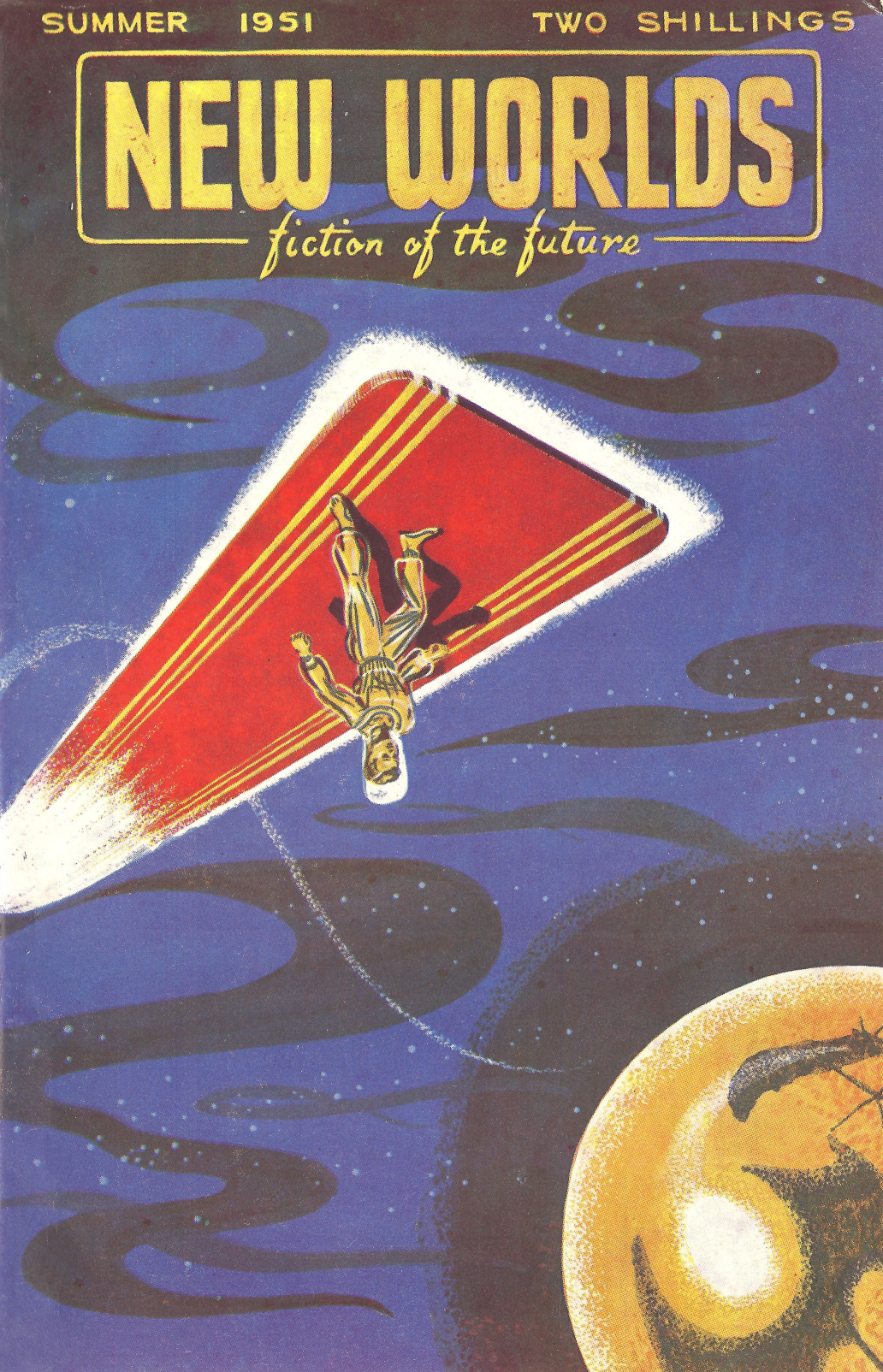
SUMMER 1951 TWO SHILLINGS

NEW WORLDS

fiction of the future



INCREASED COSTS

It is with regret that the publishers of *New Worlds* are forced to increase the price of the magazine, as from this issue, to 2/–, but the rising cost of paper, which is almost prohibitive, leaves no alternative if we are to continue giving our readers the best of British science fiction.

New Worlds, the *first* regular post-war science-fiction magazine in this country, already pays top rates to its authors and artists against a field which is rapidly widening and becoming more competitive every month. For this, we expect—and obtain—the pick of available material.

We ourselves, and our authors and artists, intend to continue giving you the best available literature in the field, and we feel confident that our faith in our readers and ourselves will be justified during the ensuing difficult times.

As from this issue, paper supplies being maintained, we hope to see *New Worlds* published bi-monthly on the 1st of alternate months.

Price in U.S.A. is now increased to 35*c*. Subscription rates at home and abroad remain unchanged, but now cover only three issues instead of four.

NOVA PUBLICATIONS LTD.

NEW WORLDS

fiction of the future

VOLUME 4 SUMMER 1951 NUMBER 10

CONTENTS

Editor: JOHN CARNELL

Cover: CLOTHIER Illustrations: CLOTHIER, HUNTER & QUINN

TWO SHILLINGS

In the United States of America, 35 cents

Subscription rates:
Great Britain and the Commonwealth, 3 issues 6/6 post free
United States of America, 4 issues $1.40 post free

Published by NOVA PUBLICATIONS LTD., 25 STOKE NEWINGTON ROAD, LONDON, N.16

Telephone : CLissold 5541

Printed in England by G. F. Tomkin Ltd., Grove Green Road, London, E.11

HYDRA

By ARTHUR J. BURKS

He had the power of instant matter-transmission—also a collection of obsolete traction engines—which the Martians thought of more interest.

Illustrated by CLOTHIER

DUBHE. Capella. Perseus. Algol. Hamel. Algenib . . .

"I must be very careful what I think," Eret Young told himself softly as he walked out of the dimly lighted yard office in Kinzers, with names of stars and constellations running through his mind. He looked up at the brightly starred sky and the full moon but scarcely saw them.

Square of Pegasus. Cassiopeia. Caph. Cepheus. Deneb. Eros the Planetoid. Phobos and Deimos, the two moons of Mars.

He did not see these heavenly bodies save in words which sped like small comets through his thoughts.

"I'm probably the only man on this insignificant earth," he told himself, "who can go anywhere at will, instantly. One day, if I like, I shall go everywhere at once. But I shall not hurry."

Eret Young was well aware that he must guard thoughts like these. Humdrum people saw madness where none existed. The great advanced spirits of all times had been condemned by their contemporaries as madmen, crackpots, heretics, traitors, almost everything. He was advanced, but he would never be condemned by anyone, for none would know of his secret planning until he was ready. Eret Young was twenty-four years old, stood six feet four in his bare feet, had a tumultous shock of ebon hair, was tremendous across the shoulders, weighed an even two hundred pounds.

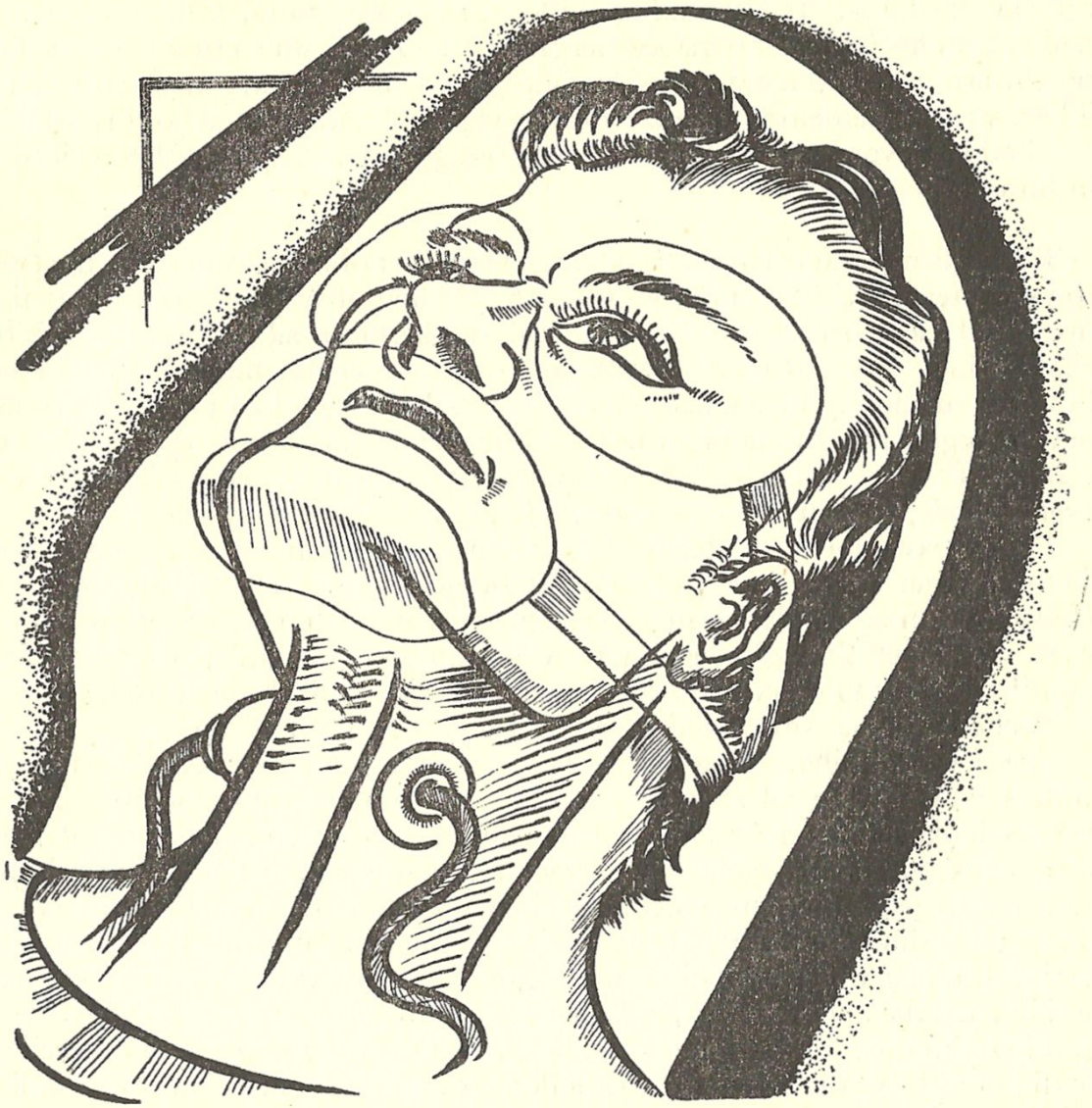
One year ago he had inherited the graveyard of steam traction engines from his father who, with his mother following two days later, died with his hand virtually on the throttle of an old Garr-Scott.

"Promise me, Eret," he whispered a few minutes before the end, "that you'll build the museum to perpetuate the glory of steam. I never got around to it. I always intended . . ."

"I promise, father," said Eret Young.

Promises to a dead man were easy. One need not worry about keeping them, for "the dead know not anything, neither do they rise any more." But Eret Young was a loyal son; he would keep that promise, much as he hated those black old monsters in the yards of Kinzers. Some of those steam traction engines on which Peter Young had lavished decades of affection, had stood in the yards for almost forty years. All were capable of being fired up and run, their cables clanking, their stacks roaring, at the yearly reunion of steam traction fanatics from all over the United States.

NAMES of the old engines began running through Eret Young's mind, interspersing the names of planets, stars, planetoids and other space-travellers



which Eret could no longer keep from thinking. Their names were a grim musical strain he could never stay again, he was afraid. Not that he feared madness, for he knew that his thoughts were power. They were his great secret, which made him not a star-gazer but a star rover.

Jupiter. *Leader*. Saturn. *Advance*. Mercury. *Birdsall*. Venus. *Huber*. Mars. *McNamar*. Neptune. *Russell*. Uranus. *Case 65*. Earth. *All the steam traction engines in Kinzers*.

This was very strange. Ever since he had made his first queer, startling discovery behind the iron doors of the old Birdsall boiler, had he connected space and the bodies of space with the metal monsters he had hated since he could remember—hated with a deadly hatred because they had absorbed his father's love, leaving so little for his mother and for Eret.

Connect the engines with the stars ? He had learned the stars, and secrets of the stars and planets known to no one else in the world, to *escape* from the old black piles of past glory. It was so strange, even to a man who had found himself in all that would have seemed strange to everyone he knew, and, perhaps, everyone he didn't know.

It was just after midnight. Eret Young stood in the yards. He could hear

the sky crackling. It was chill outside, cold as the tomb, cold as the grave which held his father. He raised his grey eyes to stare down into a little valley northward, where the church of his faith stood stark against the bright night. There was the cemetery, where Peter Young slept with so many of his friends.

"And he never *knew* !" thought Eret Young with, strangely, little exultation in him.

TO HIS right and left as he stood in the street of metal monsters, the twin rows of steam traction engines in which £25,000 of his inheritance was tied up, faced each other, their once-proud smokestacks silent but still faintly challenging. Eret dreaded to walk down that street, for he had always been in terror of the big machines. When he was little they had pursued, though never caught, him in his nightmares. Then they had had big eyes, and teeth instead of stacks. Now he felt as if every one of them turned its front wheels, ever so little, so that the monsters could stare watchfully at him.

Thirty past glories of steam. No steam traction engine had been manufactured since 1930. For Eret's money he hoped none ever would be again. He kept them now only because of the promise to his father, whose customers were now Eret Young's customers who would resent and perhaps boycott him if he failed to carry on as his father wished—as all those customers *knew* he wished. For a time yet Eret was careful not to offend them.

There were boilers lying in the yards, behind and between the engines, boilers which were all that remained of yet other steam tractors. Those boilers looked like mammoths asleep—mammoths, elephants without legs, with smokestacks for heads. Such boilers heated some of the Kinzers shops, and one in particular, in which Eret had played as a child, held the secret that would shock the world if the world ever knew. He smiled now, remembering the day when he had crawled into the boiler with an acetylene torch and burned the hole, far back, in the boiler's belly. Something must have been guiding him then, for no sooner had he cut out the rough hole than he decided to dig into the ground beneath the boiler. He began hiding his work, too, like a lifer digging his way out of prison. He visited the boiler at night, carrying the dirt out, dropping it on to the right of way where the Pennsylvania railroad sliced through his father's yards.

In time he had had to find other places to hide the rocks and dirt he took from the growing, deepening hole.

He had to find other means of transport than hands, buckets, sacks.

Then had come the day when he had required nothing; he had discovered how to consume, disintegrate, whatever he was pleased to dig out of the walls and floor of the cave.

If his father ever realized how Eret looted the power lines, to provide light in the pit, and power for the things he began to build in it, old Peter said never a word. It was possible, of course, that he had known all along, merely waited for his son to speak of it if he wished. Old Peter had always yearned to be an inventor but had never had time. Maybe he suspected the inventive genius of his son . . .

But never anywhere near the extent of that eerie genius.

ERET YOUNG, his shoulders very straight, his head expressing defiance of the weird challenge of the steam traction engines which seemed com-

pelling him to run an after-midnight gauntlet, started walking down the aisle under the dome of night. Save for moon and stars there were no lights except the dim one in the office and those which sped past on cars; cars whose horns and sirens wailed in long-drawn-out sorrow, as if they somehow knew what Eret knew and mourned for the people of the world.

The names kept running through Eret Young's mind as he walked.

Bands of Orion—*I shall loose them* ! Nebula in Cygnus—*can a Swan know the secrets of heaven* ? Nebula in Andromeda, diameter 42,000 light years—*yet for me it is less than one of the steps I am now taking* !

Between each two thoughts of the light years of space his mind punctuated with names of steam traction engines . . .

Case. Scheidler. Star.

Eret Young almost laughed aloud. Every engine here was a hasbeen even on Earth, smallest, least significant of all the specks of sand in the Universe of the Stars. They were hasbeens or they wouldn't be here in this yard. What could *they* have to do with nebula, spiral or horsehead ? They were scraps of useless metal, no more. And yet . . .

And yet, had it not been for that old boiler, one of many ripped from steam traction engines down the years to serve ignominious purposes, Eret Young would not have known what he now knew of the Universe—*and the even vaster potentialities of man*, manifested so far only through himself and his chosen confidants, none of whom knew all his secrets.

He could *feel* the engines turn their front wheels, to watch him as he walked. He entered the concrete building which since his father's death had been barred to everyone but himself, and which for years before had been his playhouse, thanks to his father's easy tolerance.

He locked the heavy door behind him. The concrete shop was like a pillbox, strong as a fortress because inside it his father had experimented with boilers which might explode and destroy the yards, killing ancient mechanics and customers.

Eret Young, even now, felt like a truant child as he crawled into the old boiler, along its belly to the hole he had cut so long ago, had since enlarged to suit his own increased size. Only now a metal door neatly fitted into the boiler's bottom. It too was locked. Eret Young opened it with a slender key, stepped on to the ladder leading down, closed and locked the door above him. As the door closed a bright light flashed on in the well, making a vertical tunnel in a wall of ebony. Eret Young instantly left childhood and the world behind him.

He went on down to the bottom of the pit, forty feet under. The walls appeared to be of solid granite. Had anyone else come down he would have wondered why the pit had ever been dug. Had he known a child had started it he would have shaken his head. Eret Young had been secretive even as a child.

BUT he faced a portion of the well wall and whispered. There was a curious sibilance in his whisper. The concave side of the wall seemed to whisper an answer, with the same sibilance. The side opened and Eret Young stepped through, the door closing behind him, its whispers dying out. At the same time all lights behind him clicked out.

Eret Young stood in the brightly lighted strangest room on Earth. It was a

laboratory and a dwelling place. It was a retreat and an assembly area. It was a tinker's shop and the abode of outgrown genius. It was a "ham" station—and infinitely, *literally* infinitely, more. It was a monk's cell and the seat of Oriental splendor. It was whatever the mind of Eret Young—which he believed to be limitless—wished it to be, for it was wholly at his command.

Strange garments hung on the wall, garments that were like skeletons, like empty mannikins, like ribs of suits of armour. No two were alike. All were large—large enough to accommodate the tremendous body of Eret Young. In a way each one somehow resembled him—their *only* point of resemblance.

There was a swivel chair on a circular stainless steel track just inside the wall of the eerie room. Panels that were distorted mirrors, draperies, screens —screens of small feathers, of lacquer, of ivory, of jade, of coral—stood side by side around the room. A deep carpet covered the floor; a hooked rug, rather, which, in a section of the United States where the making of hooked rugs was a science, was literally out of this world with an almost baleful kind of beauty. As Eret Young crossed this circular rug inside the circular rails under the circular walls, he looked fearfully down at it, with that in his eyes and heart which only ancient terror of the steam traction engines, outside and moon-far away now, ever aroused in him.

He reached the swivel chair, which swung to receive him, sat in it. He hummed softly to himself. He scanned the strange skeletal suits on a segment of the wall, mentally selecting, rejecting.

As Eret Young sat there the walls of the room began, ever so slightly, ever so gently and in silence, to ripple—as if kissed by the merest of light winds. The mirrors, draperies and screens, each in turn, as if it sought to attract his attention ahead of its fellows, rippled as if beckoning him, without sound.

Slowly he rode around the room in the railed swivel chair. He paused before this mirror and that, this screen and that, stopped before the rack of "clothing," took down one, unfastened its clasps and hooks, opened it out, slipped it upon himself, secured it so that now he sat upon the swivel chair within the "skeleton" of his selection.

As he fastened the last clasp a light showed through the lacquer screen, outlining two words: "*Loma Tina.*"

"TARGET for to-night !" said Eret Young softly. He glanced at his wristwatch as he swivelled over to the screen behind which *Loma Tina* appeared. As he rose to face the screen his watch gave the time as 1.13 a.m., the date as November 17, 1952. He stepped through the screen into a room exactly like the one he had quitted. The time was *still* 1.13 a.m., November 17, 1952.

The underground room in Kinzers was seventeen hundred miles from the room into which he stepped as through a connecting door. It was inside the ages-extinct crater of Loma Tina, island of Hispaniola, one of the Caribes.

Save for the rug on the floor the room was a duplicate of the room under Kinzers. There were screens, draperies, mannikins, even the swivel chair— as if Eret Young had brought them all with him, which he definitely had not done.

Sirius. Rigel. Vega . . .

The Stellar names kept running through his mind, as if he hummed them.

He sat in the Loma Tina swivel chair, faced a drapery, drew it back to show a blank white television screen. He pressed a button. Light glowed softly through the screen. Now the screen was not blank. It was an astronomer's map of the heavens. Near each starry body the light outlined a small arrow that pointed to something off-screen. The frame of the screen was studded with buttons. Arrows indicated those buttons. If you wanted Sirius or Rigel, the arrows seemed to say, push the button indicated by the arrow !

Eret Young studied the astronomical map.

Antares. Aldebaran !

"Each," whispered Eret Young to the silence, "is merely a head for Eret Young !"

Eros. Deimos. Phobos.

"I guess I'll take Deimos, the smaller of the two moons of Mars !" he decided. He pressed a button on the frame of the televisor.

The screen blacked out the map, but it was not Deimos that appeared in it, as Eret Young expected. It was the face and form of some interplanetary stranger !

II

ERET Young stared at the bluish creature, which stared back at him with equal interest. It was human, with a humanity like none he had ever seen, even in the pages of highly imaginative fiction. It wasn't animal or vegetable. In the screen it appeared to be about four feet high, had pointed ears beside a globule head, had bony arms ending in clawed hands, the finger-tips of which seemed to be equipped with eyes. Like earthly humanity it had a face, with two eyes beside the bridge of a razor-edged nose. It smiled at Eret Young. Its teeth were small, snow white, perfect. The eyes, he noticed, did not smile.

Into what far distance was Eret Young peering ?

"I didn't ring for you, fellow," said Young. "I'm merely getting in touch with Deimos, little moon of Mars."

The stranger pricked up his ears, literally, as if he heard and understood Eret Young. Then he did a thing Young could not, at that moment, comprehend. He poked both hands *through the screen* towards Eret Young ! Material physical hands, they were. The stranger from space ran those hands, like questing tentacles, around the television frame. At the same time the rest of the fellow's body doubled up, so that his six-toed feet came on to the bottom of the screen-frame. The toes, too, were equipped with "eyes," and the stranger moved them back and forth along the base of the frame. The toes were as prehensile as a monkey's tail, as the stranger's fingers were.

"While *he* looks at me," Eret Young thought, "his hands and feet investigate the screen. Did he understand me ?"

To Young's horror and disbelief, the Deimos Demon began to press buttons that no one on Earth, ever before, save Eret Young, had pressed. Young called the creature Deimos Demon because he could think of nothing else at the moment.

Now, having pressed several buttons, so fast that Young could not record them mentally, the Demon stepped back in the position in which he had first discovered himself to Eret Young. His ovulate lips moved. A squeaky, creaky voice came out of the screen.

"You contacted Deimos—as you of Earth call the Little Moon," the voice

said. "I am here to discuss matters with you !"

"What is your name ? How can you come out of the screen ? Where, actually, *are* you ?"

"I won't trust you with my name until we've made a deal," said the Demon. "I can't speak your name because this screen won't give it to me . . . but suppose you try ? Speak your name to me."

"I am Eret Young !"

"You are Eret Young !" the other instantly retorted.

"I've trusted you with my name, now how about yours ?"

"There has been no deal as yet."

"Just what is the deal you have in mind ? I don't make you out, have never seen anything like you on earth. Either you're from somewhere outside, or I imagine you. If you're from outside, how is it that you speak my tongue ?"

"THE deal," said Deimos, "will be made on the Little Moon. You were planning to go there anyhow, as you indicated when you pressed the button that brought *me* ! I am from Mars. I do not speak your language. I speak my own. You understand me because I have just turned your scramble of buttons into a language unscrambler ! Thus I prove my knowledge greater than yours, in certain respects. I do things with your machine you cannot do. But then, this machine is known on what you call Mars, has been known for ages there. You are simply our first contact with Earthman. I am your first contact with Mars—*and only we two know of it so far.*"

"And this deal you have in mind ? Is it personal or Martian ?"

"Highly, selfishly personal !" said the Deimos messenger.

"You're planning treachery to your own planet, then !" snapped Eret Young. "I won't have anything to do with you. You'll end by betraying me."

The Deimos man laughed, cackling.

"Have I suggested treachery ? Have I suggested *any*thing ? Isn't it that you feel guilty because you have taken care that none other in the world knows of your rooms under the monsters, your rooms in Loma Tina here, and in Ranier, Shasta, Popocatapetl, Bear Tooth Butte . . ."

An icy current raced along Young's spine as the stranger from outside ticked off names of his various "havens."

"How can he know them ?" Young asked himself. "Only *I* know them. This is a thought form—*mine*. Thus only can it know the things I know !"

But he kept thinking of all the times he had "reached out" towards the planets, the stars, the planetoids, just as he had reached out to this Loma Tina and the other havens Deimos man had just correctly named. But until tonight he had never risked transition to any place outside—lest something go wrong and he never be able to return. If he didn't return by instantaneous transmission from one of his Earthly havens there were dozens of slow ways back. But never from outside, so he hadn't risked it. Now he had intended to —now the Deimos man had beaten him, somehow, to the punch.

"How can I know you are anything but a creature of my fancy ?" asked Eret Young hoarsely.

"You are a student of the Universe," said the Deimos man instantly. "So am I. I am also a visitor from Mars, at the moment, on the Little Moon you call Deimos—meaning *Fear*. In my tongue it is also called fear ! Perhaps thoughts travel farther than you of Earth have any idea ! Come to me *now*,

and we shall talk face to face in fact. Deimos is no more distant from Loma Tina, *for you* , than Loma Tina is distant from your first haven, at the place I cannot name, not having the word."

"Kinzers !" said Eret Young.

"Kinzers !" instantly repeated the Deimos messenger. "And perhaps, if we make this deal I suggest, I will help you—*if you'll help me equally in return* !—to the control of the twenty-six moons of our system"

AGAIN that cold chill touched Eret Young's spine. Only a year before, a Defence Secretary of the United States had told the country that plans were being worked out for the establishment of a synthetic satellite beyond Earth's atmosphere, from which that satellite's owner would automatically rule the world. No sooner had the story broken than Eret Young thought:

"Why a synthetic satellite when we have a real one ?"

From this question came the next one:

"And there are twenty-six moons in our Universe. If we are able to take control of one, why not of all—and so be masters of the Universe ?"

He never asked anyone either question, not wishing to spend the rest of his days in an asylum. Now, this stranger from—Mars, the man said, mentioned Eret's thoughts as casually as if he had always shared them with him !

"I'm dreaming this fellow," Young decided. "How else could he know ?"

"You fancy yourself as Hydra of the many heads !" said the Deimos man suddenly. "Excessive vanity on your part since you have but one ! However, if you will share them with me, Eret Young, I shall make you a present of twenty-six heads—with which to begin your rulership of as much of the Universe as your years will allow !"

"Which of the twenty-six are not named ?" asked Young, testing the stranger.

"The five small satellites of what you call Jupiter !" said Deimos man instantly. "However, we of Mars have names even for these five !"

"You are a reflection of me," said Eret Young. "Nothing you have said but is known to me. You are not real."

"Then should I not have known 'Kinzers' ? " asked the other.

"Flimsy evidence," retorted Eret Young. "You could have failed to know that if you wished to set up a straw man to prove yourself."

"But if I reflect *you*, would I need to prove myself ?"

"Suppose I go to Deimos," Eret Young veered away from useless discussion. "What will the difference in gravity do to me ? Deimos is only five miles in diameter. I'd have gone before, but I have worked out no protection . . ."

"You have the best possible protection," said Deimos man. "You have instantaneous transmission. If anything goes wrong you are back here on Earth in that instant . . ."

"But if mental alertness fails . . ."

"AH, one must take certain risks, but has it not always been true of pioneers ? You have noted how I have manipulated your own screen so that we can talk to each other directly, though our languages have no common ground at all, save sound ! I can also alter it so that, whether you are conscious or not, the instant anything is *unnatural* with you, you will return to Loma Tina . . ."

"How do I know you are honest ? How do I know you do not *plan* to keep

me on Deimos ?"

"If I am as interested in Earth as you are in the twenty-six satellites of the seven planets . . ."

"You've forgotten the small new ones," said Young.

"Those you call Vesta, Juno, Ceres and Pallas ?" asked Deimos man. "They are very small. Let us class them with the satellites—if we find they can be useful to us !"

"One more thing," began Young, but the screen was suddenly empty save for a yellowish spot of light outlining Deimos, the Little Moon of Mars.

That cold, colder than the tomb, which had repeatedly touched Young as he conversed with the entity he thought of as Deimos man, held him enclosed now as if he were inside a cake of ice. If the man were real, what had he already let himself in for ? He had provided the creature with some sort of access to Earth which, clearly, Martians had not hitherto had. If the thing were not real, *what was wrong with Eret Young* ? If Deimos man were real, was Earth in any way threatened ? Deimos man had said he would show Eret how to get control of the satellites. Did that mean that he already *knew* how ?

"If he did he would have no need of me," Eret decided.

But how could he ever know unless he went further, unless he accepted the challenge of Deimos man ?

YOUNG adjusted the screen until he was peering into a room that was the exact counterpart of the one in which he sat—save for the hooked rug of strange design—and like the haven under Kinzers, except for still a different, circular rug. Young *believed* that the room into which he peered was below the surface of Deimos; he believed it because just in this way had he established those earthly havens which Deimos man had so glibly named, as if calling a roll of doom. But in moving from one Earthly haven to another there had been no danger for Young beyond the mystery of his disappearance if he happened to "get stuck," and *that* he could explain away when he returned home in normal ways. But *this* room, which looked so inviting, so near, was actually on Deimos, approximately 15,000 miles from the centre of the planet Mars. On Earth Eret weighed 200 pounds; on Mars he would weigh 96 pounds. Was there enough difference to endanger his life before instantaneous transmission returned him to Earth ? Could this man of Mars hold him in that room which looked so near, yet actually was somewhere between—he didn't pause to estimate—thirty-five to two hundred and thirty-five millions of miles distant ? Mars was *never* close enough that our fastest aeroplanes could reach it, travelling top speed, in less than fifteen years, if it could have travelled in the void. But realization of this fact tickled Eret's vanity rather than frightened him. He, of all the world, could step through into that clearly visible room, across the millions of miles of interplanetary space.

So he placed his life in the hands of Deimos man—if the creature actually existed—adjusted his skeletal transmission for what might well be his last transmission of himself *anywhere*.

Just as he rose from the swivel chair Deimos man appeared in the screen again.

"If you're afraid, Eret Young," he snapped, "we'll never get anywhere and I can't make a deal with you ! If you're not with me *in the next room*

within thirty of your seconds, there will be no deal . . . and you'd better never attempt anything on your own !"

Eret Young hesitated no longer. His decision made, all fear left him. What was death, anyway ? Would it matter if his body spent eternity on Deimos, once he was dead ? Did it matter to anyone that his father fell apart slowly in a Mennonite cemetery near Kinzers ?

YOUNG stepped through the screen. There was no appreciable shock, only a slight dizziness. Young sat in a swivel chair like one he had just left. There was a difference. The one he had left was warm with his body. This one was chill. The hooked rug on the floor was again different. It glowed with an unearthly radiance all its own.

"Un*earthly*, of course !" thought Young. "Deimosian ! But where did it come from to Deimos ?"

Young peered forth from this new haven. A quick study of the heavens told him what it would have told any astronomer, even the rankest amateur. He had, in sober fact, travelled *instantly* from Loma Tina, Earth, to Deimos, Little Moon of Mars ! He was alone in his own outermost laboratory. He was surrounded by duplicates of all the gadgets he had used or invented on Earth. What good were they out here ? What could he do with a "ham" radio station on Deimos ? What good was television ? Could he contact Earth himself ? He could contact his own haven in Loma Tina, but what good would that be, since none but himself on Earth knew of it ? *Could he contact anybody on Earth in any of Earth's swiftly improving television sets ?* The mere thought that it might be possible filled him with a sense of power. If he could, if he *could*, and could prove that he spoke from far outside, could he compel *anyone* to obey him if he issued commands ? He gulped, swallowed, turned his mind away from illusions of grandeur. He was simply the precocious son of a collector of steam traction engines. He must not get too big for his breeches.

There was a sound at the outer door of the lab. The door swung inward, proof that it swung to obey someone who knew its vibratory rate perfectly.

