
15¢ JULY
SUPER SCIENCE STORIES
DAY OF THE COMET
by F. A. KUMMER JR.
THE THOUGHT-WOMAN
by RAY CUMMINGS

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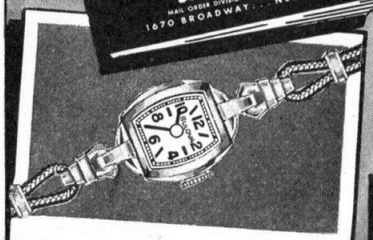

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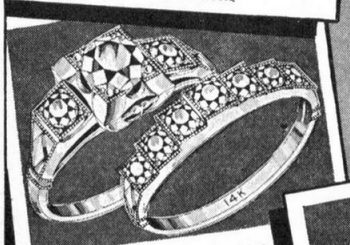

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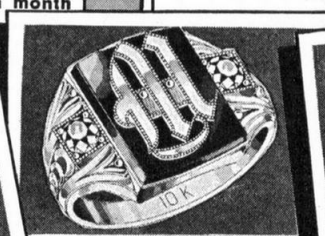

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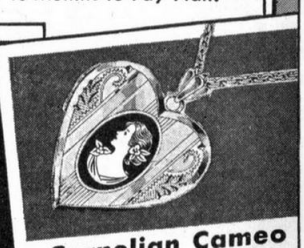

