer, and I am in a position to assure you, as I do now, that you need feel no guilt, nor shame, nor any responsibility whatever, for the things that were done by you while you were under this evil influence. I can assure you, that, to me, and to the rest of the world, you are still Lieutenant Slade, Pilot-Officer of Space Service in the commission of the United Nations of Earth. Do you understand me?"

"It's as corny as blazes," Norden thought. "But, by damn, old Windy means every word of it—and it's working, too!" The hand was noticeably firmer as it wrote:

"Yes, sir," and came back to underline the "sir".

"Good man," Gale muttered, fumbling for a handkerchief, and blowing his nose with unnecessary violence. "Now——" and his voice was a rasp again. "Is there anything you can tell us, anything at all that will give us a chance to hit back at this damned virus?" The pencil wavered, slowly, then drew a large question-mark.

"He wants to ask a question, Windy," Norden interpreted. "What do you want to know, son?" The pencil moved, writing: "Pete.——?"

"I'm sorry," Gale said, flatly, "Lieutenant Peterson is dead. He didn't survive the Polio-X shots. Anything else?" A silent, awed nurse slid a new piece of paper under that amazing hand, folding the first piece away carefully. It would be something to keep, she thought, something to show her grandchildren, someday. The pencil moved again, simply:

"Me——?" Gale made three tries to speak, but had to turn away. Bannister took over, kindly, but without pretence.

"We can offer you no reasonable hope, Lieutenant. If I said otherwise it would be untrue. At the most you have a couple of weeks, no more than that. I am sorry." The pencil was still for quite a long time, then it began to write, steadily.

"Can't tell you very much—don't know—not much in words—virus lives in a sort of plant that can move—pretty fast—for a plant—about a foot an hour—it has spore-forms—can separate and float for a little while—about six feet above ground—then return to plant—that's how they got Summerton—Lee—Grundag—atmosphere test was too high up—didn't locate any spores—

got them on hands—atmosphere-suits—no hand-protection—that's all—have suggestion——"

"Let's have it, son," Norden said, gently. "Any idea at all would be better than the blank we have now."

"I'm going to die, anyway," the pencil wrote. "Take me to Titan—fill me full of Polio-X—put me outside in atmosphere-suit—and leave me——"

There was quiet pandemonium as staring eyes read that shocking note. Gale swore, viciously.

"I can't do that—I won't even hear of it. Sacrificing a brave man——" he growled, and the rest of the medical staff seemed to be with him. Only Bannister and Norden remained silent, until the babble of protest had died a little. By ones and twos the rest fell silent, waiting for those two to speak.

"Would it work, doc?" Norden growled, thickly.

"Undoubtedly," Bannister confirmed. "It is the only sure way. An organism carrying a strong dose of Polio-X, introduced to the habitat of the virus, would be most effective in transmitting the strain to the native form. In fact, and I am glad to be able to say it now, when there can be no accusation of bravado, I had already thought of the idea, with myself as the subject."

"You?" Gale choked.

"But of course," Bannister smiled. "It is hardly the kind of thing for which one would ask for volunteers, is it?" He put a gentle hand on Slade's lifeless shoulder. "Commodore, you have here a very gallant and brave man who has not much longer to live. I ask you, let him make his great gesture. Let him give the rest of his life to the service of his fellowman. I am sure that is what he would most desire." The pencil moved again. It wrote:

"Thanks, doc."

It was a little less than seven days later when S.S.S. Hercules, with Gale at the controls, slid out of the blackness of space and into a mighty curve around the bulbous, bright disc that was Saturn. From the dimmed port, Fairless could see, in reality, a repetition of the scenes he had seen in those film-shots aboard the ill-fated Survey 38. For long, impatient hours the ship fell, down towards that huge, flattened globe with its spectacular, coldly beautiful rings, down past the outer members of its planetary brood, down, at last, into the orbit of Titan, the only satellite in the whole of the Solar System which possesses an atmosphere—down to the nameless, formless, multi-minute intelligence that spawned and throve beneath that atmosphere.

61

There was quiet tension in the ship as Gale brought it in to a landing. Frank Fairless and Kate Norden were seated at their control-units, their two puppets ready and waiting by the main air-lock. Waiting, too, was Bannister, with a group of his staff. He had insisted on coming along, just in case Slade did not survive the trip. He was standing by with the cultures of Polio-X, ready to perform the last injections. The ship came down, her tubes belching green and golden in that unearthly atmosphere, to land, almost daintily, in the same flat area the first expedition had scanned out with their radar. Gale sighed with relief and satisfaction as he swung out of the chair.

"Haven't lost my touch yet," he grated. "Even if I am an old 'un. Are they all set?" Norden nodded, and sat himself by the Z-board. There was silence in the cabin as they listened to the commentary from the two puppets.

By the air-lock, they slipped Slade gently into his atmospheresuit, Bannister made the injections, rapidly and efficiently, then they sealed down his helmet, adjusted the rubberoid grips at his wrists. The two puppets took over, carrying him into the airlock. One of the medical staff signed to Fairless.