The Deimos man was only four feet tall. He wore no clothing, as Young understood clothing, yet he was not nude. He was strangely covered, save for his hands and feet, his toes and fingers that were like a score and more of eye-equipped tentacles. The man wore a rectangular mask through which his face was visible. He carried a second one which he tendered to Eret Young, motioning him to don it. Young did.

"Now," said Deimos man, "we can talk. These two miniature screens are replicas of your big screen there, even to the buttons I manipulate to interpret our speech to each other. I could improve on them, but there wasn't time. While you were making up your mind to come I realized that we couldn't talk when you arrived unless we had unscramblers. I had to work fast !"

II

ERET YOUNG stared at the entity who claimed to be a Martian and tried to make himself believe. He had just studied the heavens with his telescope and there was no doubt in his mind—unless he were in fact dreaming—that he was actually on Deimos. There could be no mistake about it. There had been no lapse of time between Loma Tina and the Little Moon. Young

looked away from the Martian, who calmly squatted cross-legged on the balefully coloured rug and waited for Young to adjust to conditions. Young was trying to believe he had actually crossed those millions of miles of abysmally cold space *in no time*; he tried to sense himself doing it, but all he could get was this, simply: he had stepped through a "screen"-door in Loma Tina into a room in Deimos ! He himself had created both rooms, and the room under Kinzers after which all his havens were patterned.

It was all true, he had but to accept it. But how could he ? He could begin with the Martian.

"Have I gone far enough with you," asked Young, "for you to trust me with your name ?"

The fellow hesitated briefly.

"I am Pfete-lai," he said finally, "member of the Inner Scientific Circle of Mars."

"And just what, actually, has brought about *our* contact ?"

"I am a scientist," said Pfete-lai. "During some past time I have made a careful study of Deimos and Phobos, especially Deimos. I knew a short while ago that something unusual was taking place on it. It was slightly disturbed and the disturbance registered on the instruments by which we study our celestial neighbours. I came here to find what had altered Deimos. I found your haven here as easily as you find things with scientific instruments on Earth. I solved the mystery of entrance. Inside, I soon discovered what the room was. I could look into all of your havens, simply by inspecting your screens here and pushing buttons until something happened ! It's not our first contact with Earth, but is our first *mutual* contact. I made haste to get in touch with you, Eret Young, before you disclosed your personal knowledge to anyone else."

"How could you know anything about me ?"

"Since you were a child you've been reaching out," said Pfete-lai. "Your reach was vaster than you knew *because it travelled on thought*, which is instantaneous transmission. Besides, for ages we have known much about your planet."

"You're telling me nothing, really," said Eret Young, while goose-pimples of nameless fear began to ripple inside him. "I take it that I am in your power, temporarily . . ."

"And I am in yours !" said Pfete-lai quickly. "I have committed what in Mars is the unforgivable sin—I have made contact with someone from another planet without first getting permission from the Inner Circle of Martian Science !"

"And the punishment ?"

"Eternal exile from the Universe !" said Pfete-lai.

"Yet you risked it, and risked what I might do. Why ?"

"I gambled that we might be kindred spirits. I am ambitious. I am sure you are ambitious—and selfish, else you'd long since have shared your knowledge."

"I hid it from my father for fear he would stop my experiments. Secrecy became a habit I have not yet broken. I have never planned anything that might endanger any person on Earth, any nation, least of all, *the world* !"

"But," said Pfete-lai, with facial expression that could be taken as a kind of smile, "power is a good taste in the mouth ! Would you not like to be able,

all by yourself, to command the enemies of your nation to disarm—*with the knowledge in advance that they must obey you or be destroyed at your whim* ?"

Eret Young thought of it. A sense of power ! The human being, especially a young one, who didn't thrill to the sense of personal power, simply did not exist. To be able to make peace throughout the world, as easily as one closed one's hand ! It would be a great thing; but was it possible ? The Secretary of Defence had believed in the almost limitless possibilities for peace of his proposed synthetic satellite. The world was too far away from the time when it might contact satellites that were not synthetic, and which were obviously far and away better for military purposes. But Eret Young now commanded such a satellite—if Pfete-lai did not represent some unknown quantity to prevent it, temper it, or guide that command. The sense of fear grew in him.

"I WILL not endanger the safety of anyone on Earth !" said Eret Young.

"You already have," said Pfete-lai, "provided I take advantage of your presence here, and of the many havens you've already founded on Earth—*every last one of which I could, if I wished, take over* !"

"I could kill you, here and now, with my bare hands," said Young, not at all sure he could !

"True," said Pfete-lai. "You are in my power, but I am also in yours, for to make use of anything connected with you I must admit to the Inner Circle that I have disobeyed ages-old regulations, and so merit eternal exile."

"You keep saying 'eternal' exile ! You sound as if you lived forever !"

"That is virtually true," said Pfete-lai, grinning again. "We are unbodied on Mars only when we wish to be—or if 'death', as you call it, is decreed as a punishment. I have lived on Mars—how many Earth-years are you, Eret Young ?"

"Twenty-four !"

"I am sixty times your age, and more, and I look as young as you do ! I shall continue to look as young for another fifteen hundred of your years !"

Young didn't believe it, but it could be true.

"So far, then, we are in one another's power, which reminds me: how did you get here from Mars ?"

Pfete-lai looked uncomfortable for a moment, then shrugged, a weirdly Earthly gesture, and told:

"We have aerial and interplanetary travel a hundred times as fast as anything you have on Earth. I reached here in my private Transitor in a matter of seconds. *But time did elapse*, fast though our most advanced speed is . . ."

"And I have instantaneous transmission !"

Pfete-lai nodded.

"I can beat you back to Mars !" said Young. "I can build a haven on Mars while you're en route to your Transitor, beat you to Mars and report you to the first Martian I see !"

Pfete-lai shifted uneasily. The movement of his body made an odd sound on the eerie rug.

"I suggested a deal, if you will remember," Pfete-lai said. "I have trusted you with my name."

"What is the deal you propose ?"

"A partnership, your knowledge and mine pooled."

"For what purpose ?"

"*Power* !" replied Pfete-lai, so emphatically that Young almost jumped.

"WHAT do we do with it, provided we attain it ?"

"There is no limit !" said Pfete-lai.

"Do we use it for good or evil ?"

"What is good, what is evil ?" retorted Pfete-lai. "Let us use it as we agree between us !"

"What division of power do you suggest ?" Young had to grin in his turn at the implications of the question. The situation had a ridiculous side that suddenly struck him as absurb. Two entities, an Earthling and a Martian, sitting together in a hole on Deimos, dividing power between them ! What sort of power did Pfete-lai have in mind ?

"I shall rule directly," said Pfete-lai. "You shall rule indirectly, through me !"

"What shall we rule ?"

"Let's begin with your Earth," said Pfete-lai, talking fast as though he feared he might not be permitted to finish all he had to say, "and with Mars. Your seats of power will be the satellites, the twenty-six known moons of the planets of the sun. I'll assume direct power, in contact with the populations of those planets !"

"You'll do as I bid you, always ?"

"You forget," said Pfete-lai, "that was not the original suggestion ! It is necessary that we *agree* what is best ! You suggest, we discuss. I suggest, we discuss."

"And if we are never in agreement ?"

"We are entities of discernment," said Pfete-lai. "We'll find a way."

Young pondered the weird idea for a minute or two. His brain felt as if it were afire. That something was happening to him on Deimos he had known since stepping into the Deimos haven, a few minutes before. But for the atmosphere in the haven—which he had probably built into it from Loma Tina—he'd have been dead on arrival, probably. That an Earthman could exist on Deimos with no protection seemed impossible. Yet he was doing it, though his ears rang, the haven seemed now to be dizzily spinning, and Young hoped that Pfete-lai did not know that he was close to the blackout stage. He fought against blacking out, fought against giving his condition away to Pfete-lai.

"I must think it over by myself," said Young, his voice almost incomprehensible to himself. "I'm going home ! We can get into contact . . ."

"We *are* in contact hereafter, automatically !" said Pfete-lai. "You have but to enter one of your havens."

"And you have but to enter this one on Deimos ?" said Young.

PFETE-LAI hesitated, then shook his head. Alarm bells rang all through Young. This was somehow all wrong. Even if Pfete-lai were intent on doing his best for the spiritual, moral and physical progress of Mars—and the Earth —this hole-and-corner thing revolted Young. And yet, there was the temptation to power, always a magnet for the ambitious. To be able to sit on a satellite and control the destinies of the people on its planet ! To be the puppeteer, manipulating the strings of fate ! Could any man refuse a go at it ?

"I am not sure I can step into Loma Tina," said Pfete-lai. "I am afraid, too, that my colleagues of the Inner Circle of Martian Science will become suspicious of me, send someone to Deimos to check on me. Such a one will find your haven—and will ask why I have not yet reported it ! I am limited by laws I may not yet flout. But in time to come . . ."

Young suddenly rose, faced the screen through which he had stepped from Loma Tina to Deimos.

"You have only to enter a haven," said Pfete-lai.

"I'll let you know !" said Young, stepping back into Loma Tina, to sprawl on the carpet there like a spent runner, while sweat poured from all his body until he was weak as a kitten. Obviously something was needed to make life for him, for any length of time on Deimos, possible. He needed to work out a formula, build something besides his Physical Transmitter, to protect himself on Deimos. He must invent something different for each of the twenty-six satellites he would visit, on which he would in turn establish himself—*if* he made a "deal" with Pfete-lai.

"I'm crazy !" he told the silence in Loma Tina. "I'm mad ! I'm *evil*, to think of such a thing . . ."

But even as he came near to death in reaction to the strange impossible journey from which he had just returned, his mind ran over the names of satellites, except the five tiny companions of Jupiter—whose *known* moons suddenly ran their names through his thoughts: *Callisto*, *Europa*, *Io*, *Ganymede* !

"I'll call the five unknown ones," he told himself excitedly, "by my own given name: *Eret One*, *Eret Two*, *Eret Three*, *Eret Four*, *Eret Five* !"

Why not *Young* One, Two, Three, Four and Five ? Instantly he asked himself that, and frankly confessed—to himself alone—the correct answer: Young had been his father's name, many men were known as Young, but Eret was his very own He knew none other named "Eret."

Thus he knew he had already yielded to the urge to power, the desire for limitless possessions, that he would make some unholy alliance with the Martian who called himself Pfete-lai.

ALMOST as if a litany composed of their names were playing through his mind, it ticked off the names of other known satellites of planets of the sun: *Oberon*, *Umbriel*, *Titania*, *Ariel*—of Uranus; *Japetus*, *Phoebe*, *Dione*, *Rhea*, *Titan*, *Hyperion*—of Saturn; *Moon*—of Earth; *Titon*—of Neptune; *Phobos*, *Deimos*—of Mars; *Enceladus*, *Mimas*, *Tethys*—of Saturn.

When he had done his mind ran crazily on:

"*Eret One ! Eret Two ! Eret Three ! Eret Four ! Eret Five !—hitherto nameless moons of Jupiter !*"

He rose, stepped through the Loma Tina screen into his room under Kinzers, Pennsylvania, let himself out into the workaday shop, then into the yards where the steam traction engines stood to watch him. And they *were* watching him, foolish though it was. He knew the feeling came from childhood and could not be true, but he could not throw it off. The slumbering old engines, fireless, cold in the night, gave him the same feeling of nameless, inexpressible terror Pfete-lai had roused in him on Deimos.

He studied the sky, seeking Mars, but clouds obscured even the moon. He looked down at himself, to discover whether his first venture into inter-

planetary space had altered him in any way. He had not changed.

He let himself into his bedroom. It was two thirty in the morning. He would sleep until seven. He undressed, slept almost the instant he touched the pillow. But he did not sleep until seven, for there came a rapid hammering on his door. Sleepily he answered the knocker.

"It's Leigh Hewey, Eret !" Leigh Hewey was one of his late father's old-time mechanics, who knew all about steam traction engines because he was older than the oldest one in the yards. "You'd best come out and tell us what happened to the oldest Garr-Scott !"

Frankly Eret Young didn't *care* what happened to the steam traction engine Garr-Scott, so he told himself. But the terror, the urgency in Leigh Hewey's voice stirred him. He dressed quickly, went out into the yards. It was four in the morning. All Young's labourers and many neighbours from nearby were in the yards, standing around a vacant place in the opposing lines of old engines.

A Garr-Scott was indeed missing ! No wheel-tracks led away from it, *nothing*. The old metal pioneer apparently had vanished in the night . . .

"Like into thin air!" said Old Hewey.

"Who could have stolen it ?" asked a neighbour.

Foolish question, thought Eret Young. Who could have stolen it indeed, since it weighed something like eight tons ? Flashlight beams were lighting up the space the Garr-Scott had occupied. It was Leigh Hewey who first noticed the imprint of several . . . several . . . *what ?* Could they be *feet ?*

IV

THE prints in the muddy Kinzers yards were those that Pfete-lai might have made. But, of course, nobody on Earth save Eret Young had ever seen Pfete-lai or anybody like him. If he, Young, said nothing, who would ever make sense of the footprints ? In Pennsylvania, land of the hex—a fact known to everybody but Pennsylvanians !—anything could happen. That's what people would say.

Eret Young heard the telephone ring in the shops. One of his clerks slept there. He heard the man answer sleepily, then shout something unintelligible. It seemed odd that the man hadn't come out with the others to find out what had happened to the Garr-Scott.

Things had begun, for Eret Young, to take on a tinge of the utterly strange —of strangeness which even Young, whose very life was *outre*, found insupportable.

He started thinking back, while he studied the strange footprints for some answer to many suddenly important puzzles. How had it been possible for him, Eret Young, to endure many minutes on Deimos, in fair comfort ? How had it happened that Pfete-lai could say everything he needed to say, including pronunciation of Popocatapetl, yet hadn't apparently been able to say "Kinzers" ? Why, after enduring Deimos without harm, had Eret Young almost died on returning to Loma Tina ?

And there had been something utterly macabre about his return to the lab. under Kinzers. Everything had been as usual, yet somehow not as usual. A man left home, was gone for a day or two, returned to find seeming change in his home, had to become accustomed to it again. Everybody knew the experience. This return had been like that, accustomed, and Eret Young had

shrugged it off. But now he couldn't ! What had been different about his return ?

He continued to stare at the eerie prints, partly made by toes with eyes—eyes that watched the ground and everything at ground level, while the eyes alongside the nose studied *people*, and eyes in fingertips could look wherever a man wished to see. Pfete-lai had such eyes, and if he were truly a Martian, perhaps all Martians were similarly equipped. Could Young speak of any of this to his father's old employees ? He knew he couldn't.

Footprints !

They began to remind him, dimly, vaguely, of other footprints. It was a dreamy kind of recollection, with little substance to it, like a dream trying not to be remembered. *Footprints ? Footfalls !* His own. Something wrong, back along the line to Loma Tina, to Deimos. But *what* ? He must remember. These prints where the Garr-Scott had been, warned him that it was important he remember.

CLYDE Sciff came running out of the shops.

"Half a dozen newspapermen are coming," he said excitedly. "From Lancaster and Reading and Harrisburg. They asked questions, first, and if what they asked makes sense, there'll be people from every newspaper in the country by the end of the week. Somebody saw a Garr-Scott . . ."

Then tousle-headed Clyde Sciff saw the vacant spot where the Garr-Scott had been.

"Jupiter !" he said. "They're *right* !"

"Right ?" echoed Eret Young, grabbing the man by the shoulders, shaking him. "Who's right ? What's this about a Garr-Scott ?"

"This reporter who just telephoned," went on Sciff. "He asked me if a Garr-Scott had vanished from the yards, sometime during the night. I said no, or I'd sure have known of it. But he insisted. He talked aside to some woman. It was a cracked voice, the woman's I mean. She was excited. Elderly, I'd say. Then the reporter said he was coming out, with photographers and other reporters, to check on the woman's wild story. Eret ?"

"Yes ?"

"This reporter said that this woman said she saw a Garr-Scott standing in the air, hundreds of feet over Kinzers ! She saw it against the moon. She was outside looking at the stars, couldn't sleep."

"Take it easy !" said Young. "How could any woman recognise a Garr-Scott against the moon, even if she were right on it ? It's a fairy tale."

"Is it ? Then where *is* the Garr-Scott ? How does anybody know that a Garr-Scott is missing ? There is, I can see for myself—and where is it ?"

"I reckon we're going to have to answer that question sooner or later, Eret," said Hewey softly. "The thing is gone, and it didn't go of itself, and these marks in the mud are of nothing a body ever heard of. I know I never saw anything like them. If the Garr-Scott had been fired up we'd all have heard it. Nobody could have just picked it up and taken it away—not eight tons of metal ! But it isn't here, and when those reporters, cameramen, and probably the State Police . . ."

FAR off, westward towards Lancaster, came the screaming of sirens. State police cars were en route and coming fast, clearing the way for other cars.

Eret Young found himself thinking back and back, trying to make sure just what *had* happened to him. He would never tell anything, that was certain. They'd lock him up if he did. Maybe he'd be accused of some sort of trickery to arouse interest in the museum he had promised his father he would found. Then, again, how could he have made a steam traction engine stand in the air by itself, hundreds of feet up? Could eight tons of metal be levitated? *No!* But Eret Young himself, less than three hours before, had been on the Little Moon of Mars! What was that if it wasn't some form of levitation?

Eret Young began to perspire again.

The sirens were closer, turning into the yards now. There were a dozen cars wagging their tails behind the State Police cars. Officers began to pour out. An elderly woman came in with the police. When Eret Young saw her he groaned. Mrs. Laighton Cash! She'd spent half her life cooking for harvesters in the days of steam traction engines. She was the one woman who could spot a Garr-Scott, a Leader, an Advance, a Star, a Birdsall or any known steam traction engine, as far as she could see it, and she had keen eyes. Why hadn't that particular woman slept through the night? Now there was something to pay—and no explanations available.

"What's going on here ?" asked Sergeant Becker.

"That's what we'd like to know," said Eret Young. A steam traction engine seems to have taken off on its own hook, for nobody knows where !"

"Then Jennie Cash is right ?" said Powell Loder, reporter from the *New Age Weekly*.

"Of course I'm right !" rasped the woman. "I *couldn't* be right without being crazy or seeing things, but I can spot any steam traction engine I can see. I've worked on them since I was two and my husband manufactured some. And a Garr-Scott is missing, ain't it, Eret ?"

"Yes, Mrs. Cash, a Garr-Scott is missing. But I don't agree that it just levitated."

"I didn't say it did," said Mrs. Cash. "I didn't, because I don't know what the word means . . ."

"It didn't just rise into the air," explained Young.

"Just the same, that's right where I saw it, Eret !" said the woman. "Thank heaven if I'm crazy I'm only partly so."

"Maybe you'd better tell everybody what you saw," said Loder. "Then we'll all compare notes and see what comes of it !"

"I just happened to go out of the house. I live at Ronks, you know. I happened to look out in this direction, and I saw a Garr-Scott rise right above the roof tops of Kinzers, moving slowly straight up ! I don't drink, and I've never before seen things . . ."

"You saw something else, Mrs. Cash ?" said one of the other newsmen.

"I think I did, but it *couldn't* be," said Jennie Cash. "I went back in the house and got out Paw's binoculars. They're German, and good ! I looked at the Garr-Scott, now about five hundred feet above Kinzers, moving an inch at a time. *Then I saw people working on it !* I hadn't been able to see them without the binoculars. I never saw such people. They were dwarfs. I counted ten of them. If they wore clothes it was the queerest I ever saw. The whole ten was queer ! They were having trouble with the Garr-Scott, as well they might, trying to make it lev . . . lev . . . what was that word, Eret ?"

"Levitate !"

"Go straight up in the air without firing it," said Jennie Cash. "They were standing all around the engine. There were dwarfs—about four feet tall, I'd say, small in proportion, for men—crawling over the Garr-Scott, and standing around it, as if giving advice. Instead of looking into the engine with their *eyes*, they seemed to be *feeling* inside it, with their *hands*—and . . . and . . . so help me, *feet* !"

ERET Young swallowed, was glad Jennie Cash had everybody's strict attention. A Martian, like Pfete-lai, would "look" into a gadget like the Garr-Scott, with the "eyes" on fingertips and toes ! Anyway, the little men around the Garr-Scott were Martians—if current evidence could be accepted.

"Go ahead, Jennie," said Loder. "You have a *little* confimation, anyhow. Boyd, you getting pix of these strange prints around where that Garr-Scott stood ? Jennie, you say the Garr-Scott was high in the air. Taking that as a fact, a premise, men of course could crawl around over it, but now you've posed another interesting thought: if it was five hundred feet in the air, *how could men stand around it on nothing* ?"

"I've been expecting that question," said Jennie Cash, "and if anybody

else told me what I'm about to tell you, I'd *insist* that the teller be at once hauled away to the booby hatch. Gentlemen, those men standing around the Garr-Scott, five hundred feet in the air—maybe more, certainly more a minute or two later !—were standing on a *carpet.* I'm sure of that, for there was a breeze and it *flapped.*"

"Jennie," said Powell Loder, "are you telling us now that little green men from Mars carried the Garr-Scott away, to their own little red planet maybe, on a magic carpet ? That's just a story, you know, out of the Arabian Nights Entertainment."

"I've never been entertained by Arabians," said Jennie Cash, "but I knew a Garr-Scott when I saw it, didn't I ? Yes. And I knew a carpet when I saw it. If I had been half a mile closer and had had better binoculars I could have told you who made the carpet. Eret, is any of your mother's carpets or rugs missing ?"

Nobody laughed.

"I don't know," said Eret. "Hewey, you and a couple of the boys look through the house, see if anything else is missing—a carpet, maybe. But Mrs. Cash, if my late mother ever made a magic carpet, she never told anybody about it."

"What do you suppose made the prints, Eret ?" asked Loder.

"Martians !" said Young. "Who else could have ? Steam traction engines weighing eight tons levitating—men standing around 'em half a thousand feet in the air, on *carpets* ! Loder, that *proves* they were Martians, doesn't it ?"

"I don't disbelieve anything," said Loder. "I just happen to be one of the people who believe that flying saucers, or rings, came to us from outside, and are still coming. Maybe our far-planetary friends are in need of scrap-iron for an interplanetary war !"

"It isn't funny," said Eret.

"No, it isn't, and you don't look a bit as if you enjoyed it," said Sergeant Becker. "Do you mind if we take a look around ? After all, however it was done, there has been a theft, hasn't there ? It bears investigation."

"I didn't report a theft," said Young, "but I would have. Look around if you like."

WHILE the newsmen pried into everything, asked about the museum—one of them grinning knowingly as he asked about the museum angle—Hewey returned from the house to report that nothing was missing, no carpet or rug, anyway.

"You wouldn't have cooked up a nice photographic optical illusion to put across your museum, would you, Young ?" said one reporter. "Like throwing the picture of one of your steam traction engines against a cloud . . ."

"No cloud anywhere near !" snapped Jennie Cash. "Sky as clear as right this instant, clearer maybe."

"And trick advertising at four in the morning wouldn't seem profitable," said Loder.

But now Eret Young knew something else he could never tell anyone. He knew what it was the Martians had been standing on, on which they had levitated the Garr-Scott . . .

"For Pete's sake !" said Loder. "Nobody has asked Jennie what became

of the Garr-Scott ! Jennie, did it fall, or just disappear ?"

"It began to rise faster and faster," said Jennie. "I wouldn't have said this, but if I'm nuts I can't be any nuttier for what came next ! Before I could bat my eyes it was shooting up faster than I'd ever seen anything travel. It was going so fast in no time at all that I couldn't even see the streak it left behind it !"

"Straight up, you say ?" said Loder.

"Straight as a die !" snapped Jennie. "Now, everybody, can I go home and send for the doctor ?"

"I'll take you," said Sergeant Becker.

The rest stood around until daylight. Flashbulbs popped. Curious persons came in from the highway. Eret Young offered no explanation. Nobody, of course, except Young, believed that Martians had taken away the Garr-Scott, especially since Young had freely suggested Martians !

Young wished just one thing, yet didn't wish it; he wanted everybody to leave so he could go down into his laboratory under the middle shop; and he looked forward, for the first time in his life, not with eagerness, but with fear of the unknown, to a visit to his secret haven. For now he remembered too much, and wondered how he could possibly have failed to take note of the obvious, when he returned from Loma Tina.

"Did Pfete-lai," he asked himself, "do something to me, somehow, so I wouldn't notice things on my return ? What's he after, anyway ?"

Everybody was gone, finally. Eret Young went into the concrete shop, locked the outer door behind him. He didn't need much time, just time enough to look, to make sure.

He went back into the old boiler, down through the door into the shaft. Standing at the bottom he felt a tension never experienced before. It was all he could do to make the sibilant sound that would vibrate the door into the laboratory proper—and turn on the lights none had seen but Eret Young, unless, now, the Martians had.

He kept thinking . . .

"*My own footfalls, when I stepped in from Loma Tina, and I was so distracted I didn't even notice anything queer !*"

He uttered the whispery sound, the door responded, opened slowly on his lighted lab. Eret Young stared at the circular floor and knew a dreadful truth: the circular rug, the *braided* rug, was missing !

"*Why*," he asked himself, "*can't I ever remember where I got it ?*"

Sudden sibilance in the lab. might have been snickering laughter.

V

SOMETHING about rugs ! There had always been something about rugs ! Eret Young's father had loved steam traction engines. His mother had loved everything about hooked rugs. Eret himself had been initiated into the artistry of hooked rugs when he had been almost too small to toddle. He had hooked a small rug himself when he had been four years old. As he grew older it hadn't seemed quite manly, but he had kept on; he could think while he worked, and his thoughts had always been power.

He himself had made the rug which, until early this morning, had covered the floor of Kinzers Haven. He had done it down the years to keep his hands occupied while his brain laboured with thoughts too big to tell anyone.

But this rug, the missing rug, had got out of hand—now that he checked back, and remembered. A rug maker always planned his rugs: Eret had planned his, and it hadn't come out as he planned. For one thing, most people, including his mother, made square or rectangular rugs. This one had come out circular in spite of his plans to the contrary. If there were such a thing as a rug taking a bit in its teeth, this one had done it.

Round rugs didn't fit in anywhere in the average room, but a round rug fitted his underground laboratory. As Eret Young listened to the eerie laughter out of his blank screens around the circular room, he wondered:

"Did I make the room to fit the rug, or was the rug made to fit the room ? Did I really have anything to do with it ? If I was somehow guided, by whom, and for what purpose ?"

It was a chilling pair of thoughts.

Then, every one of his havens about the world had been exact copies of the Kinzers Haven. He had simply visualised each haven in advance, building each one mentally from the blueprint—and the Kinzers Haven was the blueprint. That is, every other haven copied it with one exception: *the circular rug* ! No two—though he'd never had any cause to take particular note until now—were alike.

What, really, were the rugs ? Magic carpets ? Not even small boys believe in magic carpets any more. Maybe Mrs. Laighton Cash believed . . .

It was on a par with the flying saucers, or discs, or rings, whatever they were.

Nothing Eret Young told himself could relieve the coldness in the pit of his stomach. That coldness was spreading outward and around him in all directions. He couldn't shake it off.

HE stepped to the Deimos screen, to the screen through which he had stepped into the first of his outside havens, on the little moon of Mars. He turned on the lights behind it, to show the celestial map. He blacked out all save Deimos. The eerie laughter—which he may well have only imagined—had died out, to a silence as thick as midnight under the sea.

"Pfete-lai !" Eret shouted.

There was no answer, not from anywhere.

"Pfete-lai ! Pfete-lai ! Show yourself, blast you ! I've got to know what you're up to before I take another step in our deal !"

No answer. The room remained cold and still. Dare he risk a quick trip to Deimos ? Could he go directly from Kinzers ? Would Pfete-lai answer only if he called from Loma Tina ? Eret Young knew he was putting off the terror, by no time at all, when he stepped through the adjusted screen into his Loma Tina haven, where the first thing he did was look at the rug which should have been a copy of the rug he had built for Kinzers. It wasn't a copy, but he'd check on it later.

He lighted the proper screen again, with the proper interplanetary map.

"Pfete-lai !" he called.

There was no answer, though he called again and again, and tried each of the screens in turn. Had Pfete-lai been taken by his people and exiled, or was he deep in some macabre betrayal of Eret Young, whom he claimed was his first contact, directly, with Earth ? First ? Had Pfete-lai meant by "first" what Eret Young believed him to mean at the time he used the

word ? Or did Pfete-lai think much farther back in time, to a "first" Eret Young did not remember ? Back, for instance, to the first time Eret Young, a mere toddler, had been initiated by his mother into the mystery of hooked rugs ? Had interplanetary destiny been stalking him even then ? Were the "stars in their courses" fighting with or against Eret Young ? That he must quickly discover.

Young stepped to the door, off the Loma Tina rug. He dropped to his knees to study it more closely. Instantly he had the feeling that it *changed*, became *alive*, aggressive, menacing. That, of course, was silly. But was it ? Did the rug withdraw somehow, without moving, when he reached down his hand to the border ? He didn't see it move, but he felt its withdrawal, its menace.

"Nonsense !" he told himself aloud. "It's one with my old terror of the steam traction engines. I still feel their eyes turn to follow me when I walk among them ! It's something out of a nightmare. Something from my childhood, that I don't quite remember !"

He found he couldn't get his fingers under the edge of the rug, and that was very definite nonsense. The rug wasn't pinned down or weighted down in any way. He could lift the whole rug, easily—though he had never lifted *this* one. He should be able to. But he strove to push his fingers under until he broke his nails to the quick, and they bled. He was hoarsely panting, and sweating again, but he would not be stopped.

THERE were duplicates of Kinzers tools in the Loma Tina Haven, as there were duplicates of everything else—except rugs !—and Eret Young went to work on these. He couldn't introduce a screwdriver tip, a come-along edge, a knife-blade or even a razor blade, under the rug ! The rug seemed to fasten itself to the floor as with innumerable minuscule tentacles. In a surge of fury Eret Young struck downward at the rug with a crowbar. When the bar touched the rug it was as if it had touched a live wire. The Loma Tina Haven blazed with light, as if every piece of electric power in it had short circuited . . .

And Eret Young was blasted into what seemed, for an infinitesimal instant, oblivion. But it wasn't that; he was back under Kinzers with his hair and eyebrows singed off, his clothing in seared rags. He was conscious that he had received a definite warning. His life *could* have been taken, easily.

What had happened to "his" rug under Loma Tina ? And the original, under Kinzers ? Until he had some sort of solution to that he would not rest.

Let them wonder, at ground level, what had become of him. He must know about rugs, "magic" or otherwise . . .

AN idea struck him. He had "made" the Deimos Haven; he could demolish it in the same way. It was his. Working out of Kinzers Haven, through his screens, his hands through the screens, working in detail across time and space as the hands had worked close to him, building under Kinzers, he had founded his world-wide havens—and the haven on Deimos. He could destroy, in the same way, in reverse.

Again Eret Young contacted his Deimos Haven, went to work on it—the silence, the coldness, with him still, and increasing. He would take the Deimos Haven apart, piece by piece.

He looked into that room where he had talked face to face with Pfete-lai. He knew he could step into it, reach into it with his hands . . . but to his horror *every part of it resisted his best destructive efforts, as had the hooked rug at Loma Tina !*

The Deimos Haven was his, but he could not destroy it. In effect it had been "captured" by Deimos, or by Martians—or by Pfete-lai.

"And they'll capture every one I erect, on every one of the twenty-six moons !" he thought. "If I go outside and build any more !"

Could they compel him to found other havens, on Phobos, the Moon, Hyperion ? If they could not, he was still to a certain extent master of his future. He was in a good bargaining position, though what he had that made him useful to Martians, or to Pfete-lai personally, he did not yet know. Certainly Pfete-lai was a far greater scientist than was Eret Young.

"He doesn't yet have instantaneous transmission, somehow !" thought Young. "If he masters that he will have no use for me. I can strike some sort of bargain. Pfete-lai ! Pfete-lai ! Let's parley !"

But there was no parley, for no voice came out of the screen, no bluish small figure showed on its far side. Eret Young remembered Pfete-lai fumbling *through* the screen, pressing the buttons on the screen's frame which turned the screen into a language interpreter. If the Martians didn't understand instantaneous transmission, how had Pfete-lai done this ?

Again that coldness touched his spine. He thought:

"*While the Deimos haven exists they have instantaneous transmission between Deimos and my Earth havens !* So while they have me they have that transmission. Then what do I have that they need ?"

He must find out.