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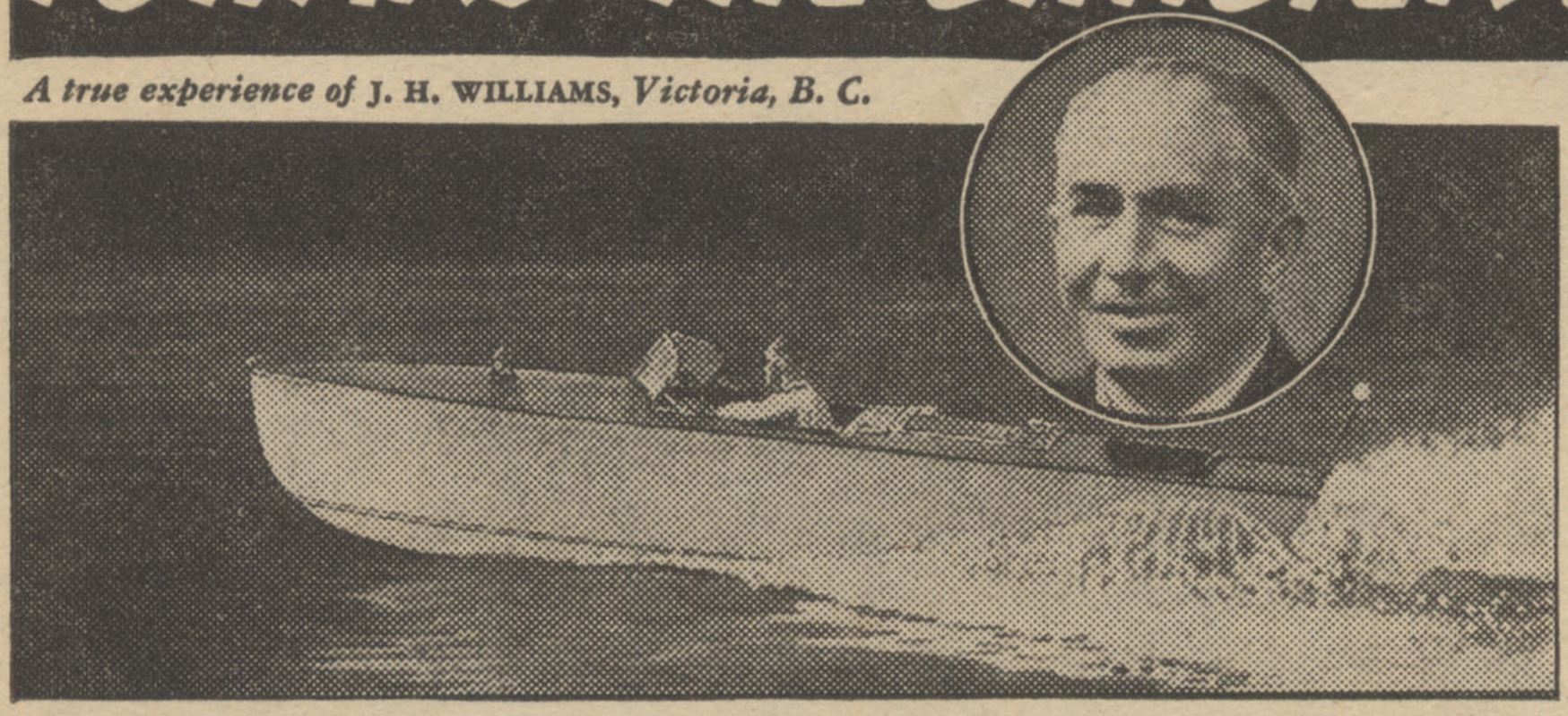
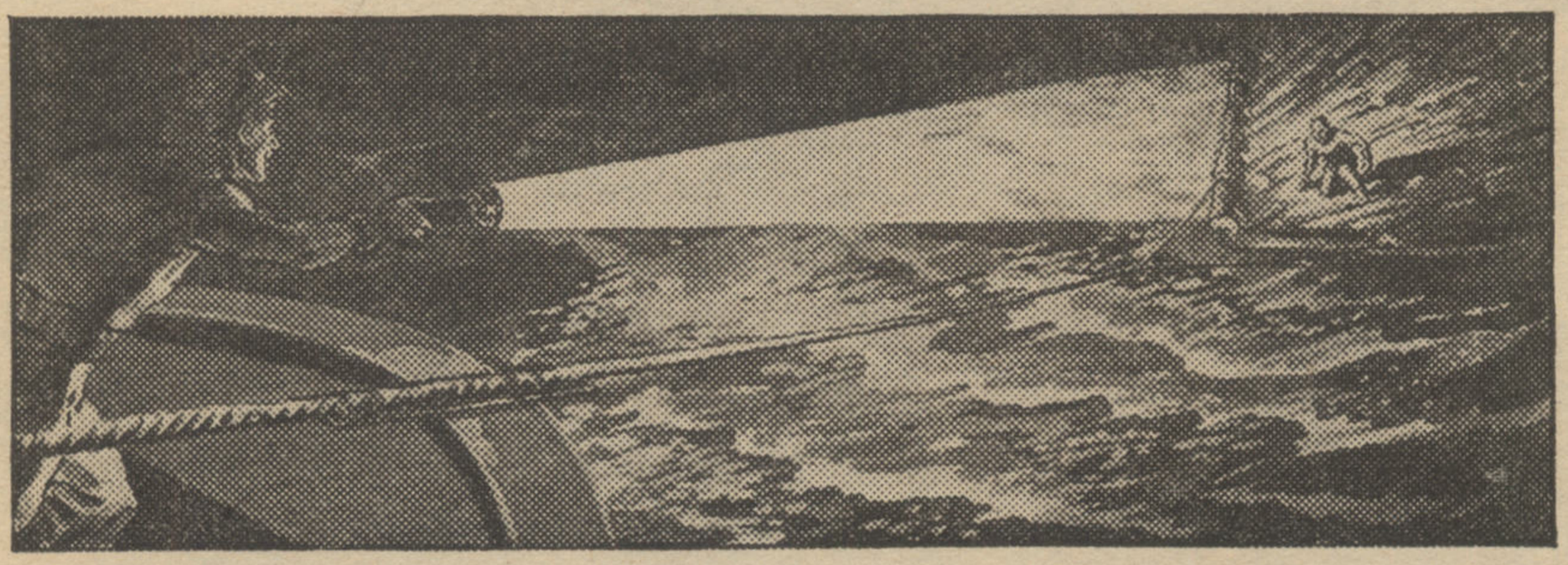
TERROR STRICKEN, I LEAPT TOWARD THE SINISTER SHAPE!

A true experience of J. H. WILLIAMS, *Victoria, B. C.*



"ONE BLACK NIGHT I was returning to Vancouver, in my 15-foot inboard motorboat," writes Mr. Williams. "Suddenly, a dark and sinister shape loomed up directly ahead. There was no time to avoid it.

"I LEAPT as the boat crashed into the object—and found myself sitting on a crossbeam of a huge log boom that was being towed by a distant tug. My boat was gone. Shivering with cold, I shouted in vain—the tug was too far away for my voice to reach it.