"Sorry, Lieutenant, you forgot to leave off your cap. You know we will have to burn any clothing, if it has been in that atmosphere——" Fairless, naked but for the cap with the gold crest, waved the medical man back.

"It's all right. I didn't forget it. I'm keeping it on, and you won't have to burn it." He stepped into the lock-space, the big door swung shut behind him. In the cabin, they could hear Kate.

"We're going out now—say! it's gloomy out here, sort of soupy, foggy green, but it feels quite warm——" Norden looked at the outside gauge-readings. The temperature was steady at 72°F. and the air-pressure showed nine pounds p.s.i.

"Just right to fool 'em," he growled. "The pressure is just high enough to let 'em think they could get away with an atmosphere-suit. Any lower and they would have had to wear pressure-suits, and they might have got away with it." Bannister came along the corridor and into the cabin, to join the two men.

"I have given him a cyanide capsule," he said, quietly. "The gelatin will take about six hours to dissolve, then it will be all over for him, but quickly."

Outside, the two puppet figures were carrying, between them, the bulky, suited, helpless figure of Lieutenant Slade. Around them was a dreadful silence, the silence of a place that should have been dead, but was not. Through the shifting swirling mist of greenish-yellow air they could see little of the terrain, but it

was not very long before they came to a solitary rock. Kate peered closely at the surface.

"Looks like a good place, Frank, we can prop him up, here." He nodded, and bent to set down the helpless man. Looking about him he caught sight of a dully gleaming object, just visible in the distance.

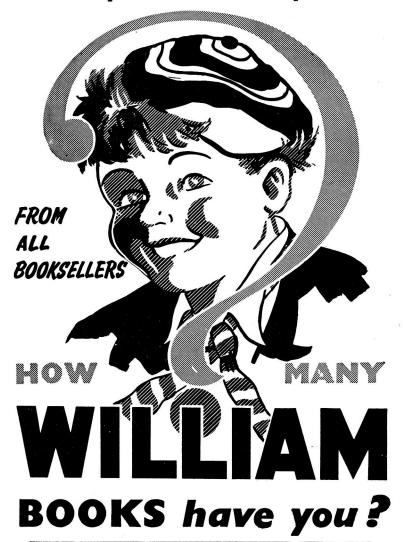
"Over there," he muttered. "Looks like the temporary domes of the first crowd. Sort of makes it poetic justice, giving it right back to them where it came from." They put down their precious bundle, set him with his back against the rock, and his hands resting on his drawn-up knees. They stood a little while, in silence, then:

"Come on, we'd better get back," Fairless said, roughly. "This is his show. He doesn't want us to stand by and hold his hand." They tapped a friendly farewell on that motionless helmet, then set off for the return, to the ladder back to the ship. Kate went up the ladder, and Fairless followed her, slowly. At the top, in the opening of the air-lock, he turned and looked back. He could just see the dark, still figure, facing him, against the green shadow of the rock. He drew himself up in a very precise, grim salute.

"Good luck, chum," he whispered, then, taking off his cap, he threw it out into the writhing atmosphere. He stared for the last time, then swung the giant door shut. In his mind he could still see that silent, solitary figure—and the whiteness of those uncovered hands—the hands that had served the virus efficiently, had helped it to within an ace of destroying mankind—the same hands that were now just as efficiently giving it back the destruction it had tried to deal out—just a pair of hands.

THE END.

28 to choose from — cheap edition now only 5/- net



Stop being a SHADO -be a MAN!

My secret method has done wonders for Thousands-Here's what I'll PROVE it can do for YOU

GIVE ME a skinny, pepless, second-rate body-and I'll cram it so full of handsome, bulging new muscle that your friends will grow bug-eyed! . . . I'll wake up that sleeping energy of yours and make it hum like a high-powered motor! Man, you'll feel and look different! You'll begin to LIVE!

Let Me Make YOU a New Manin just 15 MINUTES A DAY!

You wouldn't believe it, but I myself used to be a 7-stone weakling. Fellows called me "Skinny."
Girls snickered and made fun of me behind my back. THEN I discovered my marvellous new muscle-building system-"Dynamic-Tension." it turned me into such a complete specimen of MAN-HOOD that I twice won the title "THE WORLD'S MOST PERFECTLY DEVELOPED MAN." That's how I traded in my "bag of bones" for a barrel of muscle! And I felt so much better, so much on top of the world in my big, new, husky body, that I decided to devote my whole life to helping other fellow change themselves into "perfectly developed men.

WHAT I'LL DO FOR YOU!

Where do YOU want solid, tough LIVE MUSCLE! Are you short-winded, always tired! I'll give you a sledge-hammer fist and mighty forearm. Put a coat of muscle straight across your stomach. Change those legs that are "always tired" into mighty. vigorous columns of speed and stamina. You'll begin to know what it feels like to





with photos, valuable advice. Shows what can do for you. Rush coupon to: CHARLES ATLAS (Dept. 201/P) 2 Dean St., London, W.1



CHARLES ATLAS

(Dept. 201/P), 2 Dean Street, London, W.I. Send me your 32-page book, "You, Too, Can Be a New Man," FREE and details of your amazing 7-Day TRIAL OFFER.

NAME

(Capital Letters Please)

ADDRESS