He manipulated the buttons on a screen beside the screen through which he had stepped into Loma Tina Haven. This time a globe of earth revolved before his eyes. He touched it, spun it, halted it so that Mexico enlarged itself on the screen. He centred the spotlight on Popocatapetl. He focused Popocatapetl Haven on the screen, stepped through into it He gave scant attention to what he might see of Mexico from the crest of the old volcano. He knew it by heart, was as much at home here as under Kinzers. No, he gave all his attention to the strangely different rug. This one, supposedly a copy of the original Kinzers rug, he now noted was Mexican, or Yaqui perhaps, or . . . was it either ? He could see some of his mother's work in it, some of his own. There were overtones and undertones of Mexican and Yaqui bright colours; yet really it was none of these.

Nor could he so much as lift the hem of the rug, anywhere around its circumference !

Terror rose higher and higher in him. What did this behaviour of the rugs indicate ? What did their tenacity symbolise ?

ONCE again he stepped to the screen through whose duplicate on Loma Tina he had attained Deimos. He contacted Deimos again, looked into the haven there . . .

"Pfete-lai," he called, "give me a sign ! If there is still possibility of understanding between us, allow me to lift the hem of the Popocatapetl rug !"

There was no answer, no direct answer at all. But when he stepped back off the rug again, stooped, he could insert his fingers under the rug. He could

lift the rug—to a certain height—after which it stuck like glue. He looked under the rug, felt the texture of it with his fingertips. He had just found the strands of material, which might have been wire, might have been power lines, when the rug snatched itself from his hands, dropped to the floor with a splatting sound, then edged forward like creeping doom to re-cover its former spot on the floor of Popocatapetl Haven.

In quick succession Eret Young stepped into Ranier Haven, in Washington State, into Tai Shan in China, into Mangshan in Tibet, into Ararat, into Mountains of the Moon, into Amnya Machen, into Shasta, whichever first occurred to him after he stepped into another. There was no time between steps, no space between Shasta and Amnya Machen. All havens were exact duplicates of Kinzers—save for the rugs. Each rug, different with a *threatening* difference, was the only variation—save that of geographical location—among the havens. Each, he now realised, had within it something of the land in which he had founded the haven; each had something within it that was not earthly at all; that would have fitted Deimos better, or Mars, or . . .

Had he noticed anything unusual, really different, between the Deimos rug and the rugs of his earthly havens ? Thinking back he could remember few details except of his conversation with Pfete-lai. Pfete-lai had sat upon the Deimos rug. As Eret Young remembered he could again hear the sound the rug made as Pfete-lai shifted position upon it—and the sound was strangely like the snickering laughter he had heard under Kinzers when he dropped down into the haven to find the original rug missing.

Did he dare, now, erect havens on any or all of the remaining seven-planetary satellites ? He had already somehow jeopardised all the Earth ? What kind of a door had he opened ? If he founded havens on other satellites, would he open doors to Earth for the huge companions of the satellites ? Or would he be in command, as Pfete-lai had suggested in wording his proposed "deal" ? How could he know for sure ? How far could he trust a man who had, by his own admission, betrayed the confidence of his own group, the Inner Scientific Circle of Mars, going so far as to risk beyond-Universe exile ?

He kept asking Pfete-lai questions, from all his haven screens, and receiving no answers.

In the eye of his mind he kept seeing what Mrs. Laighton Cash had described: his old Garr-Scott steam traction engine, rising straight into the air above Kinzers, deep in the early morning, aboard a "carpet," surrounded by little bluish men like Pfete-lai. What in the world did Pfete-lai want with those old hasbeens ? The Earth had finished with them, passed them by. They weren't even interesting curiosities to most people any more. Iron and wood ! Surely Mars had iron and wood, had everything they could possibly find in the old Garr-Scott. What was the meaning of the strange theft from outside ?

ERET YOUNG visited every one of his havens, around the world, spending no more than a total of two hours in all of them, seeking the answers, receiving no answers.

Then, heavy of heart, he stepped back into the laboratory-haven under Kinzers, and stopped stockstill in the first of his "other" laboratories. He knew without looking down that he stood upon the original hooked rug, in place as, until a few hours ago, it always had been !

He stared at it. In the middle of it were dirt marks, some of them broad. The carpet was compressed where the marks were, as if the old Garr-Scott whose wheels had made the imprints still stood in them ! But it did not ! The Garr-Scott had vanished. Pfete-lai—or whoever was back of the odd developments, now becoming nightmarish—had apparently left the marks in the rug for him to see. Moreover, by bending a little Eret Young could see the sunken spots in the rug where creatures like Pfete-lai had stood !

There must have been ten of them, he guessed ! Pfete-lai had not come through the screen previously—save for his hands and feet—he had told Eret Young. But these others had. Somehow they had raised the Garr-Scott, pushed the rug under it, taken off with it, returned the rug—a queerly contemptuous, challenging gesture.

Whither had the old engine been taken ?

Deimos ? Eret Young contacted Deimos, looked into the haven, which did not contain the Garr-Scott. He could look no further without returning to Deimos, and for the time he simply hadn't the courage ! He must think it over, perhaps take someone into his confidence.

Several of the screens, as if in answer to his thoughts, snickered !

VI

ERET YOUNG knew very well what he should do. He should completely wreck his "home" laboratory, blow it to bits, and never explain the explosion to anyone. An older, more experienced man, would not have hesitated. Young was in the grip of some eerie influence from Outside, and it *could* be abysmally dangerous. His havens were doors to the Outside. He *thought* he had instantaneous transmission, but *had* he ? Did something or somebody from Outside have it, and use him now as an interplanetary guinea pig ? Could he explain his technique of instantaneous transmission, even to himself ? How did it work ? He knew, he was certain of that, but he couldn't put his knowledge into words, or even mental pictures. Did that mean that it was done in a language so strange even mental pictures would not mirror it ? Was he *property* ? Had he been weirdly kidnapped from outer worlds ?

Eret Young knew he would accept the challenge, before he actually reached a rounded decision. He simply couldn't make an end of everything, of every facet of his secret, and never know, all his life, what might have happened—no, not even if he jeopardised the people of the world to satisfy his curiosity. But was it merely human curiosity ? If so, then most of the world had the same curiosity, wished to know about the Universe. He simply happened to know more than most—or did he ? Might there not be other men, older and more experienced, around the world, who had gone even further in investigations into the forbidden unknown than had Eret Young ? If so, they kept it as secret as did Young.

Before going back out to allay any wonder his disappearance might cause among workers and neighbours, Young made a quick second journey of the day around to each one of his havens. In each one he gave the rug a "laundry mark." Not much, just a special stain to indicate that a given rug belonged in a given haven. He could scarcely have told, at that point, why he did it, except that he held the idea that he must somehow brand, and thus retain a semblance of control of the rugs; if he lost control he must know what became of each rug, or be able, for certain, to recognise it if it vanished and he found

it some other place. There was an enigma in the rugs and he was taking the first chance that suggested itself toward its solution. It seemed silly, ineffectual, but he knew he must do it. As he went from haven to haven the names of the satellites began running through his mind again . . .

Titan. Triton. Hyperion. Moon. Io. Ganymede. Mercury, Venus—no, those two were planets, and neither had satellites as far as anybody on Earth now knew. Callisto. Umbriel. Oberon. Titania.

AS he named each one, rather as each one passed in review, as if seeking his approval, or begging him to make a selection from among them, like coy women preening, he thought of the principal of each, and named it. The planets and their companions, the stars, nebula, had ceased to be great wonders to him, he often told himself—until they began playing for him, as now, a strange music of the spheres, to which they passed in interspatial review.

Iapetus or Japetus, one of the moons of Saturn. Far enough from Deimos that he might hide from Pfete-lai and other Martians what he planned doing—if hiding were possible. Pfete-lai had said that Martians had space ships, and didn't have the secret of instantaneous transmission—which was thought—but he no longer believed the Martian, if he was a Martian. After all, Pfete-lai could be from anywhere, even from unexplored areas of Earth, with designs, not on the Earth, but on Mars. He could have visited Deimos to plan catastrophe for Mars as well as he could have come to Deimos from Mars. Whatever the creature was, it was clear that he didn't play interplanetary games honestly, or else the power to do so had been taken out of his hands—by whom, or what ?

Eret Young, smearing the word "Kinzers" on the home rug, in black inerradicable ink, turned his back on the laboratory, stepped outside the door, ignoring the sounds from all the screens that were like snickers. He felt that as he went he might well be leaving unseen doors open behind him, through which strange entities from space followed at his very heels. Pfete-lai had known the sound that opened the door—copy of this one—to the Deimos Haven. If he dared enter Kinzers lab., as some of his kindred clearly had, he would know the way in and out of the room.

Eret Young doubted, deep inside him, that even if he chose to destroy the laboratory at Kinzers, he would more than briefly defer whatever Pfete-lai and his friends—or enemies—had in mind for Earth ! He didn't even try. He was going to carry the fight to the "enemy," if enemy it was.

Young stepped out of the old boiler into the ground level, concrete room. Shouts were coming from outside, lusty blows were crashing against the heavy door.

"Eret, what's wrong in there ?" the words came through the door, muffled, fearful. "Answer me !" Hewey's voice ! More thudding blows as hammer-heads, sledges, smashed against the door which Eret Young had locked inside, behind him. This was, he realised, the first time he had gone in and down to the laboratory during daylight. If he hadn't locked the door, if employees had entered the room and found him "missing . . ."

He hurriedly unlocked the door. His employees stepped back.

"Eret ! What is happening, anyway ? Where have you been ?"

"I haven't been anywhere," said Young, "away from Kinzers, that is, but I'm going to Japetus as soon as I can pack my grips !"

Nothing like the truth, especially this kind of a truth, to puzzle simple people—or make them certain that their boss was completely insane. For a few heartbeats of time Eret Young wondered if it might not be a relief to be insane, with nothing much about which to worry.

"Japetus ?" repeated Hewey. "What county is that in ?"

Before Eret Young could answer, fortunately, his employees noticed the condition of his clothes—burned rags which clung to his body as if stuck there. Burned hair and eyebrows.

"Was there an explosion ?" asked Hewey. "We didn't hear nothin' !"

"A short-circuit," said Young truthfully. "I almost electrocuted myself, or someone almost executed me. I don't know which."

"Where did it happen ?"

"Loma Tina !" said Young, knowing he might as well have said Mount Olympus, Mount Tabor or Everest, for all the sense it would make to Hewey. Of course, they had all been convinced that a Garr-Scott had vanished heavenward in the night, and maybe he could make *some* explanation to them that would make sense, but suppose he did ? Suppose they took action that restrained him from going any further ? Asking himself this question he knew that if he were restrained, so that his growing curiosity could never be satisfied, he would indeed become insane.

NOW Young saw something in their faces, knew that it hadn't been entirely concern for him that had sent them hunting him.

"Well, why so anxious about me ? Why knock down the concrete shop ?"

"There's been another one !" said Hewey. "And this time nobody saw it. Somebody saw where it was. Then, it simply *wasn't*. And Carter Neary is gone, vanished, just like the Birdsall."

"Birdsall ? Birdsall ? *Which* Birdsall ?"

"Right behind this shop. The oldest Birdsall," said Hewey. "Nobody saw it go, unless Carter Neary did—for he was tinkering on it, Eret ! He was fixing it, so it could be fired at the harvest reunion of steam traction engine cranks. Now, the Birdsall is gone between eye-bats, and Carter Neary with it !"

Carter Neary was an old man, past seventy, one of Eret's father's closest friends. Neary had never ceased to mourn the passing of Peter Young, with whom most of his life had been spent, all of it as a worker on steam traction engines.

Now, where was Neary ? Out in space somewhere, dead, a tiny satellite of some kind that would travel a lonely orbit until the end of time ?

"And it's all my fault !" Young told himself. "Every bit of it. But I was in the laboratory, must have been there when and while it was happening ! How was it managed ? From some other haven ? Or was any haven used at all ? Or was it done even while I watched, not knowing what was happening ?"

Had Carter Neary simply disappeared because he happened to be aboard the Birdsall when Pfete-lai, or whoever had done it, took possession of the old engine and spirited it away ? Or had he been taken for some purpose, *because he knew all about the Birdsall* ? Carter Neary was a simple old man, almost illiterate. He'd have no idea about planets and moons, even though he had a vast wealth of lore about phases of the moon as superstition related them to the harvesting or planting of crops. He knew the zodiac as specified in the almanac, but he would speak of it thus:

"Look for trouble when the posey woman comes !"

He would plant "in the dark of the moon," or the "light of the moon," but he would have no idea how far away the moon was.

"If he were told he was on Jupiter he would accept it quietly and calmly," Eret Young thought, "if he found himself still at the steering wheel of a beloved old Birdsall. He would wonder how he got there, and where 'there' was but he would accept it until someone got around to explaining it so he could understand ! If Pfete-lai were deliberately selecting someone to run that old Birdsall, no matter in what condition it found itself, he couldn't have picked a more suitable engineer-fireman than old Carter Neary !"

If he hadn't been living in the midst of it he would have laughed at the whole thing, if he hadn't taken it to be too ridiculous even to laugh at.

HEWEY and the others led him to the spot where the Birdsall had been parked for months. It was gone. No tracks indicated that it had moved so much as an inch, forward or backward. It had risen, if the marks meant anything, vertically into—nothingness ! So far no word had come from any eye-witness.

"I just can't explain it," said Eret Young, "and you'd all best keep quiet about it until I can."

"Keep quiet ?" said Hewey. "Too many people already know. There couldn't be more people interested if we had a museum already established, all the engines inside it, and everybody was a fanatic. It can't be hidden any longer."

"All right, then, maybe somebody will explain what is happening. Hewey, maybe *you* have ideas ?"

"Only this: I wonder how you got so burned. I wonder what's in the concrete shop. Others are going to wonder, too. Sooner or later the law is going to probe. I just don't want Peter's son to get into any kind of a jackpot."

"I'm just as anxious about Peter Young's son as any of you could be," said Eret Young, without smiling, "and rest assured I'm going to do my best to find out what's happening."

JUST then someone called from the main shop.

"Hey, Eret, a reporter from *The Newcomer* wants to talk to you !"

Glad of the opportunity to escape his own well-wishers who, though they asked enough questions, could never ask as many as all the world would if an inkling of the truth—whatever the truth might turn out to be—got out in the news.

"Young," said the reporter casually, too casually, "another one of your steam traction engines hasn't gone riding on magic carpets, has it ?"

"Of course not !" said Eret quickly, to hide his surprise from the reporter. "Why should it ? Besides, it only happens at night, when witches ride broomsticks !"

"Don't kid anyone, Eret," said the reporter. "A queer story has just come from China ! Someone has been seeing things there, too ! I thought a description of what he saw might be of interest to you. This man, a man of family, culture and refinement, a descendant of Confucius, no less, was atop Tai Shan, paying prayerful homage to his distinguished forbear, Kung Fu Tze (Confucius to you !) when he saw what he took to be an elephant, flying !

But this elephant, Eret, had a white man at its steering wheel. This elephant had wheels, like a Juggernaut, except that the front wheels were small, the back wheels *huge*, huge enough to crush anything they ran over. That is, if they had been running on anything but air ! This elephant had a huge, long head, which stuck straight up from its neck—almost like the smokestack of a steam traction engine, Eret Young ! It had no tail, but did have a place behind it on which things could stand, and things did stand on it—things that looked almost human, and might have been Japs, by their size ! Are you still listening, Young ? Bear in mind, chum, that this wild report comes before our wild story of the disappearance of the Garr-Scott could possibly have reached China !"

"I'm listening," said Eret Young.

"Well, has another steam traction engine disappeared ? And tell me something else, Young ! Are all your employees, friends and neighbours present and accounted for ?"

He dared not hesitate, he could not lie—for there was deep honesty in him.

"Carter Neary seems to have wandered off somewhere, but he's done it before, will do it again."

Surely that was safe enough ! And it stalled for time. Had the Chinese gentleman of culture, descendant of Confucius, praying on Tai Shan, been close enough to the "foreign devil" on the levitating engine, to be able to describe him ? Young thought not.

"I'll be looking for a picture of Neary," said the reporter. "The Chinese gave a good description, so there might be *something* here."

"If that's all you want of me . . ." said Eret Young.

"Not by a lot, Eret !" said the reporter. "Not by an awfully lot ! But it'll do for a moment. Just don't *you* disappear, leaving us without a story !"

Eret Young clicked up. There was an idea in the reporter's last words. Young could disappear and let the world wallow in bewiderment, if questions became too touchy to answer. Meanwhile, there were things to do.

YOUNG demanded respite from questions for the rest of the day. He needed sleep against he couldn't even guess what contingencies of the night to come. He slept until late. He let himself out of his room. He felt that all the world waited, tense, listening. Kinzers itself was under an invisible globe of tension, its inhabitants scarcely breathing.

Making sure nobody spied on him, Eret Young slipped down into the Kinzers lab. He took special note of the rug which he had branded "Kinzers." He adjusted his global screen for Tai Shan, stepped into the haven there.

Now he intended making a *real* jump; a jump to Japetus. First, he studied the Tai Shan rug, making sure he would know it if he saw it again. He peered out at as much of China as he could see. Tai Shan's holy places were packed with the curious, eager to see the "elephant" on the "flying carpet." They scanned the sky, seeking it, while Eret Young founded his second satellite haven, on Japetus, stepped through into it—looked down at the Tai Shan rug and up into the stunned eyes of Carter Neary !

VII

"THANK God, Eret !" said old Carter Neary. "I thought . . . I thought . . . well, that I was having a stroke or something. But if I'm where you are I

can't be in any danger, kin I ?"

"Where," choked Eret, "do you think you are, Carter ?"

"I dunno, hospital, maybe. I was on the old Birdsall. I guess I got sort of dizzy. I felt as if I was fallin', *straight up*. Then I was here. Dunno how long I was unconscious, if I was. Thought I musta fell off th' Birdsall, but don't find any bumps on me."

"You didn't fall, Carter," said Eret Young. "Where is the Birdsall ?"

Carter Neary grinned.

"If I'm in a hospital they wouldn't be likely to let me run th' Birdsall in with me to play with, would they ? This is kind of a funny hospital, though, ain't it ?"

"Carter, I'm going to try to tell you what happened to you. You know something about the Earth, don't you ? That it's round, for instance."

"Looks flat to me !"

"Does the moon look flat ?"

"No, 'course not !"

"Well, the moon revolves around the Earth, which is round like the moon, and both revolve about the sun. You'll admit that's round, won't you ?"

"Looks so, yes."

"You've noticed the stars, Carter. You know that there are other worlds just like ours ? Well, those worlds have moons revolving around them. This world, called Saturn, has nine moons. We're on one of them ! This one is called Japetus."

Carter Neary stared blankly, then shook his head. Hopelessly, Eret Young went on.

"While you were tinkering on the Birdsall," he said, "you, and the Birdsall, both together, were whisked away like the witches on a broomstick. First, for some reason I don't yet know, you were taken to China . . ."

"Eret, I don't know why you're funnin' with me !" the old man shook his head dolefully. "But if you're just going to poke fun, and this ain't a hospital, and I ain't sick or got anything broke, just send me back to the Birdsall. It's the only thing I understand. I must be gittin' old, to mind a bit of jokin'."

THE Birdsall, the only thing on Earth the old man understood. Where *was* the Birdsall now ? On Japetus ? There was no answer to that yet. And why had Carter Neary been kidnapped along with the old steam traction engine ?

"Good grief ! Eret, how did I get here ?"

Young whirled away from Carter Neary, to find himself looking into the pale, frightened face of Leigh Hewey, another one of his father's old employees whom he had kept on. The two stared at each other. Hewey looked at Neary.

"Carter !" he said softly. "I don't know ! I just don't know ! Where are we ? What has happened ? I got dizzy when I was clear on top of one of the old Hubers. I didn't feel as if I was falling. I just got dizzy, like everything inside me was dropping out through the seat of my pants . . ."

"Eret says we're away out in space somewhere," said Neary, shaking his head, lifting a forefinger to describe a circle around it, indicating his certainty that Young was crazy. "He says we're on a moon called Japetus . . ."

"It can't be true, of course, Carter," said Hewey. "But just where *are*

we ? No place I've ever seen, that's sure !"

Young knew he could lift these two old men out of their bewilderment, but he knew he could never explain the truth to them. He could take them back to Kinzers with him, up and out of the Kinzers Haven, which he'd have to tell them about, with little hope they'd understand it, or appreciate the secrecy under which it had been maintained. But it would be something they could grasp, and they might even be induced to keep quiet about it.

Then he knew it would never happen so, for Pfete-lai came through the door, smiling, and tendered three masks, one to each Earthman; he wore the fourth.

Eret Young donned his mask. The other two men stared at Pfete-lai, and each rubbed a palm over his face to assure himself that what he saw was there.

"This is Pfete-lai," said Eret Young, "Martian scientist !"

This would mean nothing to Neary and Hewey, either.

Now Pfete-lai spoke: "What's their names, Eret ?"

"Carter Neary, Leigh Hewey," said Young.

Pfete-lai repeated the names, nodding as Young pointed to the men in the order named.

"I'm taking them home, Pfete-lai," said Young. "What do you want to pester them for ? They're simple men, unlettered. There is nothing they can do for either of us."

"What do you call the metal things we brought away from Earth—*you and I ?*"

"Steam traction engines," said Young. "The first one, a Garr-Scott. The second a Birdsall. The third—if Hewey's presence means what I guess it does—a Huber ! Pfete-lai, where are they ?"

Pfete-lai ignored the question.

"For what were the steam traction engines used before they became obsolete ?"

"To run separators, threshing wheat, barley, rye, oats, in harvest time. They ploughed fields. They ran sawmills. They pumped water. They opened up our frontiers."

WHAT could that explanation possibly mean to Pfete-lai ? No more than the explanations of what had happened to them, and their present whereabouts, had meant to Carter Neary and Leigh Hewey.

"Why are so many of them in one place on Earth, now ?" asked Pfete-lai.

"My father collected them. He kept them in repair for the use of old friends at annual reunions of steam traction enthusiasts at Kinzers. He sold a few. Just before he died he sold four to a group of pioneers in Paraguay. That group was far off in the jungles. No other power was available to them. They needed the kind of power these old metal things provided when our nation was younger. They're still good for that, but in the United States we no longer have frontiers where electricity and oil and petrol cannot reach. So, nobody uses them any more."

"If they are useless why do you keep them ?" asked Pfete-lai.

"My father planned storing them in a museum."

"Would he not have preferred that they remain useful ?"

"Of course he would !" exploded Leigh Hewey. "Most of those oldtimers are good for forty years yet ! Why, I can make one of those things work like a

charm ! So can Carter Neary here. I don't know who you are or where you're from, nor what is happening, nor why we have to wear these masks, but I do know steam traction engines. What's more there are a couple dozen more oldtimers here in Kinzers . . ."

"*Hewey !*" snapped Eret Young.

"Never mind, Young," said Pfete-lai. "I knew it anyway. I'm very sorry, but somehow I think your father, if he knew everything, would approve of what I'm going to do with your old monsters. I was so sure of it that I threw myself on the mercy of the Inner Circle of Martian Scientists, and was forgiven for dealing with you without permission. Indeed, I now represent them —which is the same as representing Mars itself ! You can't take these old men back to Earth with you, Young. They're going to work, at the thing they like best to do, for which alone they are fitted !"

"I won't stand for any blasted experiments . . ." began Eret Young, when Carter Neary interrupted him.

"Let me get my hands on a Birdsall and keep 'em there th' rest'a my life an' I don't care what happens to me, or where it happens !"

"And who's best with a Garr-Scott ?" asked Pfete-lai softly.

Before Eret Young could answer, Leigh Hewey spoke enthusiastically.

"John Prather ! He cut his baby teeth on Garr-Scotts !"

'Hewey, you fool, you fool ! Now every oldtimer at Kinzers . . ."

HE was talking to a blank wall. The Japetus Haven was empty of anything that lived except himself. He had been conscious that Pfete-lai turned his back on all three of them, but that he crooked an eyed-finger at Carter Neary and Leigh Hewey. They started, automatically, to follow, because all their lives they had obeyed the voice of authority. They had gone, between breaths, with Pfete-lai—Pfete-lai the alleged Martian, who was now on Japetus, one of the nine moons of Saturn !

Almost at once Pfete-lai was back.

"By the way, Young," he said, "while you haven't yet agreed to any deal with me or the Inner Circle, you're going to have to go through with one along the lines I mentioned. The Inner Circle, hundreds strong, is with me now in every step. They're just too many for you, never let you out of their sight, wherever you may be, from Deimos to Japetus to Tai Shan . . ."

"Why did you bring the Birdsall away via China, anyway ?"

Pfete-lai smiled.

"It was necessary that China see it go, especially someone in China whose report on the sky-vision would be believed. Patience, Young, don't ask too many questions until we are surer of you. No harm will come to Carter Neary, Leigh Hewey or John Prather."

"I suppose you've got him already ?" said Young bitterly.

"Between my departure just now and my return !" said Pfete-lai easily. "He's all right. The three old friends are together, briefly—and while they'll often be apart by millions of miles, they'll never realise it. They'll simply separate to work, as they always have, and be together for meals and at night. We'll maintain this policy—"

"We ? What policy ? Where ?"

"Everywhere our deal operates !" said Pfete-lai. "And by the way, Young, that deal had best be moving ! Indeed you won't be able to return to Earth

until all the foundation stones are laid . . ."

"You mean ?" began Eret Young.

"Yes," Pfete-lai began to tick off names, "*Hyperion ! Titania ! Triton ! Dione ! Phoebe ! Rhea ! Enceladus ! Tethys ! . . .*" on to the end of the list of twenty-one named satellites of seven planets which had companions. At the end Pfete-lai grinned, the grimace could be called nothing else, as he went on: "*Eret One ! Eret Two ! Eret Three ! Eret Four ! Eret Five !* New names for five of Jupiter's nine satellites ! Why don't you establish havens in all the other places first, finishing off with Jupiter's *and your* moons ?"

PFETE-LAI was mocking Eret Young, laughing, jeering at him. Yet somehow Young believed that the fellow meant him no real harm. He intended to be obeyed, did not hesitate to force obedience. And Young felt that he would take care of Neary, Hewey and Prather, though there seemed no way to assure himself of this.

"I got the idea, Pfete-lai," said Young, suddenly irrelevant, "that I came here on the rug from my own Tai Shan Haven !"

"You did !" said Pfete-lai calmly. "At least you can say it's your rug, though . . ."

"Though what ?"

"Though too much work has been done on it by others not of Earth for any one of *them* to regard your claim as valid !"

"Riddles !" said Young. "Riddles ! A flying carpet ! Magic rugs, right out of the Arabian Nights Entertainment ! Myths ! Fables ! Fiction told just to entertain !"

"Scientific truth !" snapped Pfete-lai. "It was scientific truth when the first so-called 'magic carpet' appeared on your Earth ages ago !"

Eret Young gulped, swallowed.

"You're trying to tell me that the magic carpet was *real* ?"

"Not only *was* but *is* ! You've ridden on several. Most of your oldest stories are based on facts too profound for Earthmen to grasp—*parts of experimental flights to Earth by Outsiders at infrequent intervals in almost every century* ! Do you think people as stupid as Earthmen could imagine 'flying carpets' before they actually saw one on which to build imagination ?"

"If you have so little respect for Earthmen," said Young, "what use can you possibly have for us ?"

"You have hands that can work, backs that are strong !" said Pfete-lai. "You make good slaves, though I hasten to add we have no intention of enslaving you."

"I refuse to extend my havens," said Young. "Maybe you've got control, thanks to my stupidity, of Mars and Saturn, but it will go no further . . ."

"We have Earth, remember ?" said Pfete-lai softly. "You wouldn't want anything to happen to it, would you ? Even a little thing, like dropping a Garr-Scott into the middle of a city from a hundred miles up ! If you refused to co-operate, and we used pressure, don't you think New York City would find such a projectile of great interest ? Since by now your world knows that several steam traction engines have vanished from Kinzers, and examination of shards remaining of the Garr-Scott, if we are compelled to drop it to, shall we say influence you, were proved to be from the missing Garr-Scott, how would Earth feel about it—if you were back there to answer

questions afterwards ?"

Eret Young shuddered. He could guess something of the answer. Nobody anywhere would be satisfied with his explanation of such a weird catastrophe, especially if he reported the exact truth.

"Can't *you* establish havens on the other satellites ?" asked Young.

"It is the policy of Scientists of the Inner Circle," said Pfete-lai, "never to do, personally, anything that anyone else subject to their authority can do. You're an expert in your line, therefore your work is beneath the notice of a Martian scientist !"

YOUNG thought a moment or two, while Pfete-lai waited calmly, in no apparent hurry. What if he refused ? Pfete-lai would drop something on some Earthian city. Suppose he agreed ? What, then if he placed all Earth in the maw of some unspeakable cataclysm ?

His mind flashed, almost as if Pfete-lai had directed it, to remind him of power, to the five hitherto unnamed companions of Jupiter, now named—at least by Young and Pfete-lai !—Eret One ! Eret Two ! Eret Three ! Eret Four ! Eret Five !

"Your first suggestion," said Young, "was that I would rule indirectly from the satellites, you from the planets. I assume that has changed."

"Do you not rule, since we can do nothing without you ?"

"Then you *can't* establish havens !" ejaculated Young.

"No, we can take command of them, prevent you destroying them, make full use of them, keep you from destroying our communications systems—*rugs*, you call them !—but simply, we can't reach satellites as yet untouched, without your special knowledge—until we have learned it"

Young didn't believe it, not any of it, but decided he could do nothing save fall in with the plans of Pfete-lai. Besides, the urge was in him, almost impossible to restrain, to tie himself to the five little moons of Jupiter which he was already beginning to regard as something especially his very own.

As if he had read his mind, knew his decision, Pfete-lai vanished through the door.

"Sooner or later I'll know where Neary, Hewey and Prather are !" thought Young. "Meanwhile, when and if I return to Kinzers, what shall I *tell* everybody ? *And I'll be there twenty-four moons hence !*"

VIII

"PFETE-LAI !" Eret Young called softly into one of the screens.

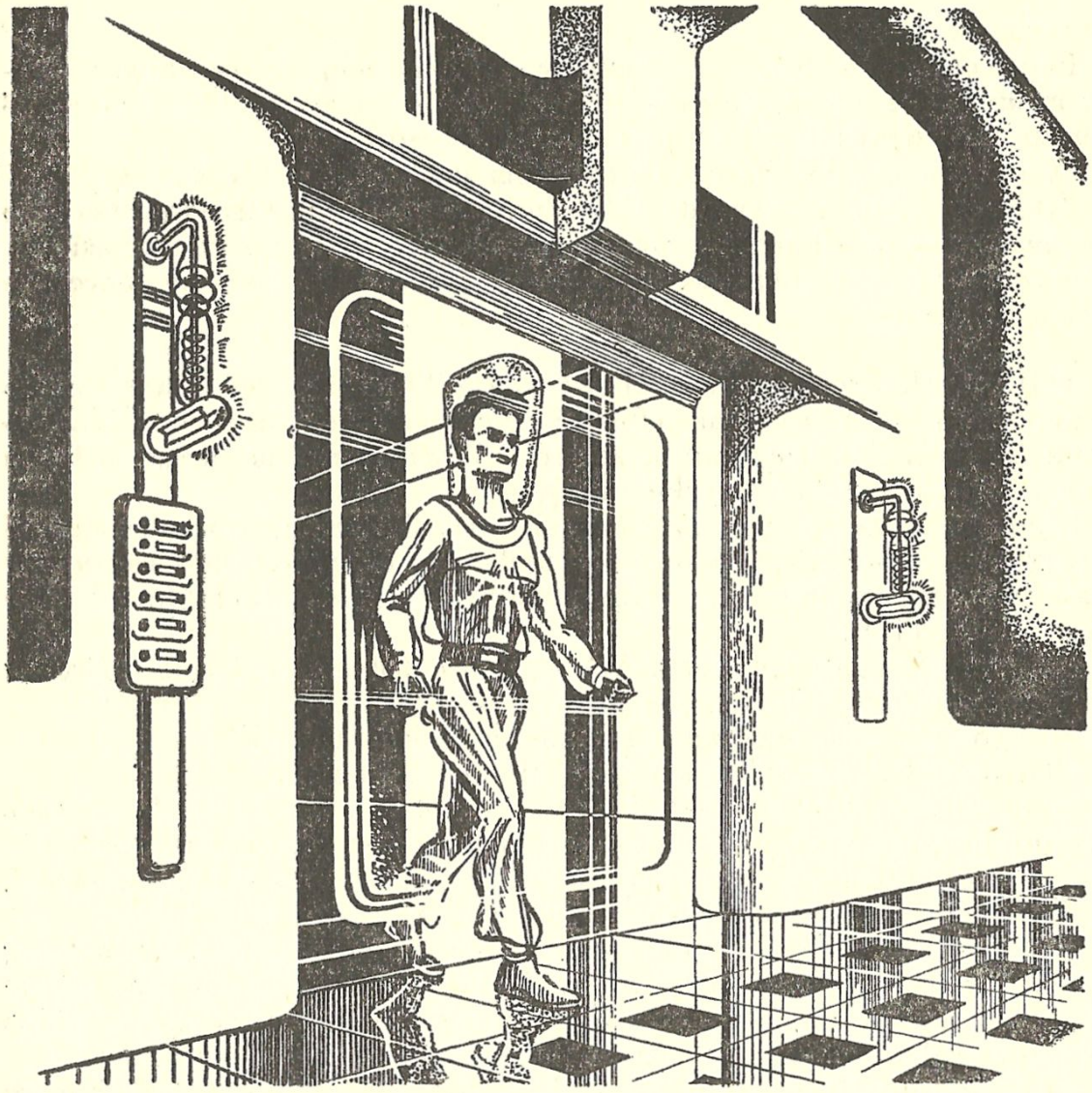
Pfete-lai's response was immediate. He stepped into the Japetus Haven equipped for conversation.

"Yes, Eret ?" he said. "I'm very busy, so let's don't waste any more time than is necessary."

"I'm establishing the next haven on Mimas, in this same group of moons," said Eret Young. "And I am proceeding on the assumption that both of us are honest."

"Why not ?" said Pfete-lai. "You are honest according to honesty on Earth. My honesty is that of Mars. Perhaps they are not so far apart."

"I selected Mimas because of an old yearning to the letter M," said Young, smiling. "I've a favour to ask. I take it that though I seem to step through into a haven in Mimas, already constructed by me before I leave, I actually



travel on . . . on . . ."

"A magic carpet ?" prompted Pfete-lai.

"And this is the favour: bring me to a complete halt somewhere between Japetus and Mimas, so that I'll be conscious I am actually interlunar—and can make some study of the 'magic carpet'. I'd like to savor the sensation . . ."

"You can manage it yourself," said Pfete-lai. "Just command the forces in the rug right here to halt midway between Japetus and Mimas."

"And I'll survive ?"

"If there were danger I would advise against it, strongly," said Pfete-lai. "So, there is no danger. But I shall call the rug back as soon as you are established on Mimas, for I have much work for it—and all the others, as fast as new havens are created !"

Pfete-lai vanished again. He did not become invisible, but went away so fast; that's how Eret Young understood the vanishing act of the Martian. He gave no further thought to what uses Pfete-lai might find for the rugs of Earth and lunar havens. He already knew, fairly well. He studied this one, noting the differences between it and the first one, in Kinzers Haven.

"If I discover they're actually spun by the Three Old Ladies of Fate I won't be surprised," said Eret Young to himself.

FIRST, he spent a few minutes working through the screen adjusted to Mimas, duplicating the Japetus Haven on Mimas. When he had done all of it except the rug he did everything possible to make the Mimas rug an exact counterpart of the Japetus rug—and could not do it. In everything else his was the master's hand. He had nothing to do with the rug, had probably had far less to do with the first rug than, up until the last night or two, he had believed. Even while on Japetus he could see that the Mimas rug, while closely resembling the Japetus rug—and the Tai Shan, Shasta, Moon Mountain and all other Earth-rugs—was subtly different, with an increasing difference. Where and by whom was it actually made ? By the Scientists of the Martian Inner Circle ?

"Patience !" Young told himself. "Patience ! Rome wasn't built in a day, and if I'm a good boy, in time Pfete-lai will reveal secrets to me."

He hesitated, when he had done with the Mimas Haven. He looked down at the rug:

"Obey my desire," he said, feeling both silly and a surge of power within him, "and halt between Japetus and Mimas, so that I may learn what I may learn !"

He stepped through the screen. But for the arrangements he had just made with Pfete-lai and the rug, he would have been inside the Mimas Haven. Instead, he was somewhere in space between them, riding a magic carpet ! There was no mistaking his location, for he could see Saturn and some of her other moons. Riding the carpet, twenty feet and more across though it was, was like sitting in interplanetary space astride a postage stamp, but he felt no fear, only a vast eagerness to know what the situation could teach him. He stood in the midst of the rug, when he realised, just bringing his left foot down to plant it beside his right, as he'd have done stepping through the Japetus screen. He spread his feet apart slightly, instinctively moving to balance himself when, actually, he had no need of balancing.

He stood immobile, utterly secure, while stars and planets wheeled in the black heavens. There was no discomfort. Earth itself could not have been more solid underfoot. There was no sagging, nothing. It was as if the rug had stopped at exactly the point where all gravitational pulls were equal, nullifying one another. The rug simply rested.

But there was more. There was a light around it, as if it reflected the sun, or reflected some moon that reflected the sun. He could feel surging power in it. Not motor power, or anything of a kind he had hitherto experienced, but *forces*, as if perhaps the rug were a vast field of force, responding to the pull and drive of some central force. He could feel it pulsating, far more silently than his own heart, but with infinite power. The rug was a machine, an interplanetary piece of transportation.

Just when had the first "flying disc" contacted the Earth, that Sheherezade had mentioned one of them during one of her Thousand and One Nights ? Was there any law of physics which said that an interplanetary flyer must not be shaped like a rug ? None !

THERE was no fear in Eret Young, only a growing eagerness, an expanding sense of power, as he began to walk about the rug, testing it with feet, hands, all his senses, striving to find its secrets. With no misgiving whatever, because he felt certain that he was being watched—and guarded—from many directions,

that therefore he could not die, no matter what he tried—Eret began walking about the rug. He moved steadily toward the rim. The rug did not give, remained solid, and what appeared to Eret Young to be upright; he remained on what he believed to be the top of it. He walked to the very edge, where he could look over, and down—or up, or out !—and looked over the side. His head came in contact with something solid. Instantly he put out his hands to touch the smooth invisible inner skin of the Japetus space ship which, to Eret Young, was and would always be, a rug ! No wonder he felt no discomfort ! As Japetus Haven was a duplicate of Kinzers Haven, even to atmospheric pressure, so this rug, and the globe, or tube, whatever it was—even a cone, for all Eret Young knew now !—which roofed it over, was a cabin pressurised to whatever it might find in outer space.

Eret Young made a complete circuit of the dome, or whatever it was—which he could not yet describe, though his inventor's mind was working with thoughts of how it *had* to be to work. That he was, therefore, inside a globe, whose middle the rug rode as if it were a gyroscope—because it *was* the globe's middle—Young felt certain. All heavenly bodies were circular . . . would this one be any different ? The sooner Earthmen, in their dreams of conquering interplanetary space, settled on the globe as the only usable shape, the faster would their progress be.

But Young knew how far wrong he could be.

He returned to the centre of the rug, sat down.

He began to spin, almost as if seating himself had been a signal to—whom, or what ? Pfete-lai ? The Inner Circle of Martian Scientists ? He couldn't make up his mind to anything except that he was being given a ride he would never forget. He spun like a top. Equilibrium vanished, sickness possessed him. There was a roaring sound, as of great speed. The stars, the planets, beyond the darkness, became all one vast outer globe of celestial light with the spinning of the rug. Eret Young expected to be hurled against the top of the globe, and thus find out if it *were* a globe. Instead, he remained pinned to the centre of the rug. He simply spun. He covered his face with his hands. The spinning ended. He sat up, looking about him. He knew himself in Mimas Haven, then, but the rug under him was not the Japetus rug on which he had travelled hither, but the Mimas rug. Sometime during his wild ride of mere seconds, the Japetus rug had been snatched from around him, or under him, and returned to Japetus, while Eret Young, as if being restored to normalcy after a dizzy spinning, recovered himself on the Mimas rug, inside the Mimas Haven.

YOUNG sat up, and almost at once Pfete-lai joined him.

"We're extending our authority, Eret," he said, grinning. Young glared at him.

"Did you have to give my insides such a churning ?" he demanded.

Now Pfete-lai laughed aloud. It had an almost earthly sound.

"Do folk on Earth never play practical jokes ?" he demanded when he could stop laughing. "We felt that a bit of churning might keep you from becoming too expansive in the region of the ego. Also, perhaps *we* needed to remain aware of our human limitations. There is such a thing as illusion of grandeur !"

"So I've heard," said Eret Young softly. "Now, if you've had your laugh,

I'll go on with my business ! I think I'll take Dione next !"

"Just to keep abreast with events collateral with those you yourself are bringing about," said Pfete-lai, "take a look into the Japetus Haven !"

Young stepped to the Japetus screen, peered into Japetus—and almost swore. In the middle of the Japetus rug, the very rug by which he had reached Mimas, was a Springfield portable steam engine ! It was much smaller than any steam traction engines his father had collected. It had been built in 1886 or thereabouts. It had been his father's pride. It was now the special pride of Henry Walters, and this very instant Henry Walters was tinkering with it, there in the Japetus Haven !

"I'm being robbed blind !" said Young. "I've got twenty-five thousand pounds tied up in engines, and if you're paying for them, I've entirely missed every single transaction. And how about Henry Walters ? Does he know what's happened to him ?"

"He hasn't the slightest idea he has gone anywhere," said Pfete-lai. "A minute or two ago he was tinkering with the little engine, in its shop corner in Kinzers. He hasn't even looked up from his work. He may be surprised, though not dangerously so—after all, his heart is bad !—when he looks around and finds that something has happened to the walls of the Kinzers shop !"

"Pfete-lai, what *are* you doing with the old engines ?"

But Pfete-lai, deliberately avoiding answers, vanished.

Eret Young, thoughtful, but with that feeling mounting in him which more and more, as seconds passed, convinced him that he was riding a high wave of interplanetary destiny, turned back to his work. Building havens, which required such a fine attention to details, was becoming drudgery. He could understand why the Inner Circle would have none of it. The need to build without making mistakes—even a small one could throw a moon out of its orbit, for all Eret Young knew—called for attention which was gradually beginning to irk Eret Young.

But he was, always had been, a good, careful workman.

DIONE Haven required but a few minutes. From Dione's new Haven, with scarcely a glance at the heavens to make sure he was on Dione, Eret Young built solidly in Rhea, Titan, Hyperion, Tethys, Phoebe. From Phoebe he made a long jump indeed, for no other reason than to assure himself again that any distance was no distance, requiring no time. He jumped to Callisto, and still there was no time lapse. He required time only to build the havens. He thought in terms of time as he knew it, earth time. Each haven required at least fifteen minutes labour when his mind was at its keenest, his memory photographic, so that when his eyes focused on details his hands reconstructed them. Long before he made an end of the twenty-one moons, including the Moon, and before he got to the five "Eret" moons of Jupiter, construction of outer havens had become automatic, so repetitive as to be boring. But not when, inside any one of the havens, he studied the heavens and realised their immense sweep, and how much of them he covered in no time.

His feeling of power grew, was constantly augmented by accomplishment in founding the havens.

When he began on the last five, the "Eret" Havens, he was ripe for a complete belief in himself, with the feeling that he *was* supervisor of Pfete-lai and all

Martians, including the Inner Circle; that, potentially, so that it was as if already done, he was master of the seven planets that had companions, moons.

Mercury had no moon.

Venus had no moon.

Knowledge of these two interplanetary facts gave him food for thought. Could he, without a point of vantage from which to operate, do anything with either Mercury or Venus, or a coalition of both ? Not that he thought in terms of conquest, or of defence. But those two, lacking moons, were for the time outside his influence—and so outside that of Pfete-lai, and his Inner Circle, unless they were holding something back.

"I've a feeling," he told himself, "that if there is a struggle for power, the balance of power will lie among the Eret Moons, or have some connection with Mercury or Venus or both !"

He had no known reason for saying it; he just felt it, and feelings were power in the outer spaces, if geared to thought and thought forces.

Building havens in the five "Eret" moons of Jupiter was a labour of love. They were so peculiarly *Eret's*. He felt, from the first, as if they had always been his; as if since the beginning they had been waiting for Eret Young. He even felt that the five rugs were more his than even the first under Kinzers had seemed to be, when he had been very young and there had been but the one haven, first of all of them. How many did he now have, or control, or had he built ? Twenty-six outside Earth !

"Why don't I build havens on the nine planets, just as I built on my own. Can I not found on the eight outer worlds as I founded on Earth ?"

For some reason he could not try to do so. He knew, without being told, without experimenting, that if he tried he would fail. The planets, Pfete-lai had said when the "deal" was first suggested, were his work. Pfete-lai had the power to block him, he felt sure.

WHEN he had done with the last of the hitherto nameless five moons of Jupiter, Eret Young stepped back into his haven in Kinzers, out into the concrete shop, out into the yards—to find pandemonium.

In all the yards only four steam traction engines remained ! Twenty-six had vanished !

"Not only that," said his young book-keeper, Sara Mae Rose, tearfully, "but all the older mechanics are gone, and I thought you were never coming back ! You've been gone for *hours* ! Where have you been ?"

"Mooning !" said Eret Young, hating the pun, knowing he could never explain to Sara Mae Rose.

"We're not losing anything," said Sara Mae Rose, "for somehow the engines have been paid for ! But where *are* they ? Reporters keep asking me ! The whole world tells wild stories of apparitions in the sky !"

"Paid for did you say, Sara Mae ?" said Eret Young. "How ?"

Sara Mae strode to the big deep drawer under the cash register in the hardware store. It was partly open, so that Eret could see. The drawer was almost full of what looked *exactly* like one guinea gold pieces ! Eret lifted one, dropped it back. It *was* a guinea gold piece, *minted in 1950 !* Already Eret could hear the comments of the manager of his bank !

IX

SARA MAE ROSE telephoned, saying exactly what Eret Young told her to.

In a matter of minutes sirens screamed from Lancaster way and reporters from all county newspapers, some of them representatives of press services as well, together with radio commentators, doctors, scientists, professors from the college, high school principals, cameramen (still and movie), psychiatrists, business men (including the bewildered manager of Eret's bank) began pouring into the yards. Not only were most of the steam traction engines gone, but most of the separators, headers and binders as well.

It was a police sergeant who broke the silence, after all had crowded into the main shop to face Eret, some of them standing, some squatting, some using what chairs there were.

"You've a lot of explaining to do, Young," said the officer. "Like what has happened to the old men your father kept on the payroll ?"

"They're still on," said Eret grimly, knowing in advance about what all these people would think of him when the truth was told. He would be lucky indeed if he weren't taken away in a straitjacket long before he was done.

"And just where *are* they ?"

"Each one is in charge of one of my steam traction engines, of one that *was* mine. I've sold out, gentlemen !"

"To whom ?" asked a reporter.

"To the Inner Circle of Scientists, of the planet Mars !" said Eret Young.

A grave stillness settled over the assemblage. Pencils and pens poised above notebooks.

"I keep in touch with them from the twenty-six moons of the seven planets Earth, Mars, Saturn, Jupiter, Uranus, Neptune and Pluto !"

"Ah, yes, of course," said a psychiatrist soothingly, looking wisely about him, winking, as he said: "This is in *my* line !"

"Just what is your connection with the twenty-six moons ?" asked a girl reporter.

"I have a field office on each one !" said Eret Young desperately. "My main office is in a laboratory forty feet below the concrete shop in the middle of the Kinzers yards. I began building it even before I started to school !" he started talking faster, to get it all out before some direct action could be taken against him, for he realised that such action was imminent. "I kept it secret. Not even father or mother knew of it !"

"Abnormally secretive !" said the psychiatrist musingly.

"Why not tell it from the beginning, Eret," said the bank manager. "After all, maybe the answer to a lot of recent newspaper stories is right here. Haven't we had reports of flying steam traction engines from at least two dozen places around the Earth ? Maybe Eret can explain; certainly nobody *else* has been able to !"

"I have a laboratory near where every last one of the flying engines was seen ! I built them long before Pfete-lai, the Martian, got in touch with me—just as I was preparing to establish my first other-lunary laboratory, on Deimos, the smaller moon of Mars ! I have mastered the secret of instant transmission. Not only have I now visited every last one of the twenty-six moons, but as soon as I have told you the story I'm going to take *all* of you, *en masse*, to each and every one of my laboratories, both on Earth and on the twenty-six moons !"

The silence became deeper. Eret Young stepped into his story, told it through.

"What I'm going to tell you now is speculation, in part," he said, "but I am almost sure I can prove it, given time—especially if Pfete-lai or someone from Outside will lend a hand. Since childhood I have been influenced, obsessed if you like, with the idea of power and interplanetary communication—with co-operation as the final goal. I have instantaneous transmission, while Martian scientists can only jump from planets to satellites in any reasonable time. That's why they need me. They can transmit their space ships—which I haven't seen, unless the flying rugs *are !*—between any two of my laboratory-havens, just as they transmitted the twenty-six engines which belonged to my father. From the moons they fly the engines to the planets—where they are put to work."

"And what need could people so much advanced possibly have for broken-down old steam traction engines ?" asked the doyen of reporters.

"I've knuckled my skull over that one, and come up with the idea that at least seven planets within reach of the combination of Pfete-lai-Eret Young, resemble the Earth in that they have backward areas. My father sent four steam traction engines to Paraguay, where they do the work they did in the fields until about 1930, when no more were manufactured. The Martians are using the old engines to promote development of such areas on the planets within their reach !"

"And what of Venus and Mercury ?" queried a college professor. "Where do they stand, not having moons ?"

"They are my aces in the hole," said Eret Young quietly. "I alone, for a reason that is my own secret, can go from any one of my laboratories to havens I am capable of founding on Mercury and Venus. As long as I do not found them, reaching them by space ship is impossible even for the Martian Inner Circle of Scientists, for centuries yet to come. If Pfete-lai and his assistants betray me, us, the world, I can reach Venus and/or Mercury, and either enlist the aid of the populations of those advanced planets, or take as many Earthmen with me as wish to follow, and escape from Martians and inhabitants of the other six planets for the centuries that must yet pass before space flight between them is practicable !"

"This is utterly preposterous !" said one of the professors.

"So are the flying steam traction engines, and the magic carpets !" said another. "But half the civilised world has seen both—with little men riding them, and every last one—except the first vanishing engine—has been reported as bearing a white, aged passenger as well ! What about them, Mr. Young ?"

"Twenty-six very frightened but brave old men have been scattered through the seven planets—*six* planets, not counting Earth—attainable via my laboratories of instantaneous transmission. They operate the engines, as they have all their adult lives. Just what they're doing, I don't yet know, but I believe there is nothing to prevent our finding out, once the whole story is told ! I do know what the engines can do ! They can run separators in the harvest field—and most of my separators have been taken."

"Stolen ?" said someone softly.

"Purchased," said Young, "forcibly ! We'll get to that in a moment. Now, my laboratories provide for something new for commuters. There is no reason why my old mechanics can't spend their nights at home, eat their

meals at home, and scatter across the millions of miles of space back to their engines, at will. I'm going to suggest that to Pfete-lai. It will be simple enough. People just need to become accustomed to Earth spewing forth people into space, pinpointing their targets on the planets—in this case the targets being old steam engines which won't even get cool while their engineer-firemen are away eating their meals on Earth !"

"I'D feel a lot better about it if I could get a good look at the old-timers who disappeared," said the sergeant. "This sounds crazy. For all we know you may have killed all those old men and hidden the bodies ! If we could just have some proof . . ."

"Pfete-lai," Eret Young apostrophised, knowing that his 'partner' must know the situation in which Young found himself, "I'm going to need your help very soon !"

Again all Young's visitors exchanged glances, knowing glances. Young was beginning to understand why Pfete-lai had "materialised" the old traction engines in so many places around the Earth. If these people were not all acquainted with the stories, Young wouldn't even be granted a chance to explain. And the flying carpets . . .!

"The story of the magic carpet," Young went on quickly, "had a basis in fact. The central portion, the balance in the spatial gyroscope of the Martian space ships, *appears* to be a rug. Such inventions must have visited Earth long ago, to be seen by someone, to give rise to the magic carpet story !"

"Maybe Aladdin was a Martian !" suggested a reporter.

"When you've made a trip to the twenty-six moons with me," said Eret Young, "you'll agree that he *may* have been."

"But what good is all this going to be ?" asked a professor.

"If I'm right," said Eret, "which I pray I am, it's going to be a lot of good. Every planet has something every other one needs. When we've reached understanding with all of them there will be interplanetary trade, colonisation, exploration. The twenty-six old engines are a starter, though what they'll harvest I don't know—*yet !*"

"How are the engines distributed, do you suppose ?" asked a grinning student. "Twenty-six engines, and only seven planets, six, not counting the planet of origin."

"We'll get the distribution later," said Young. "After all, we sent four to little Paraguay last year ! Probably a planet as big as Saturn can use more than one !"

"Well," said someone else, "except for the global stories we've all read and heard on the radio, we've no inkling that anything Young tells us is more than his imagination, or his insanity. Until we know better, why can't we start hunting those missing men ?"

LEIGH HEWEY walked into the office. He looked dazed. So did the twenty-five old men with him. Hewey stared at Eret Young.

"Thank God !" he said. "For the first time in *hours* I see something I can believe ! If I hadn't stuck to the old traction engine I'd have gone completely crazy !"

The visitors gasped.

"Take it easy, Leigh," said Eret Young, his heart hammering with

excitement. "It'll seem simple soon. Within weeks, you'll accept it as you've accepted steam traction engines for fifty years and more."

"Where were you ?" demanded a professor.

"On some planet, I was told, not Earth ! I thought I must be dreaming, but the old engine felt natural, and worked like a charm. There was a great level field of red grain of some kind. There were something that might have been *people*, small, blue people !"

"Martians !" said Eret. "You were on Mars, Hewey !"

"I was in a kind of swamp," said Carter Neary. "There were people there, too, like none I've seen since I was a small boy and had nightmares. They had too many legs, too many arms, too many eyes. They gave me a mask to wear, and then we could talk together . . ."

"My nightmares must have been electrical," said another old man. "They were robots, emitting sparks when touched. Yet they were not metal. They were intelligent, able . . . and they learned quickly when I told them how the engines operated . . ."

"You were on Saturn, Uranus, Pluto, Neptune or Jupiter, but I don't know which," said Eret despairingly. "We'll simply have to go back when you go, and find out. If there is an astronomer with us he can tell by one look at the heavens just where we are !"

"We've got passable descriptions of the denizens of three planets," said a professor, "if what you've told us is true, Eret Young, and these old men actually saw what they think they did !"

Quickly, often incoherently, often all talking at once, the twenty-six old men described the "people" they had seen. With a thrill of satisfaction that his guess *might* be correct, Eret Young ticked off the descriptions of six types of "men". Then he realised that all of them could be from Mars alone, or any one of the other planets, though he chose not to think so.

Carefully, while the visitors listened, reporters furiously taking notes, cameramen grinding, Eret Young explained to the old men, as simply as he could, what had happened to them, what would happen in future.

"I'll arrange for you to come home for meals and to sleep," he told them gently, "if I possibly can, and I am sure I can !"

The faces of the old men began to clear. They still didn't understand, but if the son of their old boss told them, they accepted it. They were not much given to thought beyond steam traction engines. As long as these were to remain their principal interests, they were satisfied.

Abruptly the twenty-six old men, in a body, in a flash, were gone ! Visitors gasped, stared at Eret Young.

FINALLY the banker said: "You said you sold your old engines and separators. It just occurs to me to ask myself about the medium of exchange ! Have your planets a common monetary system, Eret Young ? Or do they buy with gold, because the Earth regards gold as the steadiest medium ?"

"I've been waiting for that, sir," said Young. "Have a look in that drawer !"

The banker looked, shook his head, glared an accusation at Eret Young. One by one the others came up and looked, recognised an utter impossible fact: a drawer filled with A.D. 1950 golden guinea pieces !

"Here at least," said the banker, "is something the Government can get its teeth in ! Eret Young, you're going to have to do a lot of explaining about this

gold ! And no Treasury agent will ever be satisfied !"

"It's time, then," said Eret, "for all of you to make a circuit of my laboratories, Earthian and other-planetary, so you can see for yourselves. Maybe, then, you'll believe !"

"Young," said the psychiatrist, "I would no more go into one of your so-called laboratories with you than . . . than . . . than I would fly to the moon !"

"Me, neither !" said a reporter elegantly grammatical.

"I'm getting as far away as I can," said a doctor. "I don't know what goes on, but I want no part of it !"

The police officer, and three of his men, however, their faces grim, were closing in on Eret Young—when a strange voice spoke, freezing all of them in place. Eret Young whirled.

"I can explain," said Pfete-lai, through his mask. "I can even explain the gold pieces. You'll notice, when you count them, Eret, that they allow you a profit of twenty per cent., gold being cheaper on Mars than here anyway !"

When Eret Young noted the five "men" who came in with Pfete-lai, no two of them alike, yet all somehow "human," all five clearly not of Earth, he sighed with relief, certain that his aces in the hole, Mercury and Venus, were still outside Pfete-lai's orbit of influence. He thought of that first.

Then he remembered all the doubting Thomases of Earth, so many of whom were right here, staring at Pfete-lai and his associates, and grinned widely.

"As soon as you've finished interviewing Pfete-lai, and representatives with him from Neptune, Pluto, Uranus, Jupiter and Saturn," said Eret Young, "I'll be ready to take you on the inter-lunary tour previously suggested ! I can't invite you to the other planets, but maybe Pfete-lai convinced of our good intentions, may extend such an invitation !"

"With pleasure," said Pfete-lai. "Now, let's have your questions !"

THE END

THE LITERARY LINE-UP

IT IS very encouraging to see the number of new authors who are now beginning to make their debut in our pages. New writers bring fresh ideas, even to old concepts, and, unlike some of our contemporaries who appear to have a penchant for staff-written stories, *New Worlds* contributors are individual entities.

A new author, Lee Rondelle, has the lead story in the next issue. Entitled "Cosmic Mirror," it embodies some healthy space opera with a Time concept of the curved Universe. Hjalmar Boyesen, an American now living in London, presents a delightfully wacky story of a future-man stranded on the Festival of Britain site, entitled "No Priority," and another newcomer, Alan Barclay, has "Welcome Stranger," a Venusian story with a neat twist.

Cedric Walker is back with another of his android stories—"The Scapegoats," and John Christopher continues his future Genetics plan with "The Tree." To round off the fiction, E. C. Tubb comes in with "Greek Gift."

OWING to the press date of this current issue following publication of the last issue so closely, it is not possible to include the position of story ratings. These will be listed in No. 11.

MACHINE MADE

By J. T. M'INTOSH

It was a simple enough problem at first, until the Machine began to take a personal interest in its attendant.

Illustrated by QUINN

ROSE found a burn on the edge of the silver-grey metal casing and rubbed vigorously at it. But the cigarette carelessly laid there had been left too long. The brown stain wouldn't come off.

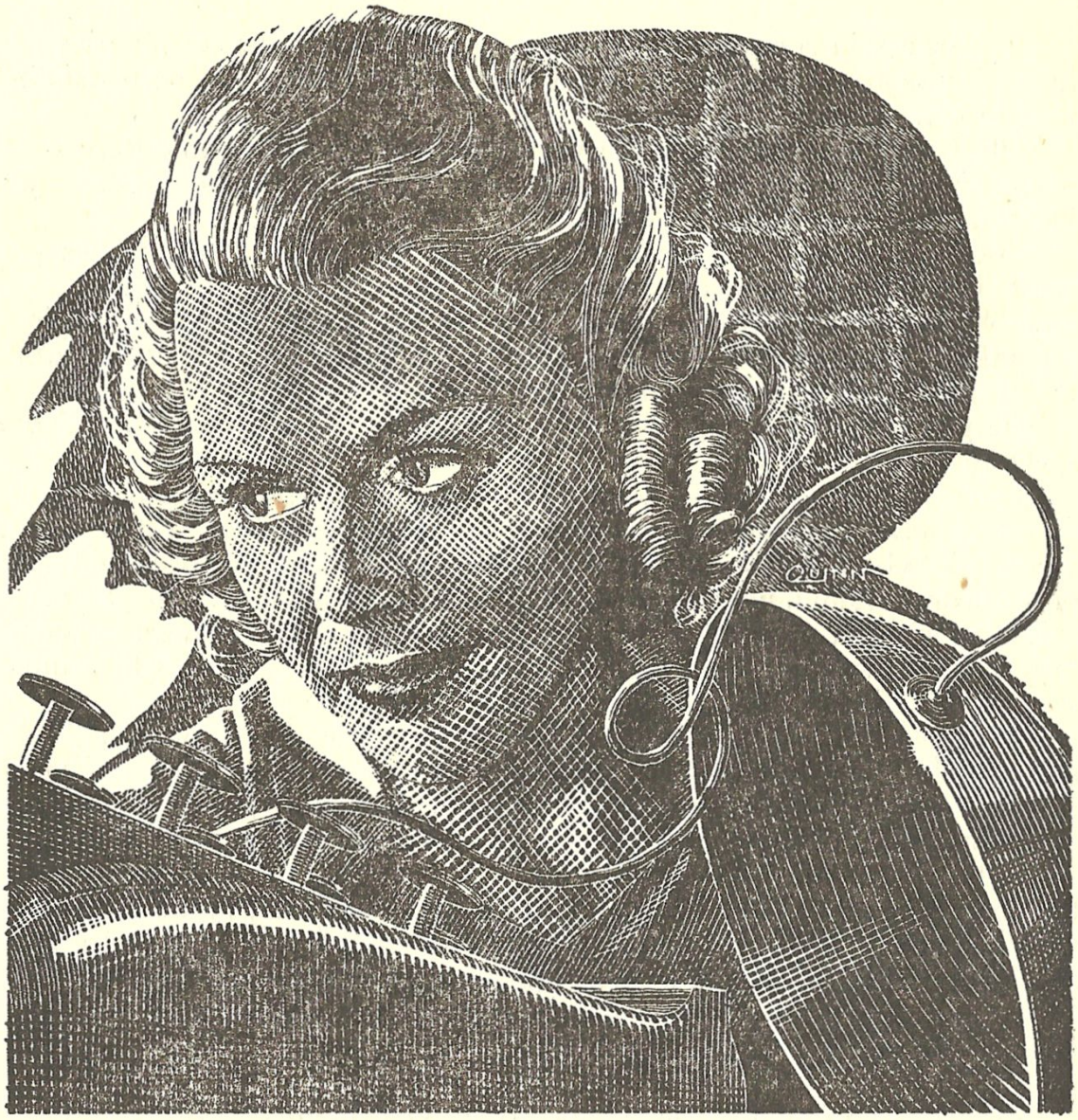
She wished sadly she had not bothered the painters so much in the past. The last time she ran fearfully to Mr. Harrison, he had come resignedly, looked at the spot she pointed out, and exploded. When he calmed down he had said: "Look, Rose, I know you're not very bright, but surely you can get this into your head. We paint the memory banks and keep the floors and walls clean, but this isn't a hospital. Sure, I know you like to have things nice, and it's your job to dust and sweep this room and polish the casings and report anything that needs attention—but have a heart. Give us a little peace. It wouldn't affect the Machine if we burned all the paint off and battered the casings with a sledgehammer."

That left Rose in such a state of palpitating horror that she resolved never to go to Mr. Harrison unless she was quite sure the matter was serious. But still, it was a very unsightly burn on the shining casing, and if she hadn't bothered him over that last spot he might have sent someone to spray both blemishes while he was at it.

She was afraid if Dr. Esson saw the burn he would blame her for it. True he had never blamed her for anything, and often when he had been working the Machine he would stand watching her polish the gleaming metal with amusement which she felt was kindly. But there had to be a first time for everything, and she felt she would die if Dr. Esson even hinted she had been neglecting her job.

She stretched to her full five feet four on tiptoe and looked round the huge room. There was very little in it but row upon row of silver-grey casings, from the floor to her shoulders, with only just room for a big man to walk between them. But there was plenty of room for Rose. At one end was a clear space, with a table and several chairs, facing the six electric printers that were the only means of communication with the Machine—both its ears and its voice. The walls housed more memory banks, and were of the same silver-grey metal. The monotony was relieved by the light green ceiling, only twice the height of the casings, and the dark green rubber passageways. And always, day and night, there was a faint humming.

It was no use, Rose found, looking at those thousands of square feet of spotless, shining metal and trying to tell herself it was perfect. The burn on the casing in front of her seemed ten feet across. She felt no one could open



the door at the other end of the long room and glance in without seeing that blemish on the beautiful functionism of the layout.

DR. ESSON and a pretty young woman Rose had never seen before were at one of the printers. They were talking, apparently under the impression that Rose couldn't hear what they were saying, but she could. Of course, she was so much a fixture in the Machine room that most of the people who came there often hardly noticed her, but she knew vaguely from what Dr. Esson and the young woman were saying that they didn't know Rose could hear them.

"Is she *always* here ?" the girl asked.

"Her hours are nine to four, officially," Dr. Esson said, smiling. He had a beautiful smile, a smile twenty years younger than anything else about him. "But this room is locked up only between the hours of ten p.m. and eight a.m., and the rest of the time Rose is more likely than not to be here at any given moment."

"But she's a lovely girl. She must have—other interests. Surely she . . ."

Dr. Esson said something that Rose couldn't hear. She wasn't trying to hear—it was just that her hearing was so good they might have been standing next to her.

"Oh, I see," said the girl, with such a warmth of sympathy that Rose loved her, without knowing why. "Of course, no normal girl could endure a job like this. But she doesn't look stupid."

"Stupid isn't quite the word, Gem," said Dr. Esson. "Sometimes you can't help thinking of people in classes. There are scientists who are incredibly dumb—for intelligent men. Pianists who are shockingly inartistic—for artists. Maniacs who are unbelievably sane—for lunatics. And I can't help regarding Rose as surprisingly intelligent—for a moron."

The girl with the strange but attractive name—Gem—laughed. "Can I speak to her ?" she asked.

"I wouldn't, if I were you, Gem. Not to-day. You'll be in to-morrow for the correlates you wanted—you won't be such a stranger then. I'd be glad if you'd talk to her. She spends almost her whole life here, you know, and most of the people around, naturally enough, ignore her completely. That seems to suit her very well. But she should have some sort of human contacts—people to whom she can confide the little problems that are all her simple little mind seems able to throw up."

Gem looked at her seriously. "That's what I like about you, Dad," she murmured. "Of all the people connected with the Machine you're at the top. And this poor kid must be right at the bottom. But I'll bet she gets more sympathy and consideration from you than from all the others in between."

Dr. Esson smiled. "Well, maybe all she does is dust the casings and scrub the floors," he said. "But, after all, I spend hours every day in the same room with her. And we're both human beings, Rose and I. I'd be a pretty poor specimen if I didn't have at least a kind word for her now and then."

"I bet there's a lot of pretty poor specimens around, all the same," said Gem. "See you at supper. 'Bye."

SHE gathered up some papers and went out through the swing doors.

Rose had a vague recollection of Dr. Esson saying to someone that his daughter had just graduated and would soon be home for good. So this was her. She was not only lovely—she seemed almost as kind as Dr. Esson.

All through the conversation the Machine's six printers had been softly clicking away at their regulated hundred and twenty words a minute. Rose knew that the casings all round her were really a library, representing all that the Machine knew. She was aware in a dim way that the Machine could do far more than it was ever called upon to do—that it could work twenty-four hours a day at full pressure, and actually worked fourteen, at perhaps a third of its potentialities. For all six printers to be working at once, as they were at the moment, was very rare. But why the Machine was given so much rest that it didn't need, Rose had no idea. It had been explained to her, simply and in detail, patiently and impatiently, by a score of different people, but she had never understood. It must be her fault, for everyone else understood.

She had never asked Dr. Esson, the one man who could explain it, she was sure, in terms she would understand. She watched him as he bent over the printers with love (but the kind of love men have for God) and awe and fear.

Why fear ?

Because he was the one man who had never spoken a harsh or even mildly irritated word to her. She could endure anything anyone else said to her, she thought, as long as Dr. Esson didn't change. But perhaps she didn't trust his kindness, which had never wavered—for she never put the slightest strain on it.

SUDDENLY Dr. Esson left the printers and came towards her. Had she done anything wrong, Rose wondered anxiously. The stain ! She trembled.

"What's the matter, Rose ?" asked Dr. Esson quietly.

"I don't think Mr. Harrison would have come if I'd asked him," she said in a small voice. "He doesn't mind if it's anything serious. But I don't think he'd have thought it was serious."

"Then it probably isn't," said Dr. Esson cheerfully. "I know you'd never believe it, Rose, but Mr. Harrison would hit the roof if he thought there was really anything wrong in here. But he doesn't see a scratch on the paint quite as you do. Now, what's wrong ?"

Hesitantly, Rose pointed at the burn. Gem, not knowing Rose, would have laughed, and then been sorry; but Dr. Esson knew what to expect.

"Yes, it doesn't look nice," he agreed. "But I don't think you need worry, Rose. I'll tell you something. In a fortnight—thirteen days from now—all the casings will be sprayed. So if you can wait that long, you'll have everything looking like new, even if everyone who comes in during the next few days leaves cigarettes on the housing. The place will smell of paint for a few days, but you won't mind that, will you ?"

"Mind !" exclaimed Rose happily. "It'll be wonderful."

"Is there anything you'd like to tell me—or ask me ?"

Rose remembered, and plunged.

"Yes, Dr. Esson," she said quickly, running the words together. "The Machine wants to work all the time why don't you let it ?"

Dr. Esson couldn't help showing his astonishment. He had always thought the Machine was only metal casing to her, though he knew she had intelligence enough to be vaguely aware that it was a calculating machine.

"What makes you think the Machine wants to work all the time, Rose ?" he asked gently.

"Look how happy it is when it's working," she answered simply. "It likes doing sums. If I could do them the way it can, I'd want to do them all the time."

"I'll try to explain," said Dr. Esson. "The Machine doesn't only do sums. It can give the answers to almost any problem. We tell it exactly what the problem is, and if we haven't told it enough, it asks questions. Then it tells us the answer, and it's always right—unless we made a mistake in what we told it. Do you understand that ?"

"I think so."

"Good. But remember, the Machine is new. You've been here since soon after it was made. I know that seems a long time, but it isn't really. And when a thing is new, you don't depend on it too much for a while, do you ? When you get new shoes, they squeak for a bit, and aren't comfortable. You don't wear them much, until you've got used to them.

"Well, it's like that with the Machine. It's still new. We don't know yet exactly what it can do. We don't want to trust everything it says—not that

it's ever been very far wrong, but in case it might be. But the longer we use it, the more it knows, the more we know of it, and, so long as it's always right, the more we trust it. So you see, Rose, it gets more and more to do as time goes by. And the only reason we are so careful about using it, and checking its results, is this. Suppose we had to do without the Machine ? Suppose it suddenly went wrong ?"

"You mean if it died ?"

"Yes, if you like to think of it that way. Don't worry—it won't die. So long as there is electric power it will go on living. But if it *did* die—and if we'd been relying on it a lot—we'd be in trouble, wouldn't we ?"

"I see," said Rose thoughtfully. "Thank you very much for telling me, Dr. Esson. I think I understand. At least, I understand some of it."

THE next day was Friday, the best day in the week for Rose. For there was a meeting at ten, and from ten to twelve on Friday morning no one *ever* came into the Machine room . . .

Rose had her question ready. It was much harder than the one she had asked the last time. It was a sum with division as well as multiplication in it, and it took her a long time to tap it out, figure by figure, on one of the Machine's idle keyboards. All the time she trembled in case someone came in. If anyone knew she had touched the keyboard, she would be shot, she was sure. But the temptation to have the Machine work out something for *her* had been too great to resist, and this was the fourth time she had done it.

This time the Machine started clicking at once, as before, but instead of a short burst and then silence it went on and on. Rose was terrified. Had she broken something ? Every moment increased the danger of someone coming in, and she could do nothing to stop the Machine. If she tore the paper out the Machine would go on writing on another piece. She had seen it happen.

She thought it would never stop. But at last it did, and quickly she tore out the paper, folded it and tucked it in the pocket of her overalls without looking at it, interested only in getting it out of sight. Then she thought she might bring it out accidentally with something else and drop it on the floor, trembled afresh at the thought, and remembering a film she had once seen, pulled out the folded paper and thrust it down inside her blouse. She tightened her belt, just to make sure, and at last felt safe, though she still trembled a little.

All morning she was agitated, but nobody noticed. At last one o'clock came. She had an hour for lunch in the canteen, but it took only a few minutes and she often waited until one forty-five so that the rush would be over. She hurried to her room, a little cubicle in the Electronics Building itself, locked the door, and threw her white coat on the small neat bed.

For one sickening moment she thought she had dropped the paper after all. But then she found it and opened it.

At the top was the answer to her problem—432,116, in the small purple figures of the Machine's printer. But then there was a space, and what followed was not figures. The next line said: 'Hide this—do not read it now'.

That was exactly what she had done, Rose thought, pleased that she had done the right thing.

She had to go through the rest four times before she began to understand it. The fifth time she took it section by section.

THE first was a statement that the Machine's duty was to humanity first and individual humans afterwards. But it wasn't as simple as that. The phrasing was complex, and several big words were used. Rose didn't know it, but the statement was the Machine's first and only rule, built into it so that it could never by-pass it or wish to.

She ignored that and went on. In the next section the Machine said that it knew all the scientists and technicians who normally put questions to it, knew them by name and to some extent by personality. And it went on to deduce by Rose's slowness on its keys, the simplicity of the arithmetical calculations which had been proposed four times with that same slowness, and the regularity of their incidence, that they had all been set by a moronic attendant without the knowledge of the scientists in charge.

Simplicity ! thought Rose in wonder. Why, it would take her days of hard work to test the Machine's latest answer.

It didn't seem to her particularly clever that the Machine had reached the truth about those four calculations on the meagre evidence it had at its disposal. She still had a vague idea that the Machine must have eyes and ears somewhere, and thus knew what was going on.

Then the note went on to ask her to tell it more about herself, secretly, because, said the Machine, it might be able to help her but would probably not be allowed to try if anyone knew about it.

It explained how she could do it. If it hadn't eyes, it knew the routine of the Machine room very well. It told her to tell it all about herself, tapping gently on the keys when no one was about, with no paper in the printer and the ink duct switched off. Then if she was disturbed she could pretend to be dusting the printer, or whatever her duties suggested.

It closed with another statement—that this was the first time the Machine had ever volunteered anything not specifically asked for.

The note would have sent Dr. Esson or any of the other scientists into wild excitement, but it would have been a different excitement from Rose's. To her it was not strange that the Machine had an independent personality; she had always thought it had. She saw no menace in the message, nothing of which to be suspicious, as the scientists would inevitably have been. To her it showed only that the Machine was trying to be friendly.

Suddenly she looked up at the electric clock above the door. She had been afraid she had taken longer than she intended over the note, but she gasped apprehensively when she saw how long. It was half-past two.

SHE dashed about in a flurry of fear. First she had to hide the note. She thrust it under a drawer, and in doing so, spilled a bottle of ink over her blouse and skirt. Another girl would have realised that her white coat would cover it, but not Rose. She had to change her clothes, in desperate haste. Of course she got ink on her fingers and face. Then she had to wash, and it seemed the ink would never come off. She buttoned her clean blouse through the wrong holes. Her hair had gone all wild, and she had to comb it.

There was no question of going for lunch. Even then it was almost three o'clock when she reached the Machine room, breathless.

Dr. Esson was there, with Gem.

"Why, what's the matter, Rose ?" he asked.

"I'm late," said Rose, fighting against tears.

"Well, you're usually early, so don't worry. This is my daughter Gem—Rose."

Close up, instead of seen from the other end of the long room, Gem was frightening, though she smiled pleasantly. She was older than Rose, twenty-four perhaps, and she dressed as Rose imagined a princess would dress. Her blue watered-silk frock seemed part of her, not merely something put on like other people's clothes, and her hair shone like captured sunlight. Rose could only gulp and stand helplessly before her.

She said something, and Rose felt her kindness, but could not respond to it. Afterwards, when she was polishing the casings—there were so many of them that it took her three days to get back to her starting point—she was ashamed of herself for her nervousness, and flushed as she looked across at Gem and Dr. Esson.

She heard Gem say: "I wonder if I should ask her to come up the river to-night."

"No," said Dr. Esson. "She wouldn't want to go, but she wouldn't dare refuse. And remember, she's not really fit to meet other people as an equal. Nobody would try to hurt her, but they couldn't help it."

That was all they said about her. The rest was mathematics, meaningless to Rose. She admired Gem more for being able to talk to Dr. Esson as a mental equal.

ROSE did as the Machine told her. Whenever there was no one in the room she would tap out a few words on one of the printers. She couldn't spell very well, but that didn't seem to trouble the Machine. It knew phonetics as well as every other branch of human science. It also knew nearly all that had been written about psychology.

She told the Machine about the school where the other children were always doing strange things and one or two had voices in their heads. She had stayed on at the school as a sort of assistant to Miss Beamish, the superintendent. Then one day Mr. Harrison had come to see Miss Beamish and Rose was asked if she'd like to have a special little job of her own.

She told it about Dr. Esson and Gem and all the other scientists and technicians, about Mr. Harrison, the works manager, and all the people she met at the canteen. She even told it how she had always wanted to do sums, because she had loved the arithmetic teacher at the special school, and Dr. Esson, and the Machine, and was now beginning to love Gem—everyone she had known who did sums.

The Machine seldom replied, but every now and then it would direct her to some subject she hadn't touched. And at last, on a Friday morning, it started tapping away at a long note to her. She hovered about anxiously, for it was a *very* long message and seemed to take hours, even at a hundred and twenty words a minute. When it was finished she stowed it away as before without looking at it. This time it was so thick and heavy she wondered nervously if anyone would think she bulged curiously. But she got the message safely to her room.

She didn't look at it at lunchtime, remembering the last time. But at four, for once, she was away on the dot, locked her door and began to read.

It was a set of instructions to make something. Every stage was described clearly and simply, and she knew, glancing through it, that she would manage

it. She had always been good with her hands.

But all that was said about the purpose of the thing was that she was to bring it next Friday morning, put it on her head, and attach the two terminals to the terminals at the back of one of the printers.

SHE worked at the thing, which had no name, for a week. At first she was happy to be doing something. But gradually she became uneasy. Dr. Esson had said they didn't entirely trust the Machine yet. Perhaps she should tell someone what was going on—even if they sent her back to the school or to prison or shot her. At last, however, she decided that whatever happened could only harm her, and it was better that it should happen to her than to Dr. Esson or Gem.

On Friday morning she waited until Dr. Esson had left for the meeting and then dashed to her room for the thing she had made. It was a kind of cap with two trailing wires. She had made it exactly as the Machine said. It was as if the Machine had used her hands and its own brain to make it. Somehow Rose, whose grasp of electricity extended only to the knowledge that nothing could be done without power, didn't really expect very much from the cap, since it had no batteries and contained nothing but wires and coils she had twisted carefully herself. She had forgotten, or didn't know, that the Machine was fed all the power it wanted.

One after the other she twisted the terminals securely about the little pins at the back of a printer. It tapped briefly. She tore out the paper. It said simply: 'Sit down'.

Nervously Rose pulled up a chair and sank into it. In all the time she had spent in that room, she had never sat in a chair before.

Two hours later, after the meeting, Dr. Esson and Gem returned to the Machine room.

"Now you're one of us," Dr. Esson was saying. "But I expect you'll get married soon and leave us."

Gem laughed. "I may get married, but I don't think I'll leave you," she said. "It's such fascinating work, watching over a Machine that's always developing . . ."

Her voice trailed off as she opened the door.

"Rose !" Dr. Esson shouted, and in one movement was across the room and tearing the wires from the printer. Rose was slumped in the chair, unconscious. He turned to her.

"Let me handle this," said Gem quietly. "But watch her, Dad. Heaven knows what has been going on here. I see the Machine doesn't want to say anything. Be careful. She may be meant to assassinate you or—or anything."

She lifted the cap from Rose's head and took her wrist gently. In a moment Rose opened her eyes.

"Gem," she said. "And Dr. Esson." She looked at the printer before her and started in apprehension.

"What happened, Rose ?" asked Gem softly.

Rose didn't seem to hear her.

"Now I understand," she said in a whisper. "The Machine meant you to find me like that. You were to know *then* what it had done, but not before. Dr. Esson," she added, smiling, "you've no idea what a marvellous Machine it is."

THEY stared at her. She was the same Rose, shy, nervous, eager to please —but she had a new confidence.

"The Machine made me keep it secret," Rose went on. "I knew it was wrong, but I went ahead with it. I don't think that matters much now. It's funny, I can suddenly understand everything—why I was at that school, why a girl like me was chosen to do the simple, monotonous little job I've been doing, everything but why you and Gem were so kind to me."

"Surely," murmured Gem, "surely the Machine can't *develop* intelligence —put intelligence where was none before ?"

"Why not ?" asked Rose. "Intelligence is the ability to correlate. The definition the Machine gave me"—she smiled faintly—"was that it is the capacity to discover relationships and educe correlates which are relevant to the solution of a problem. But this capacity is the general factor common in all specific abilities."

She stopped suddenly and blushed. "This doesn't really mean anything," she said apologetically, "I'm only quoting the Machine. It transferred whole volumes of knowledge to my mind. But the queer thing is that it recognises that we're all more intelligent than it is. You see, any actual, concrete problem needs more than this general factor for its solution. It needs some specific ability as well—talent, if you like. Well, we all have talents, but the Machine has none. It could teach me, by opening new circuits in my mind, to see relationships and reach conclusions. And then, as it frankly admits, I can do more than it can—because that enables me to call on musical ability and artistic ability and mathematical ability and mechanical ability and a dozen other things I had before but couldn't use, things that no machine can ever have because they're special talents. Capacities that are there even if they're never tapped. Do you see ?"

"I think so," said Dr. Esson dazedly.

"But I'm afraid that now I wouldn't be very happy just polishing the casings," said Rose regretfully. "Do you think I could get a job as a calculator ?"

"Can you work things out in your head ?" asked Gem.

"Yes, the Machine showed me how. Try me."

"Two squared all squared," said Gem.

Rose looked unhappy. "I'm serious," she said.

"All right," Dr. Esson remarked. "Twenty-seven by forty-five by fifteen."

Rose began to reel off figures. They let her go on for half a minute or so, then Dr. Esson stopped her. "The Machine has certainly done you some good, Rose," he said gently, "but not all you think. It meant well, no doubt. We can investigate it and you'll be well looked after. But . . ."

"Isn't that right ?" asked Rose, the tears welling up in her eyes.

"I'm afraid not. It's only about eighteen thousand."

Rose's face cleared, and she smiled in relief. "I'm so sorry," she said. "It was all my fault. I thought you meant twenty-seven to the power forty-five to the power fifteen."

Dr. Esson and his daughter stared at each other.

"I think," said Dr. Esson faintly, "you'll get that calculating job all right, Rose."

THE END

Current Trends . . .

TWO years ago there were only two regular British science-fiction magazines on the market—*New Worlds*, an all-British effort, and the reprint edition of the American *Astounding Science Fiction*. The latter presented the best of American short story material. Both filled an urgent and increasing demand for well-thought-out adult fiction, but, while the reprint edition had all the wealth of material available from a regular monthly American edition, *New Worlds* had to pioneer along developing new authors and relying upon a small core of regular professional writers who usually wrote only for the American market. They backed our contention that an all-British magazine was not only needed, but essential.

At that time, the fans and regular readers were practically petitioning for more frequent publication—their favourite reading material did not come often enough or fast enough to more than whet their appetities. An occasional one-shot pocketbook or reprint edition of some other American magazine did little to fill the reading gap.

DURING the past six months an overwhelming change has taken place in the British market. Where before there were only a few magazines dealing with our specialised field, there are now dozens of regular and irregular pocketbooks striving to create sufficient demand and interest for their own particular brand of "science fiction." The quotes there are mine, because some of the material now coming on the market leaves much to be desired, and it is extremely debatable whether they will contribute any progress to the field, or whether the existing standards will be lowered in the minds of new readers who chance across the medium from time to time.

THE facts behind this sudden interest in fantasy publishing are: mainly a direct result of the vast upsurge of hard- and paper-covered fantasy in America, with its resultant interest in the publishing field in this country (many book publishers are planning new British or American novels for the coming autumn); and the belief amongst numerous pocketbook publishers here that the slick fast-action (sometimes sexy) detective story is on its way out. The logical substitute, in our own opinion, is science fiction. But produced properly and logically.

That our contemporaries are not concerned with altruism is obvious from the type of material being published—to give credit where due, however, *one* newcomer to the field is making a serious attempt to tackle the field from an adult angle and present acceptable concepts in its stories.

IT IS the considered opinion of experts in the field (outside the Nova team) that there are insufficient experienced authors in this country to support the number of new publications appearing (recently as many as *five* new titles were placed on sale the same day !) and maintain any reasonable standard of literary value.

It will be interesting to review the situation at the beginning of 1952.

JOHN CARNELL

SPACESUITS WILL BE WORN

By ARTHUR C. CLARKE, B.Sc.

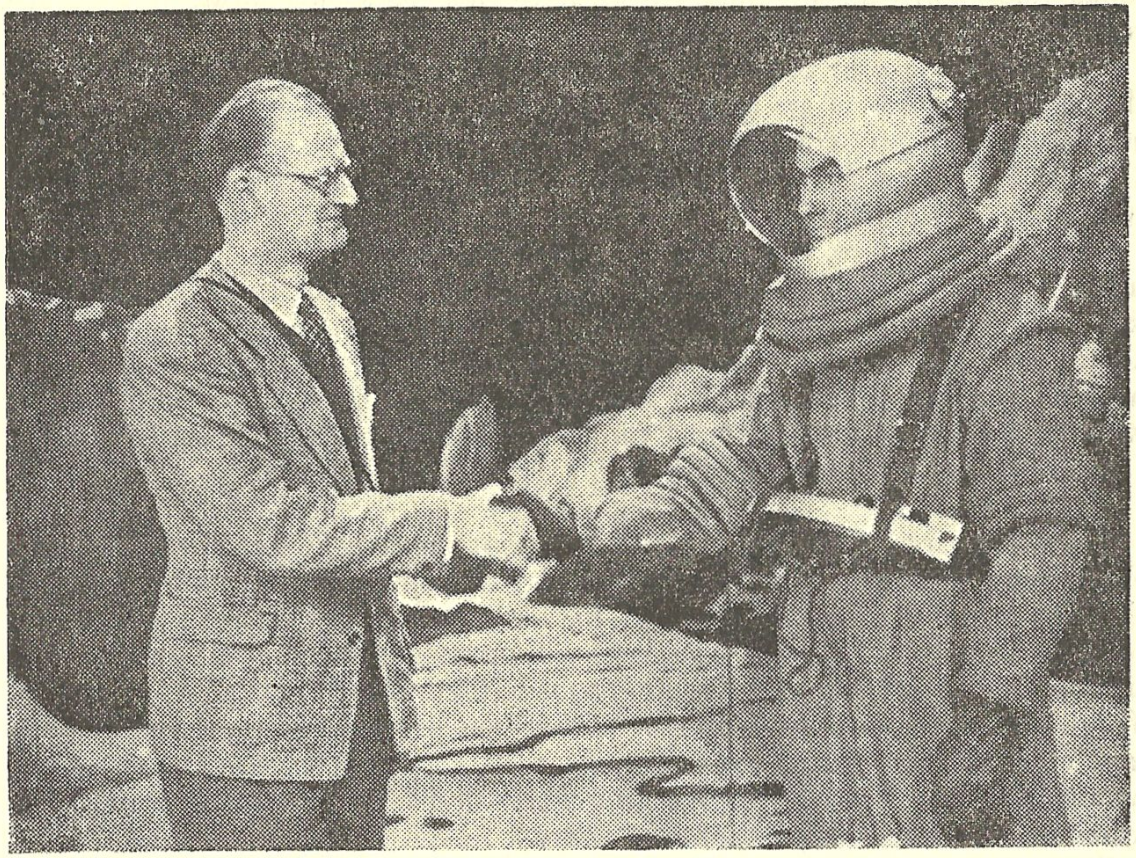
In this article, Mr. Clarke explains that Man will not be able to live on any of the planets or moons of our System without mechanical aids. Fiction writers please note!

"SO this was Mars! Pausing only to make a rapid test of the atmosphere for breathability, Angus McStuffin threw open the doors of the air-lock and inhaled deeply. The pressure was low—the astronomers had warned him of that—but he'd soon grow used to it. Around him, as far as the eye could see, lay the low, endless . . . etc., etc."

We've all read this sort of thing before. By now, the number of stories containing a scene something like this would probably reach half-way to Mars if they were unstitched and the ends of the pages stapled together. Well, we hate to be spoil-sports, but we can't help thinking that Angus must have slipped up somewhere when he carried out that so-glibly-described "test for breathability." Because in actual fact, if he had come bouncing out of the air-lock in such an abandoned manner, by the time you've read as far as this he'd be flopping round on the desert like a stranded flat-fish, presenting a most undignified spectacle to any Martians who happened to be passing.

For we might as well get used to the idea—and it's really time that science-fiction writers faced up to it—that there's no planet in the Solar System on which a human being can live and breathe without mechanical aids. We can't yet be 100 per cent. certain of this, but the chances against it are now very remote indeed, according to the results of modern astronomical observations.

THERE are only two planets—Mars and Venus—which at all resemble Earth and on which we might have hoped that we could have lived without breathing apparatus. They both possess atmospheres—very deep ones, in fact—but both are completely irrespirable. That of Venus is known, by direct spectroscopic evidence, to contain enormous quantities of carbon dioxide *and no trace of oxygen has been detected.* If oxygen were present in appreciable quantities, it would tend to rise to the top of the heavy carbon dioxide layer and we should be able to observe it. What is almost as surprising is the fact that Venus also seems completely devoid of water—which makes the composition of its unbroken cloud layers an absolute mystery. According to the latest ideas, Venus is considered to be quite dry and swept by extensive storms caused by the intense heat of the sun. If so, the probability of life—indigenous or imported—under that suffocating blanket of carbon dioxide looks pretty remote.



Mr. Clarke congratulating an astronaut who remembered to wear his spacesuit.

In the case of Mars, there are two fundamental reasons why the atmosphere will be fairly lethal to human beings. First of all, it's far too thin. No one can live at the top of Everest, no matter how long they've been acclimatised, and the atmosphere of Mars is far thinner than this. Also, as in the case of Venus, the only gas that has been detected in it is carbon dioxide: oxygen again appears to be lacking.

The vegetation which seems to exist on Mars must therefore be of a totally different type from any on Earth, and if there is any animal life there it will be even more alien. This is quite a relief as the possibility of encountering human life on Mars might well have dismayed the most ardent astronaut.

IT'S hardly necessary to spend much time looking at the rest of the Solar System, for however attractive the other planets may appear to their hypothetical inhabitants, it will require a lot of engineering to keep human beings alive on them. All the remaining planets and satellites are so small that they have no atmospheres at all—or so large that they have atmospheres thousands of miles deep, under enormous pressures and disrupted by storms of inconceivable violence. (And, if further discouragement were needed, consisting of methane and ammonia.) There is one satellite with an atmosphere—Titan, the largest moon of Saturn, which is nearly as big as Mars. Once again, it's not an atmosphere which would be breathable, as it consists of methane (marsh-gas), and in any case even oxygen wouldn't go down well at a temperature of more than 200 degrees below freezing. Nevertheless, the atmosphere of Titan may well be extremely valuable to astronautics, as methane

looks like being an excellent propellant—*not* fuel—for atomically driven rockets. But that's another story.

Our own Moon, of course, has practically no atmosphere whatsoever. At the moment there is an argument going on between Russian and French astronomers as to whether the lunar atmosphere is 1/10,000th or only 1/100,000,000th as dense as the Earth's. Whichever side wins, lunar explorers won't notice the difference.

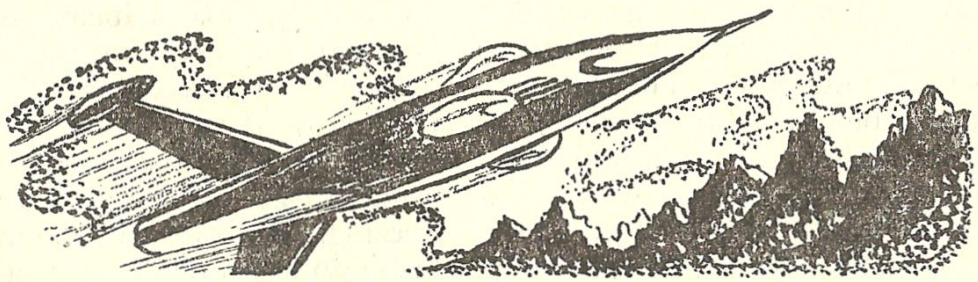
It seems, therefore, that on every planet we visit in the Solar System we'll have to wear space-suits and live in sealed colonies with their own air conditioning supply (just like office-workers in New York.) Perhaps on Mars or Venus we might get away with a simple oxygen mask of some kind and wouldn't need the full paraphernalia of a lunar-type space-suit, which would have to withstand a complete vacuum. Even this would be rather a nuisance, though I suppose one would get used to it.

IN these circumstances, what is the poor science-fiction author to do? Well, one solution is to write-off the Solar System as a dead loss and set up shop on the imaginary, and nearer-to-the-heart's desire, planets of another sun. By the laws of probability, there will be such planets if you can find 'em among the hundred thousand million suns of the Milky Way. And, of course, if you can reach them—which means that you've got to invent something as much better than rockets for propulsion as rockets are better than elastic bands. (Rockets *can* be used for interstellar flight: but the scenery gets a bit monotonous after the first hundred years.)

The other solution is to be brave and accept the Solar System just as it is, determined to make the best of it—since this is what we'll have to do when space-flight starts. It's interesting to remember that a few centuries ago there were many stories about the Moon which postulated a breathable atmosphere and human types of life—but the discovery of the Moon's real nature hasn't made it any the less popular as a location for stories. The writers shrugged their shoulders, tore up their old MSS., and adapted themselves to the new conditions by inventing space-suits and all the other gadgets we now take for granted.

There are always technical answers to technical problems. Sometimes, moreover, there are answers which are not "technical" in the usual limited sense of the word. If we wish to colonise Mars or the Moon, which will certainly be the first astronomical bodies to be explored by man, there are several interesting lines of approach which take advantage of the natural conditions and the materials we might reasonably expect to find there. On Mars, for example—oh no, you won't catch me giving away plots as easily as that !

THE END



BOOK REVIEWS

Tomorrow Sometimes Comes. By F. G. Rayer. Home and Van Thal, London. 256 pp. 9/6

REGULAR readers of *New Worlds* will recognise Mr. Rayer's name as one of our most frequent contributors, and his first novel to be published lives up to the high standard of technique and thought to which we are accustomed.

This is a sustaining and "suspenseful" story of one man—Major Rawson—forced, through circumstances, to give the signal for retaliatory atom-bombing at a period of great world tension. The hospital where he is undergoing an operation is blasted, and Rawson revives hundreds of years later—to find his name reviled by all normal humans, and revered by all mutants (abnormal births caused through radiation). The mutants, not so numerous as the normals, have the advantage of universal telepathy.

Overshadowing the shambles of civilisation is the gigantic Mens Magna, a human-built electronic brain which actually controls all mankind in a beneficent manner. (Rayer's "Deus Ex Machina," in No. 8 *New Worlds* centred around this machine.)

Throughout the maze of surprise and intrigue, Mr. Rayer leads his chief characters, Rawson and the Mens Magna—the former an unpredictable but highly important pawn in the struggle between the two humanities, the latter, semi-sentient but immobile, working for the ultimate good of all life.

To reveal the dramatic ending to what is undoubtedly the finest British science-fiction novel published in this country in recent years, would spoil the enjoyment of thousands of readers.

Tomorrow's Comet. By Lewis Sowden. Robert Hale, London. 302 pp. 10/6

THE only similarity between this book and the one above is in the word "Tomorrow." Mr. Sowden, a South African with three novels behind him, has taken a greatly overworked theme—an approaching comet which will annihilate Earth—and attempted to portray the lives of a number of people in the last few weeks before The Day.

It is not until half the book has been waded through that Mr. Sowden's objective becomes clear, and then, as he warms to his subject, the story unrolls smoothly, marred only by a weak love interest.

There is a certain humour, and pathos, in the word-pictures of a South African newspaper plant striving to get editions on to the streets as the comet draws ever nearer; of the complex attitudes toward the inescapable doom assumed by the characters. There is drama in the pooling of American, Russian and British resources to fire atomic bomb-laden rockets at the comet in an attempt to divert it sufficiently to allow some of mankind to survive. There is even excitement in the escapades of a Big Business Man who doesn't believe in the end of the world, and goes ahead buying in shares until he practically owns the rock soon to be blasted.

But these better passages are completely overshadowed by a long and tedious opening, which tends to stifle the reader's interest.

J.C.

PRISON TRAP

By F. G. RAYER

It was an ingeniously guarded penal colony. So clever, in fact, that the men who built it were trapped also.

Illustrated by QUINN

"THEN the job's finished," grunted Al Lucain and he wiped the moisture from the vast expanse of his forehead. "By Copernicus, it's odd to think we've worked six months without knowing the purpose of some of the units we've fitted up !"

Nimmo Manderly shrugged. He slid off the desk corner and made a gesture which took in the rocky landscape outside.

"Yes, but it's a sweet little prison. There's everything. Books, games, feather beds and gravity normal enough to make a home from home."

Al Lucain nodded his ponderous head, a shaggy egg balanced on its pointed end. The responsibility of landing the ship on this strange planet had been his and luckily it had proved suitable for the prison city they had built. But Epiris was lonely and the hard, pinkish light slanting across the rocky plain outside never let them forget how remote was Earth. On the plain, towers ringed the city, thin, black girder-built fingers pointing to the strange, opalescent sky.

"Wonder if Cameron and Thorsen *are* crooked ?" murmured Nimmo Manderly, lean, tanned features pensive. "I seldom forget a face."

Lucain shrugged shoulders wide enough for a man and a half.

"They've worked well enough."

The bang of a door ended his words. Heavy steps came down the passage outside and Manderly turned his back to the window, frowning.

"There's trouble brewing, Al," he said.

The door swung wide and a heavy man with thick black hair topping his bullet head strode in. He jerked an order from the corner of his mouth at a slim individual who followed closely and shut the door.

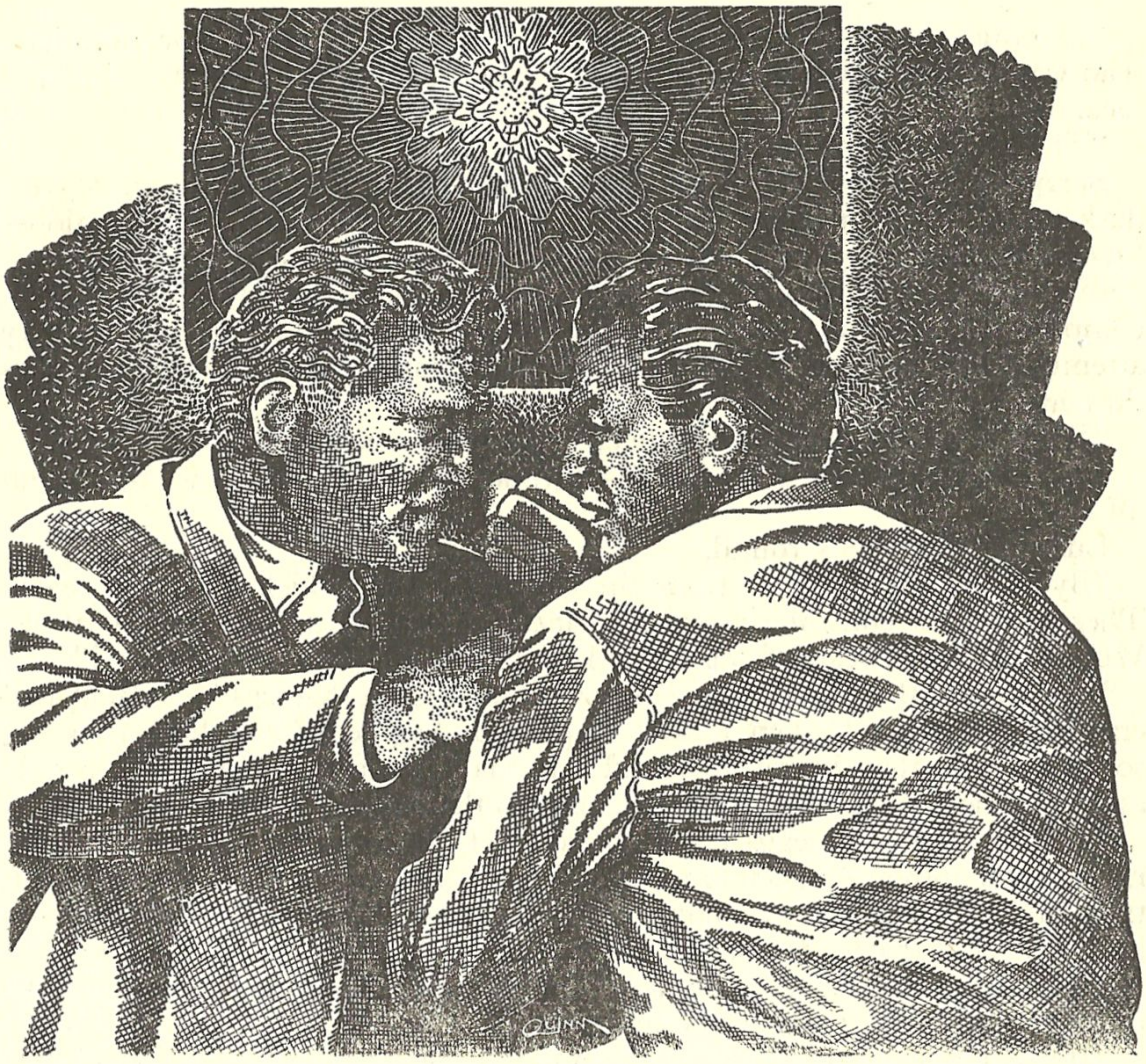
Lucain straightened in his chair, grey eyes snapping as he recognised Cameron and Thorsen. "By the horned comet ! *Knock* when you come in," he said icily. "Finished checking ?"

"We have, and you've got a few questions to answer !" Cameron thumped a mighty fist on the desk so that it rang. "Why did you come to this forsaken place ?"

Al Lucain glared at him and snorted powerfully.

"By my perihelion, I've explained ! I don't return to Earth with jobs unfinished. There wasn't enough fuel to go on to Equarius as planned so I landed here. I came out to build a prison city—a dumping ground for criminals—and I have. This planet's no beauty spot but it's good enough for them ! I'm satisfied and shall take full responsibility when we get back."

"We shan't get back." Cameron's voice shook with fury. "The fuel's too low."



"*What* ?" grated Manderly, coming to the desk.

Lucain thumped a double-sized fist on the desk and the metal bounced. "Let me handle this, Nimmo." He glared at the men. "Explain."

Cameron ejaculated an oath and leaned across the desk, snorting, his eyes like black glazed pins.

"The explaining's wanted from you ! There's insufficient fuel for a return trip to Earth. You should have turned the ship as soon as the state of our fuel supply was noted. We'd have got back then !"

Thorsen edged out from behind his leader, his beady eyes antagonistic.

"There'll be no rescue ship calling when we're overdue," he pointed out. "It'll go to Equarius. They don't know we're here on Epiris !"

LUCAIN brought all the vast area of his face into a gigantic scowl, silencing him with a look. But Thorsen's words were true. Earth did not know they were on Epiris. Baulked by the planet's blanket of static and the infinity of space beyond, radio was useless. Vain, too, was the chance that a ship would find them—Epiris was a mote among uncalculated millions. The rescue ship would land on Equarius, then presume them lost.

"By the ghost of Galileo Galilei, you've fumbled your checking !" he declared.

Cameron swore, but his retort was lost in a shout from Nimmo Manderly who was staring from the window with unutterable astonishment on his lean face.

"The robot apparatus has started, Al !"

Scraping back his chair Lucain saw Nimmo was right. On the top of each dark tower an illuminated globe had begun to spin and from the globes finger-like rays raked over and over the rocky ground, scanning every inch with relentless precision. A glance showed that the weaving lights formed a complete circle round the prison city—a circle which would be sensitive to any attempt at escape by those within and set in motion the deadly robot machines they had built.

"We'll never get past the scanners," Nimmo breathed.

Thorsen peered past them and his thin face blanched. "Can we turn them off ?"

Lucain did not look round.

"By Halley, no! Except from the control tower, which we can't reach. These scanners control the robot planes to make a prison without walls. We're captives instead of the jailbirds who'd have been landed here !"

He halted. Beyond one of the towers a shaggy, hyena-like animal had emerged from the broken rocks. It paused, frightened by the interlacing scanning rays, then began to bound towards the shadowy forest half a mile away. Lucain waited, his grip tightening on the back of the chair.

Then it came—an egg-shaped plane that whined into view from their right. The animal broke into a furious spurt, flitting between the rocks but the plane followed its every move, drawing closer. Abruptly flashes spat from its nose. A sharp *tat-tat-tat* echoed across the boulder-strewn ground.

The little craft circled twice, then droned back to its hangar. Among the rocks a hairy body twitched momentarily.

"It's got one of the *Vesperus*," said Nimmo Manderly. "What chance would a man have ?"

"*None*," grunted Lucain. The long-limbed creatures which crept out with evening were twice as fleet as man; yet the scanning beams had recorded the movements immediately and directed the robot plane with deadly accuracy. "Get all the men together in the hall below," he ordered abruptly. "No one must go outside."

Cameron growled something but Thorsen plucked his sleeve and with a dark backwards glance the men went out. Nimmo Manderly turned his back to the scanning beams, faintly luminous in the gathering darkness as they wove to and fro.

"What's happened, Al ?" His voice was baffled. "Has one of the men switched on the robot apparatus ? How can we get out ? Nobody can run to the control tower without getting shot down—the prison's too darned efficient for that !"

Lucain led the way towards the door. "Sufferin' satellites ! No man in his senses would start this jail running, Nimmo. I'm puzzled."

THEY passed along the airy corridor they had built from pre-fabricated sections. High on every wall throughout the compact, single block of the prison was a blue screen. Lucain halted before one. It was as large as his hand and burned with inner light.

"There's a lot we don't know, Nimmo," he said pensively. "What are these things for? We've put things together according to a book of rules without knowing their purpose."

Manderly shrugged. "Perhaps they're for sun-rays, germicidal radiations, or something. Let's go on. I can hear the men. They dislike being jailed in their own prison!"

Lucain nodded. "By Satan's Star, so do I! I've got to get back to Earth according to contract! And I never did admire the tangled forest and rocky hills making up our view!"

He paused at the top of wide steps. The hall below was filling with uneasy men who gathered in little groups and his spirits sank as the last entered and the door was kicked shut. All were present. He had hoped otherwise.

"We're up against it, Nimmo," he murmured. "If someone had started the prison apparatus as a fast plan we might reach terms. But everyone's here. So we're up against something inhuman—the scanners that locate anything moving, the autoseekers designed solely to kill, and all the rest of the prison gadgetry. This place was designed to be without guards and yet keep in toughs who'd burrow through concrete thick as a house."

A murmur went round the hall as Lucain stopped halfway down the stairs.

"Any man missing?"

Heads shook uneasily at his question.

"Does anyone know why the apparatus started?"

"No, but we know we're penned up here and it's your fault," Cameron declared loudly, pushing his way towards the front. "There'll be no rescue when we're overdue! We're trapped in our own jail!"

A sympathetic murmur ran through the men. Lucain balanced on his toes like a heavy-weight pugilist and felt the corded muscles of his huge forearm.

"I'll take responsibility for that! Any ideas for getting out?"

There was no reply until a fat, red-faced man near the stairs spoke.

"Have all the scanning towers started and the complete hangar of autoseekers become ready to operate under their control?"

Lucain nodded. "Yes. The installation was complete. All units have come into operation simultaneously but we don't know why."

Pondicherry shook his big head sadly. "Then we're sunk, Mister Lucain. There's near fifty of us but if we all ran out at the same time in different directions no one would reach the control tower. The autoseekers would get us all."

A heavy silence followed his words. At last a slim young man threaded his way forwards. Lucain looked down at him.

"Well, Roscoe. Any ideas?"

"I—I'd like to try to reach the control tower, sir." The lad grinned uneasily. "Few could beat me at a sprint. If I can switch the circuit off you'll be free."

Lucain raised his brows.

"You know the chances?"

"Yes, sir."

"I shan't stop you. But if you think better of it nobody'll blame you, by Jupiter. You'll have to play tag for a full half mile with the fastest individual-seeking aircraft ever made."

"Yes sir, I know." The young man nodded grimly. "I'd like to wait

until daylight to-morrow before I try."

BACK in the room which formed his office, Lucain sank into his chair. For once in his life Nimmo Manderly seemed to have nothing to say. A walk round had shown them every scanning tower was functioning smoothly. The long, low hangar gaped, its dark mouth hiding a double row of robot autoseekers, each ready to flash into the air, track down its prey, then fly back to its place. A little beyond the encircling scanning pylons that controlled the craft the control tower stood; half a mile behind it the vessel which had brought them from Earth was dimly visible.

Nimmo Manderly's face was glum.

"Don't think Roscoe's got much chance," he opiniated.

"Nor do I. But he volunteered and I've got to let him try for the men's sake." Lucain tapped his fingers on the desk, then suddenly glanced up. "It beats me why the apparatus started, by Halley ! I can't believe it was a fault—faults don't arise in machinery so superbly produced. Yet all the men, including that two-eyed monstrosity Cameron, are accounted for and Epiris has no life with sufficient intelligence to play such a trick."

Manderly nodded agreement.

"We can't suspect Cameron and Thorsen—they'd just started that quarrel," he said. "We must count them out."

Lucain felt mystified. Apparently no one could have started the apparatus, yet it would not begin to operate without reason. Their difficulty defied solution.

"Cameron's got no liking for you, Nimmo," he said quietly.

Manderly nodded. "He hates me. He could be a devil."

THE next morning Lucain watched the hard sun rise above the rocky area surrounding the prison. Suddenly a figure broke from a doorway to the left, running like a madman, never glancing back for an instant as he strained every muscle for the distant tower. Lucain judged the distance covered. Twenty-five yards. Fifty. A hundred . . . Then there was a whinning purr and something with stubby wings flashed into pursuit, glinting as it arced from the hangar.

The racing man leapt on, swift and sure on the rocks. As the whistling machine drew near he dodged frantically, zigzagging like a hare. But the machine dipped and curved too, its nose spurting red fire.

Tat-ta-tat.

Nauseated, Lucain turned heavily from the window. Nimmo Manderly followed.

"So the plane got Roscoe first try. What now ?"

Lucain was silent while the little autoseeker droned back to its place, its deadly mission accomplished.

"We can't beat the scanners, Nimmo. There's only one answer—turn off the apparatus."

"But how ?" Manderly's lean face puckered. "We can't reach the control tower and there's no way to stop it from here. If there was, the whole jail would be useless because prisoners would simply let themselves out."

Lucain grunted assent and motioned towards the papers spread over the desk. "Complete instructions as to assembly ! Yet we don't know what

some of the gadgets we've fitted in are for. There were too many prefabricated units marked *Connect to 9th Unit as illustrated in Fig. 21*, and so on, in this wall-eyed job ! If we knew how the place *worked* perhaps we could do something."

"Maybe we'll find out," suggested Manderly hopefully.

"Don't bank on it. This jail was made to house criminals clever as the tailed men of Mars and with nothing to do but think up ways of escape. Their sole guards would be the robot machinery. It's a Devil's Island with aircraft instead of sharks."

Nimmo Manderly looked downcast. "You're right. The best brains on Earth had their fingers in the pie. Mechanics, housing-designers, electronic experts, psychologists——"

He was interrupted by the door opening. Pondicherry, breathing heavily, entered.

"Cameron's likely to cause trouble, Mister Lucain," he said. "The men are jumpy, fearing the worst. He's been telling them you should never have come here because Earth won't know where we are. We'll die of starvation, he says, or be shot one by one trying to get out. Him an' Thorsen been quarrelling too—something about getting rich."

A snort came from behind the fat man and Cameron strode in.

"It means we're not so ready to take orders from Lucain as we were !" he grated.

LUCAIN returned Cameron's stare coolly, wondering as he did why the blue screen behind the man's head seemed to glow more brightly than ever before.

"You're off orbit, Cameron !" he stated. "Trouble-making will do no good."

Cameron swore. "You never should have had command ! The men realise that now. We'd like to see if *you* can reach the control tower, Lucain. You got us in here and you got to save us, or we'll know why !"

Lucain strode round the desk and put a mighty fist under Cameron's nose.

"Get out, you two-eyed space-cod !" he said.

"So you're scared."

"By Jupiter—I don't plan suicide, much as you'd like it !" Lucain's fist rose and Cameron backed, to turn abruptly and disappear, muttering darkly.

"He'll make trouble," Manderly stated pensively. "I keep thinking I'd seen him somewhere before he joined this gang. I never forget a face."

Lucain stroked his ponderous chin and wondered why the blue screen was paler now. Strange they didn't know what the screens were for.

"And what do you think of his idea, Nimmo ?"

"About you trying to reach the tower ?" There was surprise in Manderly's voice. "We saw what happened to Roscoe and none of us expects you to try. It's not your fault the machinery started and with that contract in view you've got more reasons for wanting to get back than any of us."

"But machinery doesn't come into action until someone, or something, starts it," Al Lucain declared and began to thump up and down the office. There must be a reason to account for the apparatus starting, forcing them to remain prisoners in a jail of their own building. But what was that reason.

A light tap on the door halted him.

"Come in !"

A medium-sized man entered hesitantly.

"I'm Randall, sir. Mechanic's hand."

Lucain nodded in encouragement. "Go on."

"I'd like to try to get to the control tower, sir." He hesitated, adding in a rush: "Perhaps the scanners can't distinguish things when they're still. I believe they couldn't tell a man from a rock, if he didn't move. I'll run as far as I can before the plane comes out, then lie still until it goes back to the hangar. Then I'll make another dash, and another, until I'd got to the control tower."

Lucain dropped his eyes from the man's intent face. Manderly's expression told nothing. At last he put a hand on Randall's shoulder.

"I must give you your chance, for the others, laddie. Personally, I don't ask you to risk it. Nobody here knows exactly how the robot installation works. You must decide for yourself."

"Then I'll go, sir."

RANDALL left the room and Lucain followed. Knots of men were grumbling in the large hall but they dropped silent, watching the little procession with fearful, expectant eyes.

At the door Randall flung off his coat and moistened his lips.

"No use waiting. Wish me luck !"

He sprang from the building and Lucain watched him sprint across the broken ground. In the daylight the scanning beams were invisible, but he knew they were there, covering every foot, waiting to trip relays.

Randall was a hundred yards out when the shrill whine of an autoseeker taking off sounded and immediately he flung himself to the ground, becoming as motionless as the boulders dotting the plain.

The robot craft shot into view. It slowed, banking, then flew twice over the spot where Randall lay. Lucain waited, hardly breathing. Would the machine kill, or would it return to the hangar ?

It did neither, but settled into a tight circle to drone round and round the prone figure. Lucain turned away, shutting his ears against the soft purr of the engine which rose and fell as the deadly craft came and went on each circuit.

"Poor devil," breathed Nimmo Manderly. "Whoever designed these robot machines took no chances."

In the hall the grumbling was louder. Cameron was haranguing a group and sullen looks reached Lucain as he halted near the stairs.

"Well ?" he demanded heavily.

"We're not satisfied with your leadership." Cameron had appointed himself spokesman. "We're not willing to stay here and starve. We shouldn't have come to this planet at all !"

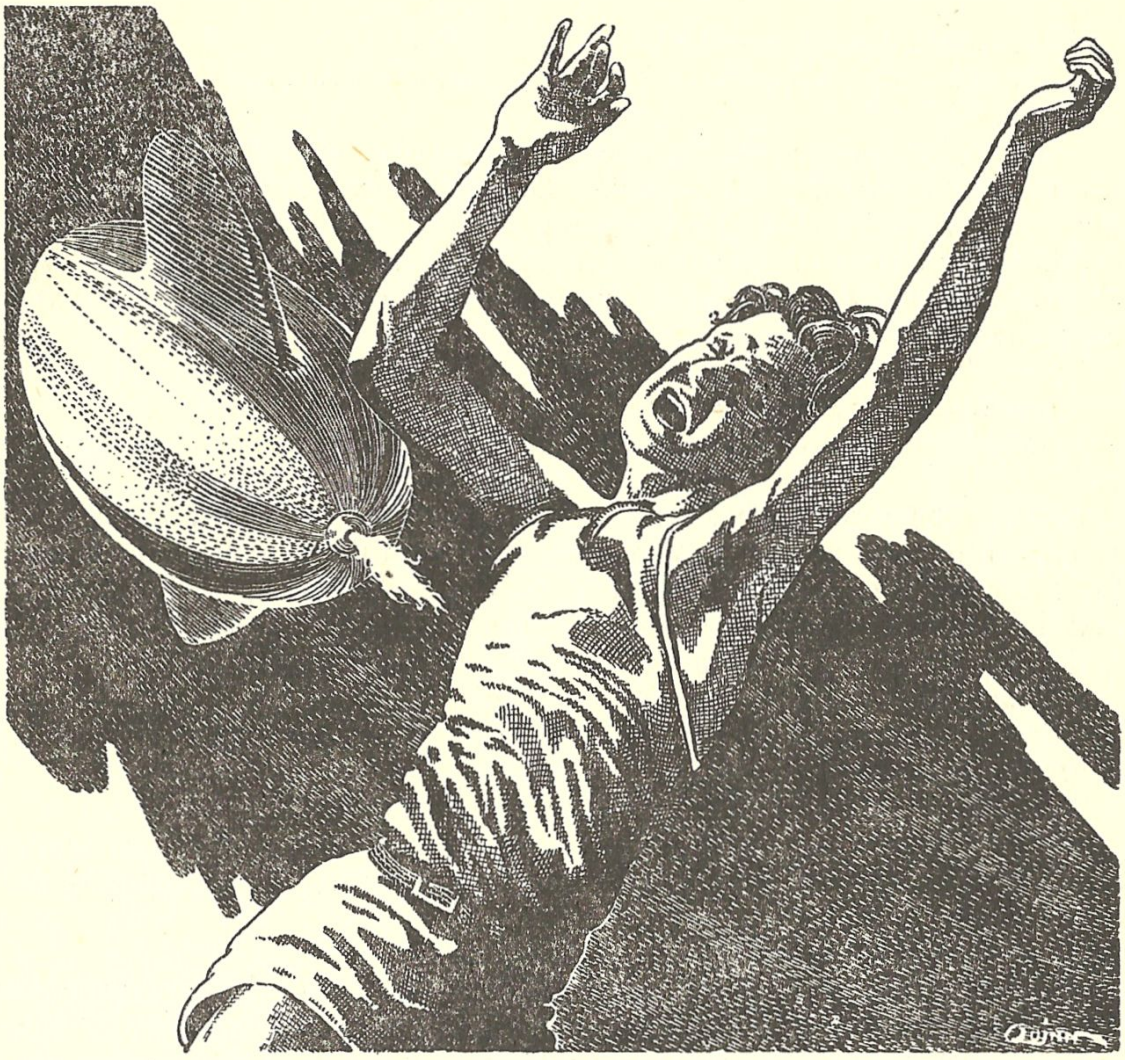
Murmurs of assent followed. Lucain met Cameron's gaze.

"If you've got any ideas I'm ready to listen," he stated. "If not, shut up."

"I'm not going to shut up !" Cameron swore and his eyes flashed hate. "You've risked our lives. Probably you bribed your way into command expecting a soft job—and *we* suffer !"

Some of the men began to move behind Cameron and added their scowls to his. Lucain moved towards the stairs.

"You're making trouble for a reason of your own, Cameron," he grated.



"I was appointed boss here and by Copernicus I intend to stay boss ! Mutineers will be answerable to the police back on Earth."

"That's the last thing to bother us now—we'll never get there !" Cameron snarled.

THE men behind him, he advanced. Manderly and a handful of the others gained the stairs first and Al Lucain saw that the hall had divided into two camps of almost equal strength. Half the men backed Cameron, half himself. The movement stopped, Pondicherry and a dozen more holding the stairs.

"We're safe for the moment," Nimmo Manderly grunted. He jerked his head towards the end of the corridor. "I've got something to tell you."

Out of earshot of the others he continued quickly: "I know where I've seen Cameron. When you mentioned the police the look on his face brought it back. Six years ago he was wanted for beating a man to death. His picture was in the papers after. Thorsen was his side-kick. They vanished."

Al Lucain nodded understandingly.

"They've been shipping off on safe trips."

"Bet your life they have ! I never forget a face."

Lucain felt convinced Manderly had made no error.

"We'll watch them, Nimmo," he growled. "Now here's news for you—— *Did you notice how brilliant the blue screens in the hall were during the rumpus ?*"

Manderly looked astonished.

"Blue screens ? What have they to do with it ? We want to know the way to get out !"

"We do," agreed Lucain, "and maybe we'll find it. Not that I know what the screens are for—yet." He paused. "Do you remember any men other than engineers who had a hand in designing this jail ?"

Manderly furrowed his brow in thought. "Yes, a few. There was Welby Patin, the criminal psychologist, Bywaters, the electro-encephalograph expert, and others."

"Sure ?"

"Stone certainly. I never forget——"

"Good," interrupted Lucain with relief. "We may make something of it yet."

Outside the robot seeker still zoomed slowly above a motionless figure. Lucain wondered how long Randall would keep still. Perhaps he had fainted for the craft seemed ready to circle for ever over the spot where he lay. Lucain's thoughts took a new turn. How could Cameron expect to get rich ?

Soon loud voices rose from the hall and Lucain closed the door.

"Perhaps we haven't realised the value of the knowledge we have, Nimmo me lad," he suggested. "What happened just before the apparatus started ?"

Manderly looked puzzled.

"Cameron began to quarrel, apparently over the fuel shortage."

"Exactly, laddie. Cameron started quarrelling." Lucain took a turn round. Dare he voice his thoughts ? They might prove wrong for he had only half-formed suspicions.

"I'm going to speak to the men," he stated abruptly.

His appearance at the top of the stairs was greeted with hisses from below.

"I think we may get out," he declared when silence returned. "But I promise nothing until you stop quarrelling. Until then I shan't even try to explain what I suspect."

Cameron's voice hooted up from below, interrupting.

"Lies ! Take no notice, men ! He's afraid for his own skin !"

A roar of throaty assent followed and Lucain withdrew, shrugging.

"It's no use, Nimmo," he said. "Tell Pondicherry and the others to move upstairs so that we can lock ourselves in the upper part of the building. We'll be safe from those vermin then, for the moment."

WHEN darkness came lights sprang to life, shining out into the night where the whirr of the circling craft could still be heard. Once a second plane whirred from the hangar and shots stuttered to the left. Lucain lifted his head to listen and saw Nimmo had heard it too.

"One of Cameron's men tried to break out, I expect," Manderly said, not without satisfaction. "They're safely blocked in the lower section."

Cursing sounded below and the autoseeker droned back to its place, leaving only the monotonous whirr of the first craft to make the silence heavy. Lucain knew he could not sleep and for a time he watched the faint, weaving scanning beams, the only moving things under the dark, alien sky. Then he went to the door which parted them from the stairs and listened.

No sound came. He unfastened it and peered out, ready for trickery. The stairway was deserted; Cameron's men slept in odd positions about the

hall, huddled on cushions, spare clothing and improvised beds.

Half way down the stairs Lucain stopped, eyes on the blue screens. They were dim. Very dim indeed compared with their brilliance when the riot in the hall had been at its height.

For an hour he sat watching, chin on hands. Sometimes the sleepers stirred, but no one saw him. At last he returned and fastened the door, brows furrowed.

NIMMO Manderly woke him early.

"The ship seems in danger," he said uneasily.

Al Lucain rubbed his eyes and looked out into the red dawn where the ship glinted like ruby. Small hairy forms of upright posture swarmed round it and with a start he recognised them as the creatures they had glimpsed before and apparently the most intelligent life on Epiris; creatures whom the dangerous, hyena-like *Vesperus* obeyed like dogs. No communication had been established, however. Lucain had classified them as indigenous savages, had noted they wore heavy brass ornaments and carried primitive weapons, then dismissed them from mind.

"They've been encouraged to come out by our absence," he grunted. "If they interfere with the ship they'll probably cause damage."

Nimmo nodded.

"That's what I feared. But we can't drive them off !"

Al Lucain watched for a moment. The savages were carrying branches with which the climb up the vessel's sides in an attempt to enter. Later, he left the office and found Nimmo placing food on the stairs.

"I warned them if anyone tried to rush me they'd get no grub for two days," Manderly said. "It's lucky we command the part of the building where the stores are."

Lucain nodded. "It gives me an idea."

Nimmo closed the door and fastened it. "There's not enough food to last all of us for long. Do we die of starvation—or run out and get shot ?"

"Perhaps neither," Lucain said pensively. "Are there any sleeping drops in the medical stores, laddie ?"

Nimmo nodded, surprised.

"Then put the strongest you can in the evening grub for the rats below," Lucain ordered. "I want Cameron and his vacuum-brained rabble to be out. And I do mean *out* ! Can you fix it ? Unconscious as bricks."

Nimmo Manderly furrowed his bony forehead. "We can, but they'll be raving mad when they come round and know we've messed with their grub ! They'll be ready for murder. They're getting angry now, saying the natives will ruin the ship."

Lucain shrugged. "We must risk that, Nimmo. Do your best."

THE short day had almost gone when Manderly left the medical storeroom.

"Simpson's been a doctor in his time," he said, nodding towards a man behind him. "Half an hour after they've eaten the men below won't wake if the place falls in on them." He frowned. "What good will it do ?"

Lucain made a gesture. "I promise nothing, by Neptune ! I only suspect a scoundrel is less bad when he's unconscious. His badness must take the

form of nefarious action or thought and those things are in abeyance when he's asleep."

"Those below will soon make up for that when they come round!" Manderly predicted.

Lucain nodded. "Yes. That's a risk we can't avoid. Let's remember this is the perfect jail and a *perfect* jail can't keep *good* men imprisoned. It would be a contradiction. To sentence a man for a certain number of years has proved futile because one might become a good citizen after six months while another might deserve a twenty-year stretch. A man should be imprisoned only while he has felonious intent."

Nimmo Manderly scratched his sandy head.

"Don't tell me this jail's that clever! Roscoe was as good a chap as ever lived."

"Yes," Lucain agreed, "but he was part of the whole—and it's the whole which is imprisoned. A kind of mass judgement."

He knew now that they could only wait. Perhaps he would be proved right, or perhaps odd, disconnected possibilities had fooled him.

"YOU should be careful, Mister Lucain," Pondicherry told him later, round face serious. "I heard them below through the ventilator slats and they're ready to kill you. Cameron says it's all your fault we have to stop here and starve."

Lucain, returned from examining the food, nodded. The situation would soon become very grave. The men were uneasy and that uneasiness would increase as no way through the deadly scanners could be found.

When the sounds of eating below were at their maximum he silently opened the door and stood in the shadows at the top of the stairs.

Cameron's men were an unpleasant lot. They argued ceaselessly and several quarrelled over cards scattered in one corner. The hall was a shambles. Lucain gazed at the brilliant blue of the wall screens and wondered.

Soon the noise began to subside as men yawned with puzzled faces. Before the truth dawned half were snoring in varied positions and the others had already finished eating and showed signs of losing the power to walk.

Cameron dragged himself to the bottom of the stairs and shook a fist.

"You'll be sorry for this, Lucain!"

He tried to mount the stairs but half way up his legs gave. He snored and lay still. Lucain picked up a shiny object which had fallen from his pocket. It was crude gold.

"There'll be hades let loose when they come round," Manderly predicted from the door.

Lucain watched the screens. Was he mistaken or was the blue already less brilliant? He pocketed the amulet and returned to where Manderly had been looking from a window.

"The natives are getting into the ship, Al," he said. "If we don't soon drive them away they'll do damage."

Lucain turned his gaze to the blue oblongs. "If those screens react to the mental atmosphere we should have a better chance with Cameron and the others unconscious," he said. "Those plates may be sensitive to neuro radiations. I've noticed they're brighter when there's trouble. Remember the prison apparatus started when Cameron began the first quarrel. I think

he planned a double-cross."

"They might be recorders making a conduct register," Manderly objected.

"They might."

LUCAIN walked among the sleeping men. He doubted if the drug would keep them under many hours and from the door the recurrent drone of the autoseeker was audible as it circled a prone black shape.

"Get Pondicherry and the others ready, Nimmo," he ordered, "but keep an eye on these scoundrels. Warn me if they begin coming round."

An hour later the robot craft was still circling outside but the blue screens had become as dim as slate. After half an hour more the autoseeker suddenly straightened its course and droned back to its hangar. The light on each scanning tower snapped out.

Lucain gave a shout.

"By Epsilom, here I go ! If I reach the control tower bring the men out. If the apparatus gets me, keep back."

He sprang from the building, flinging Randall over his shoulder as he passed. Stumbling, he went on, more slowly now and half expecting a plane to whistle in pursuit with every step.

At the control tower he lowered Randall to the ground and saw that he was unarmed. Manderly was leading a running line of men across the rocky space and Pondicherry brought up the rear, gasping.

"We've made it, Mister Lucain ! The scanners don't reach this far. We're safe now !"

Lucain nodded. The spaceship was out of the area, too. The natives had melted back into the cover of the forest and the men halted under the vessel's curved side.

"What about the fuel shortage Cameron spoke of ?" whispered Manderly. "Is there enough to reach Earth ?"

Lucain shrugged. "We'll see. If not we'll go to Equarius and wait for the rescue ship. At the moment I'm more interested in seeing how perfect this jail is !"

As he spoke the scanning towers flashed into life. The little craft droned out, circled the spot where Randall had lain, then returned to its hangar. The distance was too great to be sure, but Lucain thought he heard a bellow from the squat buildings.

"Some are awake now," he said. "If I'm a judge of character them horn-eyed toads will stay there till we release them and that won't be until we've got a police vessel ready ! I suspect our fuel is all right. Cameron wanted to make trouble and get away with his cronies—and a load of these !" He showed the amulet.

Nimmo Manderly whistled and scratched his long chin.

"So the native trinkets aren't *brass* ! There must be crude gold about by the ton. I remember now there's a fat reward offered for Cameron and Thorsen. The authorities will be interested in some of those others, too. I never forget a face !" He slapped his leg. "What a jail, Al ! It switched itself on when Cameron started trouble ! If he'd kept quiet he'd have been a free man, but instead we've got a prison full of criminals, so black at heart they'll need a life sentence."

THE END

APE

By GREGORY FRANCIS

It is not always clever to know so much. Sometimes the degenerate can learn more quickly than the knowledgeable.

Illustrated by CLOTHIER

THE planet was lifeless, except for vegetation. For days now the great ship had circled the globe in its search for intelligent life, and found none. No sign, either, of a bygone age when animals roamed the vast forests. No fish were in the rivers and seas, and except for the scars of recent forest fires, there was no sign of change upon the world's green cloak.

In the valley between two low hills, the ship landed and the crew dispersed around it, thankful for the change from the artificial atmosphere of the ship.

Darlan Rand surveyed the scene from the control room, a frown darkening his face. Absently he passed his arm round the shoulders of Frieda Jan, his chosen partner for the voyage. The ship's complement consisted of an equal number of each sex, bound to their partners for the duration of the voyage, as had been the custom for centuries, reaching back to the dim days of the first inter-stellar flights.

"It's all wrong, Frieda," he murmured. "There should be hordes of animals, running, flying and swimming on this fertile world—but not a trace of any living creature has been found. Why? Has there been some catastrophe that wiped them all out? If so, what?"

"You're not the only one who wonders," Frieda remarked. "This is a world made for us, unless . . ."

"Unless what?"

She grinned. "That's what we have to find out, isn't it? What now, radar?"

Darlan nodded. "There's nothing on the surface. If there's anything to tell us the history of this world, we'll have to dig it out."

He crossed the room to the communicator and gave his instructions. Frieda followed and sat half facing him, watching the play of the muscles of his face as he talked. This was her fourth voyage with the ship's commander and she hoped it was not the last, although most couples never met again once a voyage was over, except by accident. Perhaps their two children would keep them together for a few more trips at least.

She suddenly realised he had been talking to her for some seconds.

" . . . the left-hand hill, I think. According to the soundings, there's a cave of some kind at the centre of each, and the right-hand one is deeper down. May be perfectly natural, of course, but I doubt it. Are you coming down to watch?"

"No. I must visit the children in a few minutes."

He smiled, kissed her, and left.

THE great clumsy excavators had been boring into the hill for four hours before they broke into the tiny cave. Darlan took two men with him and searched it thoroughly, mainly for artifacts. They found none. Disappointed, the commander prepared to leave. Perhaps the other cave would give results. Something made him sweep the cave idly with his portable lamp. Then he saw it. So intent had they been looking for small things that they had failed to notice the long, regular-shaped rock by the side of the opening.

He went over to examine it. What he saw in the uncertain light interested him. This was not a natural lump of rough rock, but a product of sapient life. Nearly twice the length of a man, and half its length in width and depth, Darlan observed. Far too heavy for the men to move.

He sent to the ship for a tractor, and presently the heavy object was dragged out of its resting place into the light of the sun, where he could examine it more closely.

First he had the stone cleaned of the grime of ages and polished, hoping to find hieroglyphics or pictures in bas-relief. There were none. Only a faint line that ran around it, a hand's breadth from the top.

Darlan ran a hand along the line. It was a definite joint. Picking up a crowbar, he attacked the rock, calling for help. After many minutes of heaving, pushing and hammering, the slab of rock slid to the ground and split.

Inside was another box, of a silvery metal, with six handles inset.

"IT'S not pretty," Darlan commented, with conscious understatement.

Frieda shuddered. " 'Horrible' is the word," she observed. "This must be one of the Apes the biologists tell us about. Hair all over him, teeth that look as if they could bite through steel . . ."

"But you must admit there's a certain grandeur about him," Darlan mused.

"Grandeur like a bulldozer. There's always a certain grandeur in strength. But a bulldozer isn't handsome. And when the power is off it's just—just a bulldozer. It's the same with this brute. Alive, with all his strength, he must have had grandeur all right. But dead he's just an unattractive episode in history."

"Nevertheless," said Darlan thoughtfully, "he's the key to the mystery of this planet. He may be able to tell us——"

"How can he tell you anything ? He's dead !"

"Perhaps. But we're going to try to revive him. That metal coffin was absolutely air-tight, and there's no evidence of decomposition. He's in splendid condition."

"I hope you fail."

Darlan smiled indulgently. "Why ?"

"Call it superstition if you like, but bringing the dead back to life is a violation of natural law. Broken laws bring punishment, remember ?"

"Not always. Any advance in science starts with a broken law, and finishes with a new law that holds good till the next time."

"That's right, be reasonable and scientific. I only hope we don't all regret it."

"Why should we regret it ?"

"If I could tell you that, you wouldn't need to revive him. You could

just ask me and I'd tell you all you want to know. You're going on, of course ?"

Darlan shrugged and Frieda nodded.

"If you're right, and he's dead, you've nothing to worry about," said Darlan. "We're gambling on his being in a state of suspended animation. If we are right, we may be able to revive him. If he is dead, nothing in our knowledge will bring him back."

"Good," said Frieda briefly, and left him.

THE two surgeons, with the help of several attendants, lifted the great body from its coffin on to an improvised cot, and set to work, covering the brute with an electric blanket to provide the necessary warmth. First an X-ray was taken. It brought excited comment, for they noted that except for size and purely superficial differences, the disposition and probable function of its internal organs were identical to their own. Next, a heart stimulant was injected directly into the left ventricle. Then an attendant took each limb, hands under the blanket, and commenced a vigorous massage, forcing the blood, now warmed to body heat, towards the heart. The two surgeons, one on either side of the massive chest, leaned and relaxed their weight in unison, forcing air to enter and leave the lungs. Rhythmically they toiled until two assistants relieved them, never relaxing the steady forced respiration. For nearly an hour they slaved on a seemingly hopeless task, while Darlan watched anxiously.

"He's responding, I'm certain !" gasped the senior surgeon.

"Yes, I can feel a slow pulse now," said the other. "A little more stimulant and we can relax."

Darlan could see the flush of life appear in the brutish face as the heart took up a steady and strengthening beat and the great lungs resumed their function.

Gratefully they ceased their efforts and flexed their tired muscles as the second injection took effect.

"A healthy-looking corpse now, Commander," said the chief surgeon complacently.

"I wonder how long he lay there in suspended animation, and who put him there, doctor ? Maybe thousands of years. Perhaps, ages ago, some wandering ship crashed here and this is one of the descendants of the survivors, degenerated greatly. But why should any ship venture here, to the outer fringes of the universe, where the suns are so remote from each other that they are mere points of light ? Never in the past was there such a shortage of habitable planets as there is now. There were thousands of better planets in the centre of the universe. I hope he can tell us, but I doubt it."

"He's coming round, sir," said one of the attendants.

AS Darlan approached, the great eyes slowly opened and gazed into his eyes. For an instant Darlan thought he saw intelligence, but then he found he was wrong. The expression on the beast's face was one of brutish wonder, and wonder often counterfeits depth of thought.

The creature suddenly sat up with a grunt and gazed around the room uncomprehendingly.

Darlan drew his paralyser. If this Ape got out of control, even for a few moments, it could make a nasty mess of those in the room. It made no hostile move, however, and when he spoke to it and signed to it to get to the floor, it quickly understood what was required of it. Shakily, at first, it moved around the room with a shuffling gait, bewildered by the weakness of its legs, and finally sat down in a corner, as if exhausted.

"Leave him there until he feels stronger," he told the doctor, "then put him in the strong-room and feed him. Better feed him on some of the fruit that grows on the planet. We don't want to lose him by carelessness, after all the trouble we had reviving him."

He handed his paralyser to one of the attendants. "Watch him. But I don't think he'll give you any trouble, unless he gets frightened. I'll have a guard posted within a few minutes, anyway."

He left to look for Frieda.

"You were right about his grandeur," Darlan told Frieda. "Wait till you see him. But there's more than that about him. There's good nature, too. He wants to be liked. It's rather pathetic. He's probably feeling very lonely, as the sole remaining member of his species."

"Why not excavate the other hill ? There may be another of his kind there to keep him company."

"What's the point of making ourselves a lot of work ? What would we gain, having two hairy monsters to cope with ? If we can't get any information from one, is the other likely to be more loquacious ? Besides, our mission is to find habitable planets, and this one promises to provide a haven for many millions of people. The climate is harsh, it's true, but with no animal life to contend with, this planet can be settled easily enough. But not if we give the world back to creatures like these."

"It's their world," said Frieda.

"But the strong shall conquer the weak."

"That," retorted Frieda, "is just the trouble."

Darlan laughed. "He's strong, I grant you. We haven't tried him out yet, but even to move that colossal weight of his about he must have tremendous physical power. Certainly if we revived a female, and the pair of them got loose, we could write this planet off as hopeless. It would probably be several hundred years before the ships arrived, and by that time the progeny of the monsters would have covered the globe. Slow old ships, the colonists. This journey that has taken us two years will take them two hundred, and the young folk who started the journey will be getting old by the time they arrive. Old folk don't take kindly to fighting.

"But that's only if we let this race reproduce. We'd be mad to do that."

"Oh, yes," agreed Frieda. "But what a likeable kind of madness !"

Darlan looked at her curiously.

ODDLY enough, Frieda had had more to say about the Ape before she had any real acquaintance with him than after. In a matter of days it was taken for granted that he was Frieda's special charge. Almost all that he learned, she taught him. He became invaluable as a workman, his great strength and willingness to do anything freeing a dozen members of the crew for other duties. But his usefulness as a labourer had to be accepted in place of the information Darlan had hoped to get from him. Abstractions were

quite beyond him—and to him, the past was an abstraction.

Everyone liked him. As people credit their pets with intelligence, those with whom he was a special favourite insisted hotly that he was quite clever. Unlike most pets, he could talk. Not easily, fluently, or with a large vocabulary—but he could understand and make himself understood.

Sometimes he had to be punished to make him learn. They didn't punish him for breaking things. He couldn't help that. But he had to be whipped mildly once or twice to inculcate the habit of cleanliness in him, and to keep him from interfering with things he could not understand. Once he was found with one of the girls and lashed savagely, despite her half-hearted protests that it was her fault and that he had done no harm.

The time passed quickly on the planet. Its climate might not be the warm, friendly one of their own world, but the members of the spaceship's crew found it pleasant after two years in space and just before a further two years of that same monotony. They learned all they could of the world they had found. After six weeks there was nothing more to learn. The Ape could tell them very little. He was eager to help, but all he had to say they could see for themselves.

Darlan could not resent the attention Frieda paid to the Ape, for at first he had encouraged it. But he began to think that he had had the same partner for too long. When the trip was over, he would take a new partner—perhaps Frieda's younger sister, Mikel. She had only been a child the last time he had seen her, but when he met her again four years would have passed. She would be ready for space flights . . .

WHEN it seemed there was nothing new to be learned about the planet, the ship's company prepared to leave for home. And the Ape got into trouble. In the scurry of packing and loading equipment, most of it too fragile for his great but clumsy strength to be called upon, he was forgotten for several hours. He became hungry. His regular feeding-time came and passed. So he went in search of his food, wasting a considerable quantity of provisions in the process.

Darlan had him whipped and thrown into the strong-room.

When he told Frieda she didn't protest as he had expected, but looked at him with disconcerting understanding.

"You knew he couldn't help it," she remarked. "He was forgotten. That was someone else's fault, not his. He wasn't locked up, so he went in search of food. As anyone would have done. He didn't waste the provisions deliberately. Why punish him ?"

Darlan didn't answer. She didn't need an answer.

"We've been happy enough, you and I," she went on slowly. "Until now. I didn't change, but you did. You were jealous—jealous of the Ape."

Darlan laughed unconvincingly.

"It's not so strange," said Frieda. "It's wonderful how quickly I lost my repugnance for him. If only he had a little more intelligence, you might even have cause to be jealous."

"Nonsense," said Darlan brusquely.

"You say 'nonsense' when you don't want to talk about something. Brain or no brain, the Ape has something you're envious of, quite apart from me. If I say he's lovable, you can laugh at me. If I say he's kind, good, con-

siderate it would be the same, for those are very funny words, aren't they ? Always good for a laugh."

"If you've finished," said Darlan politely, "perhaps you'll sit down. I can't very well take off with you standing there ready to be slammed into the wall."

Frieda shrugged, and strapped herself into one of the padded seats.

THE take-off was timed for noon. Darlan checked all departments through the communicator, ten minutes before zero, found no irregularity, and rang the warning bell. He strapped himself in his seat and settled down to wait while the remaining minutes fled. Frieda remained silent. One minute to go. He rang the bell again, twice, and rested his hand on the master button. Time ! And he pressed the button, braced for the shock of the take-off.

Nothing happened.

Frowning, Darlan unstrapped himself and went over to the communicator. The chief engineer reported the rockets and super-drive in perfect order, but promised another check-up. Within minutes he reported that all was satisfactory, and could suggest no reason for the failure.

Again Darlan rang the bell twice, waited a minute while he strapped himself in again, and pressed savagely on the button.

Once again, nothing happened.

Impatiently, he stripped the control box to look for a break in the leads, and tested the current. He found nothing wrong.

"I'm not," came Frieda's voice coolly from behind him, "exactly surprised."

He twisted in his seat. "What do you mean ?"

"If I knew, I'd tell you. And you'd think I was mad. So we'll just wait and see what happens, shall we ?"

"You're being ridiculous."

"Not so ridiculous, Darlan," said another voice.

Shock drained the colour from Darlan's cheeks, and it was several seconds before he was able to turn his head.

The Ape was standing in the doorway. He had discarded his overalls and was again naked as they had found him.

"I had better introduce myself," said the Ape. "My name is Armandale. I regret the pretence of the last six weeks, but I had to learn what you were like—whether you were dangerous, how you behaved. The superior learns little of his subordinates. The inferior learns everything."

Darlan recovered from his daze and quickly stepped over to the communicator.

"You are wasting your time," came the calm voice of the giant, as the commander ordered the guards. "They can hear you, but they can't move. You can try that toy, if you wish"—as Darlan drew his paralyser—"but it won't work."

He was right. It suddenly *was* a toy—it looked and felt like a paralyser, but it didn't paralyse.

"NOW, Darlan, you'll listen to me." The tone of the great deep voice changed from amusement to stern purpose. "You came here unbidden, and found an empty world. For millions of years it has been empty. We emptied

it ourselves, deliberately, simply by willing all living creatures to be sterile. Drastic, you think ? Perhaps so, but it was necessary for our purpose. We didn't want Earth to be a zoo—rather, a museum. You see, this is the birthplace of mankind. The whole spawn of humanity that now invests the Universe had its beginning on this small globe. This is Earth. Yes, the legendary Earth !

"Millions of years ago space-flight began. Journeys between the planets of this small system were soon commonplace, but the nearest star was out of reach. Then came the discovery of the super-drive that utilised cosmic energy to achieve speeds far in excess of that of light, and the way was opened to the farthest stars. Within a thousand years only the old people were left on Earth. Old people dislike change, and even the lure of long life on a much kindlier and more hospitable planet than Earth failed to move them. The younger element moved on toward the centre of the Universe and beyond to the furthermost fringes and forgot, through the aeons, the location of their home planet, although the name, Earth, has remained in the racial memory.

"We who remained—many of us, not all—chose to become immortals. Keepers of the museum of Earth, if you like to think of it that way. But the body can't be made immortal unless put into the long sleep in which you found mine. Only when a race has developed far enough to live in the mind alone would immortality hold any attraction."

"Immortality !" Darlan burst out. "You accepted eternal life—if you can call it life—like that, and no doubt you look down on us ! Man is a complete creature, body and mind. While we've been making life you've been suspending it."

"I see your train of thought," said Armandale, "though you haven't put it very well. Did you ever hear it said that though the difference between a good doctor and a bad doctor was enormous, the difference between a good doctor and none at all was very small ? Your race and mine can take a lesson from that, Darlan. You are the bad doctor. We are the—none at all. We do no harm in the Universe. You . .

"Ethics develop with a race, Darlan. A race that has a practical code of ethics which it follows rigidly is high in the scale of development—even if it uses stone knives and hasn't learned to make fire. And a race that has never climbed beyond the rule of Grab is low in the scale, even if it has super-drive and can make anything in a machine-shop.

"I'm not proud of your race, Darlan. You have not gone forward, but slipped back. You know what you should have done here ? Frieda knew. You should have revived us and helped us, and left our world to us. It would have been wrong, as it happens, not what we wanted, but, nevertheless, ethically right. And the ethical rules are the only ones that matter."

"BUT we need this world !" Darlan exclaimed. "And the strong shall conquer the weak."

"Very well," said Armandale. "That is exactly what is happening."

Darlan felt a chill at the calm words.

"We want to go on sleeping," said Armandale, "but it's impossible for a while. We have to take our part in shaping the destiny of our race again. There are many others like me. They will have to live and move again for

a while. Some of us will die. But there will be children again, for a while, to offset that."

"You're not going to try to turn us into a race of minds like yours !" Darlan shouted.

Armandale shook his head. "No. We rested only because we are old. And now we will work again because however old we are, we're still men. But *you* and others like you are the future, Darlan—not us. We are only going to see that it is a good future."

He sighed. "During our long sleep we developed powers that we never expected to use. You will know of some of them soon. We intend to send you to Aldebaran, which will take less than a second. From there you will find your way home without any trouble. But you will never find Earth again. You'll find we've effaced your log and removed all idea of the location of this planet from your minds. You can watch the skies, you can guess, but nothing in your mind will ever tell you where Earth lies."

"But what," Darlan exclaimed, "are you going to do ?"

"We are going," said Armandale, "to make a new race. A new race that will sometimes fight yours, but for the most part mingle with it peaceably. It will have something of you in it, but more of us. And this time the immortals who remain will watch more carefully."

Suddenly the skies shifted and a great red globe filled half the sky. "Aldebaran," said Armandale. "I shall leave you now to find your own way home. It will be a strange voyage for you all, I fear, but I think our task of revitalising the human race is more important than a little inconvenience for you. Your motors will start now, and everything on the ship will return to normal. Including your crew."

Darlan walked over to the communicator and asked for reports from the different departments. His face blanched.

"We left all the women behind on Earth !" he exclaimed. "Except Frieda." He turned to her. "The rest——"

"Including Frieda," said Armandale. "Neither she nor I came along. What you see is nothing more than projected images."

As he spoke Frieda smiled sadly at Darlan and began to fade. Armandale, likewise, began to grow hazy. Darlan could see the walls of the control room through him.

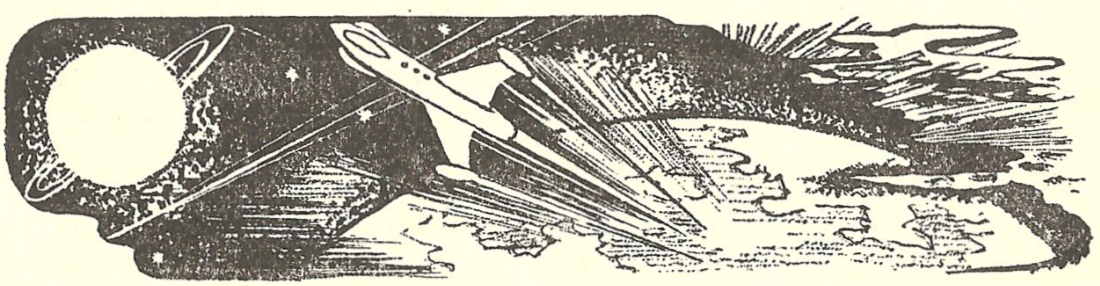
"But the women——" he blurted.

Armandale smiled. "They had to stay," he said softly. "How else could we make a new race that was a blend of yours and mine ?"

He was man, then a ghost, then a shadow.

Then nothing.

THE END



APE

NO SHORT CUTS

By E. C. TUBB

The Institute could transfer complete knowledge within a few hours. The source of the knowledge, however, had been overlooked.

Illustrated by HUNTER

IN twenty-foot letters against the twenty-story building the sign read simply:

WE TEACH YOU

Ken Newton stared at it, made a wry face, then shrugging narrow shoulders thrust through revolving doors. He grinned sardonically as he crossed the ornate foyer. A tall thin man, with hot restless eyes and prematurely lined face, he made a direct antithesis to the suave receptionist who came to meet him.

Deliberately he scowled at the man. "My name is Newton, Ken Newton. I've an appointment with Carter."

"Yes sir. One moment if you please."

Crossing to a low table the receptionist picked up a handset, spoke a few words into it, listened, spoke again briefly and returned.

"Mr. Carter will see you sir." He accentuated the Mister. "If you will follow me, please."

He led the way into an elevator without a backward glance. Newton glared at the discourtesy, then shrugged; he had asked for it. The elevator rose gently, neither man speaking.

Carter, Head of the Institute of Hypnotic Teaching, looked up as Newton entered his office. A short, fat, jovial-seeming man, he radiated good fellowship. His type could be found in the locker room of any country club. It was a pose he carefully cultivated, and it had proved very useful in the past.

"Mr. Newton ? Of the *Herald* ?" He beamed at Newton's curt nod. "Take a seat, help yourself." He gestured towards cigarettes and a decanter.

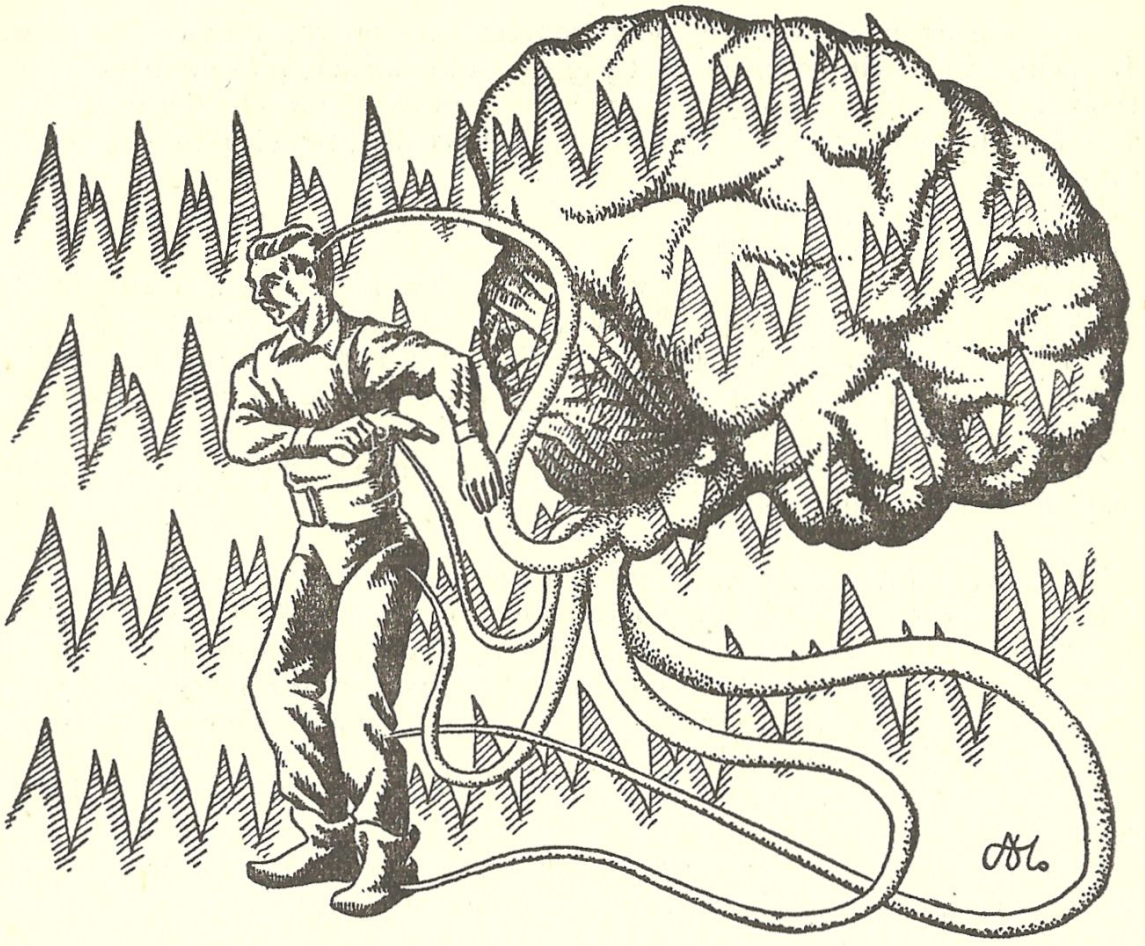
Newton grunted his thanks and scooped a cigarette from the hand-carved box, dropping his hat on to the floor with his other hand. Flicking a lighter he surveyed the room through veils of smoke.

Tasteful but not extravagant. Expensive without being vulgar. Soft concealed lighting, softer rugs on a polished hardwood floor. A pair of crossed sabres hung against one wall. Carter noticed the direction of his gaze.

"A relic of my youth," he sighed. "You would hardly believe it to see me now, but at one time I could have been world champion with the sabre. Do you fence ?"

"Only with words."

"Ah yes. Naturally." Carter crossed soft white hands over a little paunch. "Well, what can I do for you Mr. Newton ?"



Newton crushed his cigarette in an onyx ashtray. "You know what I do for a living ?"

"Newspaper reporting isn't it ?"

"It is and I'm sick of it." His face turned bitter. "Sick of chasing around digging up dirt to give a secondhand thrill to any moron with enough money to buy a paper." He laughed harshly. "And they talk of the dignity of the press." Almost it seemed as if he would spit.

Carter looked troubled. "But I thought——"

"You thought I wanted an interview, give you a good write-up, publicise the Institute. I can do that, but I want something in return."

"Yes ?"

"I want you to teach me a profession." He leaned forward staring with hot eyes. "Understand me, Carter, I'm not joking. I've got to have a change. I can feel it here." He tapped his forehead. "A tension. A building up to something. You understand me ?"

"I think so. Frustration. Inadaptability. Stress of modern living." Carter shrugged and reached for the decanter. "I'm not a psychologist you know." He tilted the decanter, and at Newton's nod filled a second glass. He sipped daintily at the whisky. "I can hardly see how we can help you."

"You do teach people, don't you ?" Newton was sarcastic.

"We do. We can teach you a language, music, the lines of a play, but a profession ? No."

"Why not ?"

"Let me explain. We can only impress data on the mind, not talent. Knowing music will not mean that you can automatically play an instrument, though it will help of course. Equally so, knowing the whole Pharmacopœia won't qualify you to practise medicine." He refilled the glasses. "You see, unfortunately we are restricted. Sorry."

"So you won't help me ?"

"Not won't, Newton. Can't."

Newton sighed. "I think that you're lying Carter. In fact I'm sure of it."

"What ?" Carter reddened. "Now look here Newton I've told you . . ."

"A lot of bunkum." Newton was deliberately rude. "I hate to do this, but as I told you, I'm desperate. Unless I get the same service that at least two others have had, then I blow the works."

"I think that you had better explain." The convivial pose had left the fat man, he was now all steel and ice.

"LOOK," Newton leaned forward earnestly, a note of pleading in his voice. "I mean you no harm, but I happen to know that you specialise in a certain form of service. Short cuts to knowledge. Professions while you wait. Very hush hush." His face hardened. "I want to learn atomic physics. I know you can teach me. If you refuse, then I'll expose your racket in the next edition of the *Herald*."

"You ? The word of one man ?" Carter laughed derisively. "I think not."

"The man's name was Roger Kent," Newton stated. He rose, scooped up his hat, and ground his cigarette end into the rug. "Remember. You asked for it." He moved towards the door.

"Wait." Carter bit his lip. "I suppose that you have proof of what you say ?"

"Naturally."

"Then it seems as if I have no choice." He reached into a drawer, Newton tensed. Carter saw the movement, hesitated, then sneered. "No guns Newton. I have more respect for my rug than you seem to have." He threw a folded paper on to the desk. "Here. A contract. Sign it and be back at ten tomorrow morning." He pressed a button. "The receptionist will show you out."

He looked wistfully at the crossed sabres as Newton left.

A RADIOGRAM filled the bar with synthetic sweetness. From the crowd jostling round the mirrored counter came hilarity that sounded forced, strained, as if they were concentrating too hard on having a good time.

In an alcove, shielded from noise and the bright glare of neon lights, Newton sat tensely waiting. A pile of half-smoked cigarettes spilled from a cheap metal ashtray on to the stained table. For the twentieth time he looked at the watch on his wrist, frowned, and signalled a passing waiter.

"Scotch. No, wait." He peered through the haze towards the door. "Make it two. Doubles."

The man that almost waded through the throng was nearly a caricature. Of extraordinary height, he wore a rusty suit of outmoded fashion that hung on his figure in shapeless folds. A bald head towered above weak blue eyes that peered through thick lenses. A rag of a bow tie caressed a scrawny

adam's apple. Only a few people knew that behind the vacuous expression lurked one of the keenest legal minds in the country.

He saw Newton, and a grin cracked his face. It grew when he noticed the brimming glasses, and betrayed his weakness, the weakness that had ruined him.

"You certainly took your time, Lawson," growled Newton. "What kept you ?"

"My dear fellow. A man must eat you know."

"That shouldn't have taken you long. You usually swallow your meals."

Lawson smiled his agreement. Lifting a glass he sipped, then drained it. Setting it down he delicately touched his lips with a once white handkerchief. "Now my dear fellow, what can I do for you ?"

Newton flipped the contract on to the table. "Give me the legal strength of this." He rose. "I have to make a phone call. I'll be about fifteen minutes. That long enough ?"

Lawson picked up the folded paper and ran his eye over the close-set type. "Hardly. However I should have the bones of it by then." He coughed suggestively looking at the empty glass.

"There's a bottle under the table," said Newton. "Stay sober." He left the alcove.

When he returned twin red spots of anger burned on his thin cheeks. He flung himself into a chair, poured a drink, and downed it in one swift motion. Tears sprang to his eyes, and he fought for breath. Snatching up the bottle he glared at the label. "What the devil ?"

Lawson coughed. "You have expensive tastes my dear fellow. I changed the bottle you so kindly left me for one of a cheaper brand." He smiled reflectively. "It's just as effective you know."

"Yeah," agreed Newton wryly, "and how much was the difference ? Never mind. Did you read it ?"

"I did, and believe me it's a masterpiece of legal ingenuity. You know of course that you agree to yield ten per cent. of all future income to the Institute ?"

"That seems fair enough."

"It does. The Institute, however, promise nothing concrete in return." He paused musingly. "It would be most interesting to hear a test case on this contract. Briefly it amounts to this. The Institute accept no responsibility for anything that may happen to you, either mentally or physically, after you sign this paper. Any service they may give you is entirely at your own risk."

"Will it stand in court ?"

"As you are over twenty-one and of sound mind, I should say yes. The coverage of the contract is so large though, there should be a loophole somewhere. Perhaps criminal negligence, or malicious intent to injure."

NEWTON grunted thoughtfully. "The trouble with such a defence is that the plaintiff must prove such charges."

"It would be difficult." Agreed Lawson. "I would strongly advise you not to sign this contract."

"I've no choice." Newton said grimly. "I tried to do something different when I left you, and got my ears pinned back for my trouble."

Lawson stared at the glass in his hand. He was very serious. Someone

fed coins into the radiogram and music drowned the chattering of those at the bar. "There is something on your mind, dear fellow. Would you care to tell me ? I am not altogether untrustworthy and if you need help it would be best if I knew a little more than at present."

Newton grunted agreement, and lit a cigarette. "You've heard of the atomic research station at Savare ?"

"Yes ?"

"They had a blowout a while back. Nothing serious but it could have been. One of the technicians was careless, he died of burns within a few hours."

"Continue."

"I covered the story. Security killed it of course, but not until I had learned one peculiar thing. The man that died, the man whose carelessness caused the mishap, was a man I had known a couple of years ago." He paused, smoke curling through his nostrils. "Two years ago that man was peddling radio service. If he knew atomic physics at that time, then I own the *Herald*."

Lawson nodded. "I begin to understand."

"Yes. There's only one place that could teach a man that fast. The Institute. I saw the top man to-day. I fed him a line and asked for special treatment. He denied that they had ever taught atomics. I applied a little pressure." Newton grinned at the recollection. "In the end he gave me that contract. If I sign it I commence treatment to-morrow."

"But man, have you considered the risk ?" Lawson was perturbed.

"You mean that they could order me to jump under a truck ?" Newton laughed. "It's well known that under hypnosis a person cannot be made to do a thing foreign to his nature. Suicide is foreign to mine. I don't think I need worry about that."

Lawson shook his head dubiously. He didn't look at all convinced.

EVERYTHING was green. The walls medium, the ceiling light, the floor dark. Even the subdued lighting had a greenish tinge. It should have been sickening, instead it was strangely restful.

Newton stared about him with interest. He wore a loose hospital gown of the same colour as the furnishings—to avoid any physical irritation they had told him when he had protested. He had to agree that they had been right.

A cough announced the entrance of the Institute hypnotist. A slight dreamy-eyed man, he was dressed in a gown of the universal green. He had one of the most mellow voices Newton had ever heard.

"Mr. Newton ? You have had the preliminary injections I believe, if you will just sit in the chair ?" He led the way to a cross between an operating table and a dental chair, and spun a few small wheels. "Comfortable ?"

"Perfect." Newton sighed ecstatically. He felt as if he were reclining on a cloud.

"Good." A switch clicked. Before Newton's eyes a plate of what had appeared to be milky plastic swirled with sudden colour, ever changing, kaleidoscopic, fascinating. He felt a light touch on his temples, from somewhere behind him the mellow voice of the hypnotist stole into his consciousness.

"Concentrate on the colours. Try and fix a pattern. Relax. Have no fear. Relax. Concentrate on the colours . . ." On and on droned the voice, lulling in its monotony. The plate swirled with drifting clouds of colour. The drugs flowing through his veins induced a pleasant lethargy. Gently he slipped into hypnotic slumber.

TEN stories higher in the same building, Carter sat and glared at his friend and partner.

Carl Frontarc, a stained laboratory smock hanging in loose folds from his gaunt stooped figure, was the brains of the Institute. He had lifted Hypnotism from a vaudeville attraction into an exact science. Now he fumed in ineffectual rage at the man who had turned it into a million pound business. An old scar running from over his right eye into thin grey hair, gave him a half comical, half sinister look.

Carter thumped a fat hand down on his desk. "What else could I do, Carl ? He had me on a spot. How he found out I don't know, but he did, and I had to make the best of it."

"But the Leiber process. To use it without consulting me was going too far. You take too much on yourself. Anyway, why the haste ?"

Carter sighed his impatience. "Please remember that this is a business, Carl. Yes, I know all about your ideals, but we are in business to make money. Too much already has been spent on the Leiber process. It is time we began getting some of it back."

"Money." Carl snorted his disgust. "Do you think of nothing else ?"

Carter laughed. He had quite lost his ill temper. "Sometimes. But why all the worrying, Carl ? You admit that the process is workable. We have to market it sometime, haven't we ?"

Carl dropped into a chair and passed a thin hand over his scar. "I suppose so." He admitted. "But it's too soon. I'm not too happy about it."

Carter smiled and reached for the decanter. "You said exactly the same thing when first we started hypnotic teaching, and what happened ? Aside from about five million people after our blood for threatening their livelihood, nothing." He grew thoughtful, poising the bottle. "If that reporter had started a smear campaign we would have been out of business within a month."

"No thank you." Carl refused the proffered drink. "It's not quite the same thing though. When we started hypnotic teaching we were on safe ground. Place a student under hypnosis, artificially sensitise his memory, play both aural and visual recordings at him, and with post hypnotic suggestions we can enable him to memorise a great deal of data in a short time." He frowned. "The Leiber process is not quite as simple. The recording came from whom ?"

"Professor Kurt Fitch."

"German ?"

"German descent. American born."

Carl nodded. "How many times have you used the process ?"

Carter sighed, he had hoped to avoid this question. "Four times. The reporter is the fifth." To his surprise Carl remained calm.

"How are they ?"

"O.K. I guess. At least I've heard no different."

"And the Professor ?"

Carter burst out laughing. "Really Carl, how should I know ? He's probably enjoying himself spending his fee. Why ? Do you want me to check up on him ?"

"Please. The others also." He rose. "One other thing. The process must not be used again until I pronounce it safe." He stared seriously at Carter. "I'll go and supervise the giving of treatment to the reporter, but after him, no more. You understand ?"

"But why, Carl ? Why ?"

"I want to check on the others for possible after-effects. Try and get the first student here for study. Kent I think his name was. Until I satisfy myself as to the efficacy of the process I'd rather not use it."

Carter sighed as he bent to study reports on his desk. Genius was sure hard to work with.

THE furniture in the office was hard, simple, and strictly utilitarian. As hard and unyielding, thought Newton morosely, as the man he had been angling to see for the past week.

General Waring of the Security Board had no imagination. Years of rigorous army routine had channelled his thoughts into rigid grooves. It was almost physical pain to him to strain his credulity. It was impossible for him to believe anything unorthodox. He rubbed a broad hand through thick grizzled hair, and glared at his visitor.

"Let me get this straight. Are you accusing the Institute of sabotage ?"

Carefully Newton lit a cigarette. Carefully he considered his answer. Anything too fantastic-seeming would get him thrown out. The trouble was that to a man of Waring's type his story would be fantastic. He decided on shock tactics.

"On the project at Savare you had a blowout. It happened a few weeks ago, and a man was killed. Right ?"

Waring purpled. "How did you know that ? I demand to know your sources of information."

Newton ignored the outburst. "I knew that man that died. Two years ago he was selling radio service. How did he ever become an atomic technician at Savare ?"

"Nonsense. You must be wrong. We check on all personnel. If he was what you say, how could he have passed the entrance examinations ?"

"I didn't say that he didn't." He drew heavily on his cigarette. "Could it be that you were a little careless in checking up on him ? After all, he had knowledge that had obviously taken years of study to acquire. Is that possible ?"

Waring nodded grudgingly. "I suppose such a thing could happen. If a man of twenty-six has knowledge that must have taken the best part of his life to learn—well in such a case we may have been a little hasty on the initial check."

Newton leaned forward, crushing out the smouldering butt of his cigarette. "I am twenty-nine years of age. I have worked for the *Herald* for the past ten of those years, yet I guarantee to pass any examination on atomic physics you may have set for entrance to Savare."

As the implications of what he had just heard sank in Waring gasped.

"But how . . .?"

"The Institute. I went in there three weeks ago knowing nothing of atomics. I left two days later with a full knowledge of the subject. My point is this. If they could impress all that knowledge on my mind, then what is to stop them impressing something else ?"

Despite himself Waring was interested. "You mean ?"

"Post-hypnotic suggestion. What could be simpler ? All they need to do is to plant something in my subconscious, a desire to talk to anyone who utters a certain key word, a deliberate bit of false information, anything would do." He rose in his vehemence, pounding on the desk. "I tell you, General, the Institute is the greatest potential menace you have ever faced. No need for them to seek out traitors. No need for them to risk approaching agents. They can make them, and make them all unknowing of the fact that they are traitors at all." He sat down flushed and excited.

"I see." Waring coughed. "It all sounds rather fantastic. This knowledge of yours, how does it feel ?"

NEWTON stared at him numbly. It was as he had feared. The fixed pattern of the other's mind had refused to allow him to believe the story. He sighed in despair.

"My knowledge ? It's hard to describe. I am not aware that I have it until I concentrate, then I somehow seem to shift viewpoint. I know, but somehow it's not quite normal knowledge, as if it is not quite natural."

"I see." Waring rose, held out his hand. "Well, Newton, I thank you for coming to us, and I can assure you that the Institute will be very carefully investigated, very carefully indeed."

Newton ignored the outstretched hand. He didn't move. "That's not good enough, General."

"What ?" Waring reddened.

"I said that isn't good enough, the brush-off I mean. I've come to you with something you can't ignore, and I've gone to a lot of trouble to prove it. I don't intend to be shown the door with a polite thank you."

Waring sank into his chair breathing hard. "You said something about proof ?"

"I've had the same treatment that the technician at Savare had. The Institute thinks that I am going after the same sort of job. It's reasonable to suppose that they wouldn't miss the chance to do more damage. I want a government hypnotist to vet my subconscious. If there are any post-hypnotic suggestions there he should be able to find them."

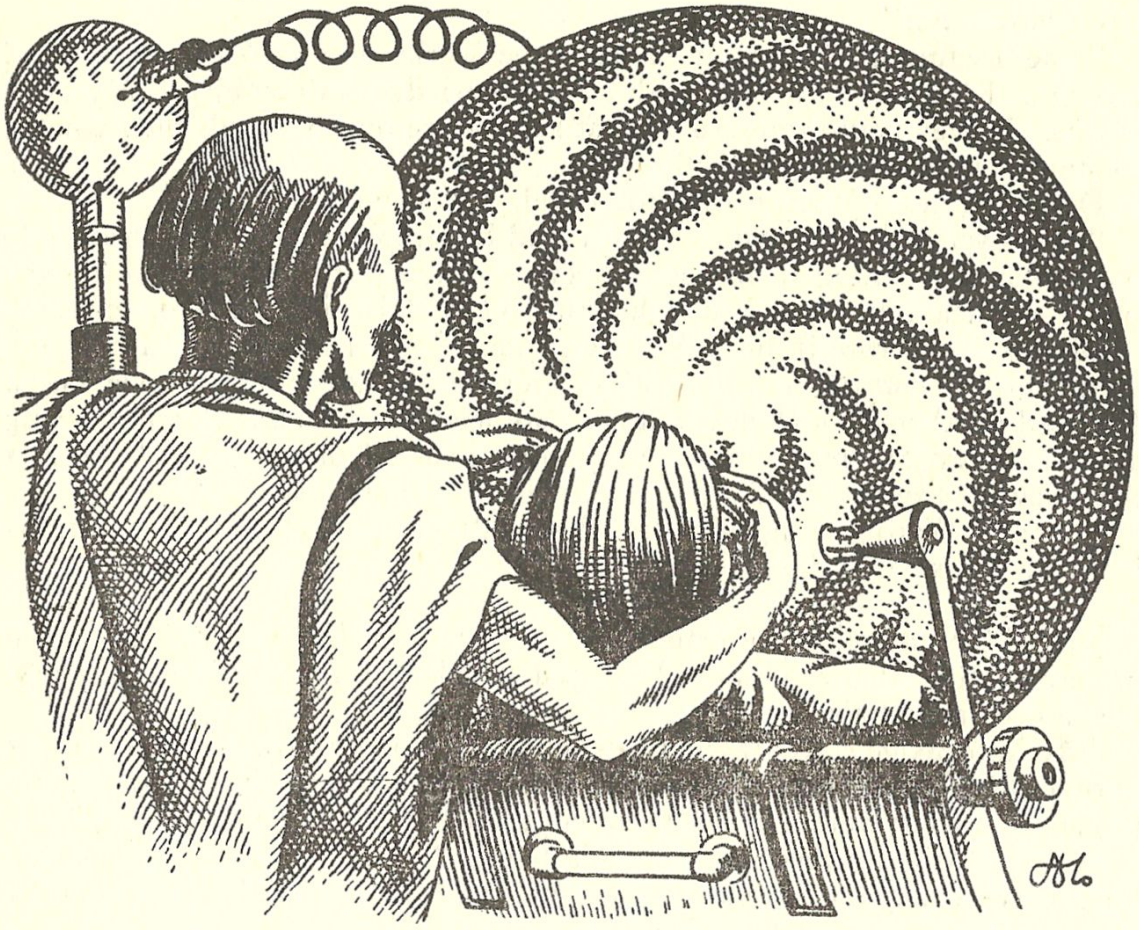
"And if there aren't ?"

Newton shrugged. "I still think I'm right. They could have played it smart."

Waring grunted. "You're going to be hard to convince." He snapped a switch on an intercom, rattled sharp orders, shrugged at the reply. "It'll take time. We don't carry such people on the staff. If you will wait in the ante-room ?"

"I'll wait," promised Newton. He had a shrewd idea as he left that Waring was glad to see the back of him. He was not far wrong.

THE government hypnotist was small, wore thick glasses, snuffled when



he spoke, and seemed thoroughly uninterested in the whole thing. He had rapidly, and with quiet efficiency hypnotised Newton in a dusty little room that smelt of mouldering paper. Now he sat and thoughtfully rubbed his chin.

"Well, Mr. Newton, I don't know."

Newton barely restrained a snort. Slipping a cigarette between his lips, he thumbed a lighter and inhaled gratefully. For over two hours he had waited in the uncomfortable ante-room, and had been under hypnosis for as long. His temper had worn thin at the delay.

"You don't know what ?" he asked rudely. The hypnotist ignored the question.

"As far as I could discover in the time you have no trace of any post-hypnotic suggestion, false information, or induced carelessness. There is, however, a strong persecution complex, and more than a trace of schizophrenia, that is dual personality." He looked at Newton with interest. "Do you know a Professor Kurt Fitch at all ?"

"Never heard of him."

"No ? Interesting. You seem to know him quite well. I wondered if he were an actual person. However . . ." His voice droned on, but Newton was no longer listening. He gripped the arms of his chair in an effort to control his emotions. Sweat beaded his forehead as the import of what he had heard fully registered. Persecution complex. Schizophrenia. He had heard those words before.

Years ago, when still a cub reporter, he had covered a story at Bellvale, the state asylum. He still didn't like to think about it, but he had seen

patients there who had suffered from just those mental illnesses. Now this little snuffling man was calmly telling him that he was . . . he wouldn't bring himself to think of it. He ground out the stub of his forgotten cigarette.

"Look." He gritted. "I had an idea. Okay, maybe I was wrong. I didn't ask to be vetted on sanity. I know my rating on that. I came because, crazy as it may sound, I thought it was my patriotic duty. If I was wrong say so, but cut out the double talk."

The hypnotist didn't bother to argue. He knew the working of the human mind too well to be upset by any display of emotion. He was late for an appointment, had missed his lunch, and wanted to end the interview. He rose.

"Very well Mr. Newton. General Waring has asked me to thank you, and regrets that he will be unable to see you again." He held out his hand and looked vaguely about him.

Newton ignored the gesture. "The good old brush-off, eh ? Well it doesn't seem to pay being patriotic, in my case exactly ten per cent. of all future salary." He slammed the door behind him.

IN the street he hesitated, at a loss what to do next. His stomach felt queasy through lack of food. He had a bad taste in his mouth, and his head ached dully. Over a parking space, between two buildings, he could just see a flaming sign:

WE TEACH YOU

"Yeah," he agreed bitterly. "You certainly do. To mind your own business."

He swung through the doors of the nearest bar.

IN the darkened room the sudden jangling of the bell was as effective as a sword of light. Newton groaned, stirred, sat up in the rumpled bed. His mouth felt as if lined with paper, hammers beat at his naked brain, and he sweated profusely as his body tried to rid itself of excess fluids.

He groped for the receiver, knocked over a bedside lamp, spilt the water glass over the ashtray, and finally grabbed the instrument.

"Mr. Newton ?"

"Yes."

"This is Carter of the Institute. Can you come up right away ?"

"Why should I ?"

"Please, Newton." Carter sounded desperate. "It is for your own benefit. Will you come ?"

"You," said Newton as clearly as possible, "can go to hell." He slammed down the receiver grinning savagely. Barely had his head touched the pillow when the bell jangled again. He cursed, and lifting the receiver off its cradle let it hang on its cord. Squeaking sounds came from the instrument, after a while they ceased. Newton drifted into sleep.

He awoke to a hammering at the door. For a while he lay trembling beneath rumpled sheets, sweating with fear, hoping that whoever it was would go away. They didn't, and he crawled out of bed.

"Who is it ?" He demanded, making no effort to open the door.

"Telephone Company." A gruff voice answered. "Your receiver's off the hook. Put it back."

Newton sighed with sudden relief. "Sorry." He called through the door.

"I'll put it back right away."

"See that you do." The gruff voice threatened. "If you want to cut off calls notify the exchange." Heavy footsteps sounded down the corridor, grew faint, died away.

Newton stood leaning against the panel breathing hard. Slowly he straightened, crossed the room, replaced the receiver. He was annoyed to find that his hands were trembling. He lit a cigarette, the smoke cutting through the mucus that seemed to line his throat and making him cough. He switched on the radio, and while it was warming up held his head under a cold shower. He returned to the bedroom in time to hear a honeyed voice drool from the speaker.

"Do you have trouble in learning ? Have you a poor memory ? Then throw away those dry books and learn the easy way. At the Institute you will learn quickly, cheaply and effortlessly. Remember: *WE TEACH YOU.*"

Newton snarled in sudden rage and switched off the set so savagely the knob broke off in his hand. He flung it into a corner, and stood quivering with temper.

WITH sudden decision he snatched up the telephone, dialled a number, spoke briefly. Without bothering to change from the crumpled suit in which he had slept he made for the door. Halfway there he stopped, crossed to a bureau, opened a shallow drawer, and picked up a blue steel automatic. Checking the loading he slipped the weapon into his pocket. As he left the room and strode down the corridor, there was something almost furtive in his manner.

Lawson stared across the top of a brimming glass, his weak eyes brightening as he inhaled the aroma of the whisky. He tilted the glass, swallowed, set it down empty.

"You wanted to see me, Newton ?"

"Yes. I'm in a spot. I need your help."

"Anything that I can do I assure you I will."

"Thanks." Newton smiled briefly, his eyes never ceasing from scanning the crowd. "You remember that contract I showed you, the one from the Institute ?"

"Of course."

"You've got to break it."

"But my dear fellow." Lawson leaned forward perturbedly. "I warned you at the time. It is ironclad. You're asking the impossible."

"Then do the impossible."

Lawson gestured hopelessly. "If you had money, a lot of money, and if you had strong backing there might be just a chance. As it is . . . !" He shrugged.

"You mean that there's no chance at all ?"

"None."

Newton's lips twitched, his eyes became feral, dangerous. "So you won't help me, Lawson. Just like all the rest of them. Afraid to help one of the victims of the Institute. Or maybe you're one of them too ?"

Hastily Lawson took a drink and poured another. He was sweating, the high forehead gleaming under the garish neons. "Newton ! My dear fellow, what do you mean ? Of course I'm not against you. I'm your friend. I'll

help you all I can."

"You mean that ?" Newton's bitterness had vanished. "If I could only be sure of that. You're the only one I can turn too." His eagerness was pitiful.

"I'll help you, but what of your paper, won't they give you a hand ?"

"I'm fired. They threw me out after an article I wrote exposing the Security Board, the dirty grafting bunch of traitors. They are against me, they are all against me."

"But why ?"

"Why ?" Newton leaned forward casting a furtive look round. "They hate me because I know too much. They hate me because I'm of German descent. They all hate me."

"I see." Lawson sighed. He had known Newton for a long time. Deep in his mind an ugly suspicion formed. He grew thoughtful. "I'll help you, depend on that. Go home now, get some rest. I'll see Carter to-morrow, and work something out, you can be sure of it."

Newton sighed with relief. "Thank you. Do your best but be careful, Carter's a tricky client." His voice hardened. "If you can't do anything, then I will." Unconsciously his hand tightened in his pocket. Lawson noticed the gesture and grew even more worried. He had seen such tell-tale bulges before and the memory wasn't pleasant.

CARTER sat in his overstuffed chair and morosely watched his partner pace the floor. The thick carpets muffled any sound of footsteps, but the

sight of the tall stooped figure shook his nerves. From the high windows the dying light filled the room with shadows, against the wall the crossed sabres gleamed dull silver.

He snorted, and snapped on a powerful desk lamp. Mellow light spilled in a bright circle chasing the shadows, making the room somehow warm and cheerful.

"For Pete's sake sit down, Carl. Wearing out the rug won't help any."

Frontarc stopped his pacing and slammed a fist into his palm. The scar on his face shone livid against the sallow skin. "Almost a week and still nothing. Couldn't we fetch him ?"

"Newton ?" Carter shrugged. "What else can I do ? I've phoned him, sent him messages, told that shyster lawyer of his to bring him up here. If he still won't come then I'm going to quit worrying about the whole thing."

The sudden buzzing of the intercom interrupted Frontarc's reply. Hastily Carter snapped a switch. "Yes ?"

"Mr. Lawson and Mr. Newton to see you, sir."

"Send them up." Carter clicked the switch and beamed with relief. "He's here. Coming right up, that make you feel any better."

Carl grunted. "I'll tell you when I've seen him." He hadn't long to wait.

The door opened without a preliminary knock, and Newton sidled into the room. He stood just within the door, shoulders pressed against the wall, one hand bunched in a pocket. He stared about him with flat dead eyes, eyes that sparkled into rage as he saw Carter. Lawson caught him by the arm as he half withdrew the hand from the bulging pocket.

Carter drew a deep breath, and from Carl came a sound that might have been one of dismay. It drew Newton's attention.

"You there. Get over by the desk. In the light where I can see you." He spoke over his shoulder to Lawson. "Lock the door."

Lawson fumbled with the knob rattling it. "It's locked. Now shall we all sit down ?"

THEY drew chairs up to the big desk, Newton choosing to sit a little further from it than the others, he kept his hand bunched in his pocket. Carter forced a smile.

"I'm certainly glad to see you Newton. There are things we must discuss." He reached for the decanter, poured drinks, passed them around.

"Why didn't you deal with my lawyer ?" Newton spoke in a flat emotionless tone, his eyes darting from one to the other.

"Come now." Carter protested. "What I had to say was of a confidential nature. How was I to know that Lawson was what he claimed ?"

Newton gestured wearily and rubbed his hand across his unshaven chin. "Okay. You know now. What did you want ?"

Carl started to speak but was forestalled by Carter. "Wouldn't it be better to tell me why you sent your lawyer to see me ?"

Lawson glanced at the still figure slumped in the chair. "Mr. Newton sent me to arrange something in reference to that contract he so unwisely signed. He feels as if the terms are a little harsh." He glanced covetously at the decanter. Carter waved him permission, and smiled.

"As far as the agreement of ten per cent. of all future salary is concerned, I think we could arrange to cancel that. Was that all ?"

"No." Newton's voice grated against the luxury of the room. "You did something to me when I was here last. I want you to cancel that too."

Carter glanced at Frontarc. Sweat glistened on the scarred brow, almost imperceptibly he shook his head. "Impossible." He breathed. Carter gestured helplessly.

"What you ask is impossible. We did nothing but give you the treatment for which you asked, I might even say demanded. Under the terms of the contract the Institute cannot be held responsible for any undesirable after-effects."

"So you knew there would be after-effects ?" Newton stood up, his lips writhing in sudden rage. "Damn you Carter. You've beaten me so far. I've tried to expose your racket and failed. They are all against me, all of them, but I'm not beaten yet." He snarled and jerked the gun from his pocket.

Carter cried out and tried to hide himself behind the desk. Carl shot forward from his chair in a swift tackle. He was too late. A muffled thud sounded through the room, and Newton slumped to the floor. Lawson stood looking bemusedly at the heavy decanter. "I'm sorry." He murmured to the prone figure. "But gunplay settles nothing." He kicked the weapon under the desk. "He will give no further trouble. A momentary brainstorm perhaps ?"

Carl shook his head sadly. "No. Not a brainstorm. I have seen this before. You had better explain, Carter. I think this gentleman will understand."

LAWSON sank into a chair and absently poured a drink. "I think that you had better do as your friend suggested. If what I suspect is true, you have much to answer for."

"No." Carter protested vigorously. "It is not what you think." He sighed. "You know how we operate, repetition of data under hypnosis?" Lawson nodded. "Well, while that system works fine for some things, we are limited in choice of subjects, and to be frank we made an experiment."

"On Newton?"

"No. He was the fifth to receive the treatment, the Leiber process as we called it. About two years ago Doctor Leiber of Vienna discovered how to record and transmit the electrical pattern given off by the brain. The same thing had been done in cruder form by the encephalograph, but Leiber improved it vastly." He paused. "Carl here improved it still more. He found that not only was it possible to record a specific pattern, but that the pattern could be impressed on another mind. More—if the subject giving the recording concentrated on one particular thing, then the machine would record only that. You can see the importance of that?"

Lawson nodded. "Like a photograph, from one negative many prints, and of just what part you choose." Neither of them noticed the stirrings of the man on the floor.

"Something like that." Carter agreed, his round plump face shining with sweat. "We took a complete recording of atomic physics from a Professor Kurt Fitch, a top man in the field. We have impressed that recording on to the minds of five men, four of them were volunteers, your friend was the fifth." He hesitated. "There was a slight danger of schizophrenia, of course, but it would be very mild. We were seeking a short cut to knowledge, and the volunteers took the risk.

"Well?"

Carter stirred restlessly. "Something went wrong. We know what, and it was unavoidable."

"What happened?"

"At first, success. The process works, no doubt of that, then . . ." Carter sighed. "The first man died through carelessness. Two others committed suicide. The fourth may recover, mental therapy may save him." He banged a hand down on to the desk. "It was the fault of the one giving the recording, not the process. The donor concentrated on things other than pure knowledge." He sighed, and slumped a little. "It wasn't his fault, of course. Professor Fitch disappeared a few weeks ago, we've only just traced him. He was in Bellvale. Incurably insane."

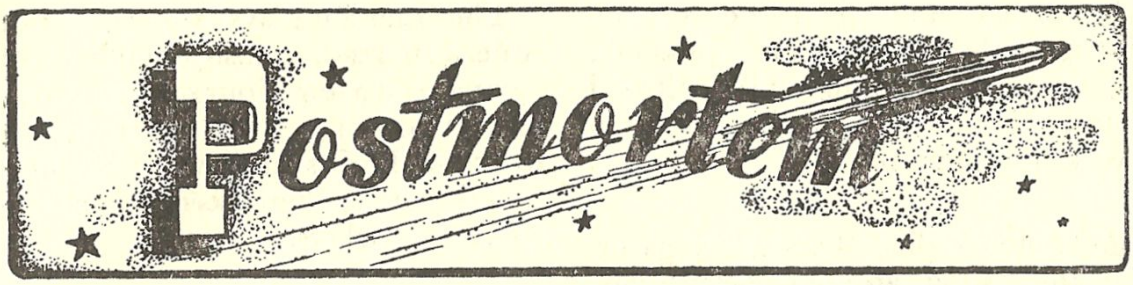
"My God!" It was a whisper but it filled the room. Newton sat on the floor a thin trickle of blood running from under his hair. Lawson would remember the sick look on his face until the day of his death.

Carter spoke again, urgently, desperately. "Please try to understand, Newton. We meant well. We didn't know, couldn't know, that not only were we recording a pattern of knowledge, but we were also recording a pattern of mental instability. Paranoia. Persecution complex. Professor Fitch was insane. We couldn't know that not only were we impressing the knowledge of his mind, we were also impressing his . . . insanity."

His voice dropped into silence, and Newton commenced to laugh. A low chuckle at first rising to a hysterical shrieking. He tried to shout words but the others could not understand what they were.

He was still laughing when they took him away.

THE END



● The idea behind this column is to present readers' queries and opinions on past issues, and to present replies by authors and artists, backed by editorial comment. We are prepared, however, to incorporate anything which will be of general interest to our readers.

● James Greig, of Dagenham, Essex, expressing interest at the scheduled First International Science Fiction Convention, asks: "What actually is the objective of such a gathering? Apart from a lot of talk and discussion, does such a meeting contribute anything worth while to the medium?"

The objective is for readers, writers, and artists, not only of this country but of as many other countries as possible, to meet and discuss the growing field of science fiction, to exchange views upon their own country's publications, and to influence, where possible, everyone concerned with publishing the literature to a higher standard.

A great deal of good comes from this exchange of ideas—authors, always cagey, are inclined to help each other with markets, readers disseminate news and magazines, artists compare techniques and suggest improvements—and the auction is always good for some rare gems of art or out-of-print books.

By the way, owing to the large numbers expected to attend, the Convention venue has been changed to "The Royal Hotel," Woburn place, Russell Square, W.C.1, and two full day sessions have been planned for May 12th and 13th.

● From Hawaii comes a letter from Erik Fennel supporting our editorial policy. He says: "Your 'keep it British' policy, I believe, will be a great help in keeping science-fiction from falling into a rut of standardisation. (Or maybe, according to some people, shake it out of the rut it now occupies.) So please stick to that policy, and many thanks to you and your British authors for many hours of enjoyment."

This is also endorsed by another American, Dan McPhail, of Oklahoma, who comments, "Clothier's covers are darn good and the 'placing' of his name is a neat touch. I'm sure all readers hunt for it first thing."

Much nearer home, A. Johnson, Middlesbrough, bluntly states "Clothier and Hunter stink, (while) Quinn in my opinion ranks with the very best."

The art side of any fantasy magazine is usually as controversial as the literary, even when the artists are top-flight illustrators. In Britain where fantasy art has not been developed at all in the past, it is extremely difficult to find artists with any flair for the medium at all. Both Clothier and Hunter are improving, but, like authors, need practise and guidance before they produce their best. Quinn's work is different, and we are interested in seeing how he develops his scraper-board technique during the next few issues.

Meanwhile, Clothier continues on

the covers, and his name will be intriguingly placed whenever possible. It has developed into a mild editorial game thinking up new ideas where to work his name in.

● Walter Willis, Belfast, brings up an interesting and somewhat controversial point in referring to Arthur Clarke's "Guardian Angel," in No. 8. "Clarke's story was the best in the issue," he states, "but it was a pity someone (in the States), beat you to first publication." Numerous readers also complain about stories they term as "reprints."

The question actually becomes "When is a story a reprint ?" Clarke's story was actually sold to ourselves and an American magazine at the same time, but the latter beat us to publication by a matter of two months. Nova has always believed that a good story is worth selling to as many "foreign" markets as possible, and only buy First British Rights from authors. They are then at liberty to earn further monies from sales overseas.

The most outstanding paradox is undoubtedly John Beynon's "No Place Like Earth," in our last issue. This was written especially for *New Worlds*, accepted by us, and given the cover on the issue. *Subsequently* American Rights were sold to a new magazine, who, changing the title (but none of the story), published their issue on the same date as the *New Worlds* issue. Even more paradoxical was the fact that the same scene which inspired Clothier to illustrate the interior of the story was chosen by the American publisher for his cover design. The difference being that a curvaceous blonde in a Bikini swim-suit was substituted for Beynon's "silvery-furred female *griffa*."

The situation plays two ways—our American readers also complain, of having read a few of our stories before, but, in general, we are endeavouring to retain Rights until we have published stories, then freeing them for overseas markets.

● In a long letter from "down under," P. E. Burke, of New South Wales, Australia, says, "Good though the stories in *New Worlds* have been, I think they still have a fair way to go before reaching the standard of the best stories printed in your rival magazine, *Astounding Science Fiction*." (! ! !—our exclamations !) "If you could obtain stories by such writers as A. E. van Vogt, Theodore Sturgeon, Phillip Latham, Eric Frank Russell, Poul Anderson, Isaac Asimov, and others, I am sure your magazine would benefit by the experience of these writers."

There are two insurmountable obstacles to Mr. Burke's suggestion, worthy though it is. The first is that all the above top-ranking authors can sell practically all their material to an established American market, and the few odd unsold stories which follow the trade winds round the globe are not worth considering. The second is that the American market pays far higher rates than the British, and no top author writing for a regular American market, would, in his right mind, submit material to us for, to quote one of them, "peanuts."

A third factor is that, obstacles being surmounted, such an influx of Americanised writing would partially defeat our intention of an Anglicised magazine. Although we will (and do) occasionally have an American written story.

THE END