"AFTER HOURS OF TORTURE, the night became stormy and the tug skipper shortened his line. Again I shouted—and this time a flashlight on the tug picked me out with its powerful beam. To the 'Eveready' *fresh* DATED batteries in *that* flashlight I probably owe my life—and you can take it from me, *I* am an 'Eveready' convert now.

(Signed) J. H. Williams"

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SUPER SCIENCE STORIES

VOL. 1 JULY, 1940 NO. 3

NOVELETTES

SHORT STORIES

SPECIAL FEATURES

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FANTASY REVIEWS

Fantasy Books

TALES BEFORE MIDNIGHT by Stephen Vincent Benet. Farrar & Rinehart, New York. $2.50.

Stephen Vincent Benet is America's foremost short story writer. His latest book contains a large number of his short stories, at least half of which are fantastic or bordering upon the fantastic. His previous book of short stories, "Thirteen O'Clock," will be remembered for the same qualities.

The most highly applauded of the stories in this volume is "Johnny Pye and the Fool-Killer," which has seen publication in limited editions. It is an intriguing tale of a young man who fancies that there exists a supernatural creature whose mission it is to travel the world exterminating fools. Johnny Pye spends his life keeping just one jump ahead of his nemesis, even though often enough the ponderous tread of the Fool-Killer is heard close behind him.

"Doc Mellhorn and the Pearly Gates" is a whimsical fantasy about a dentist, Heaven and Hell. It is reminiscent of Mark Twain at his best. Other stories that will be of particular interest to the fantasist are "Into Egypt," "O'Halloran's Luck," and "The Die-Hard."

—DONALD A. WOLLHEIM

THE TWENTY-FIFTH HOUR by Herbert Best. Random House, New York. $2.50.

The theme of this book is the end of the present war in Europe. Mr. Best foresees the worst. He paints a horrifying picture of destruction. Of the "total warfare" that engulfs each European nation, destroys all governments, and proceeds to drag down the unending butchery of the leaderless armies until Europe is a vast area of desolation inhabited by human beasts who live by cannibalism—for homo sapiens is the only large animal left in Europe. And if civilization collapses, what else is left to feed its teeming millions?

Two characters are particularly well-drawn in the book, an English soldier reduced to cannibalism in Europe and an American woman living in complete isolation on a Caribbean island. How they eventually meet and how the future of humanity resolves itself is best left to Best.

—DONALD A. WOLLHEIM

UTOPIA, INC. by Herman Everett Gieske. Fortuny's, New York. $2.00.

The jacket-blurb describes the author as "actor, newspaperman, editor, adventurer." This is supposed to give the impression that Mr. Gieske knows what he is talking about. The impression is erroneous.

The plot has been done often before, but never with such utter disregard for the simplest facts of human affairs.

The writing style is unintentionally reminiscent of the deliberate naivete of Nathanael West's "A Cool Million." "Utopia, Inc." will make a nice addition to your library. Just the thing for balancing a table-leg.

—JOHN B. MICHEL

Fantasy Music

ROBOT A swing-poem written by Morton Gould.

Morton Gould's "Robot" is by no means whatsoever a classical work. It is a highly modern instrumental piece descriptive of a heavy metal man, working fixedly at a task, gradually speeding up to a metallic frenzy. (There's no resemblance, however, to the music in Charlie Chaplin's movie about a factory hand, which might be described similarly. That music was clearly about human beings; it doesn't take a highly-developed musical ear to tell that this one is actually about a machine-man.)

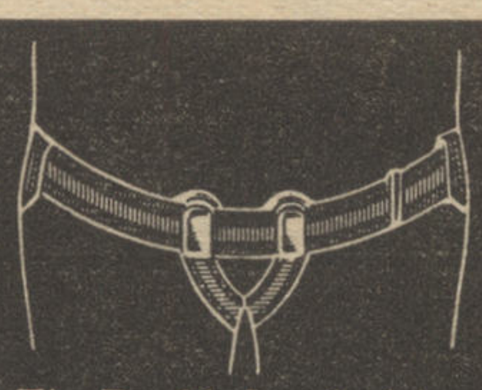
To offset the main theme of the robot, played mostly by the brasses, a wistful and romantic melody weaves through the composition as though the metal man had dreams and something of a soul. It is in direct contrast to the jerky and precise rhythms of the robot. His movements are stiff and he seems a little pathetic, so entirely dependent upon the electricity that moves his artificial limbs. The end is as abrupt as a thrown switch.

—LESLIE PERRI

STOP YOUR Rupture Worries!

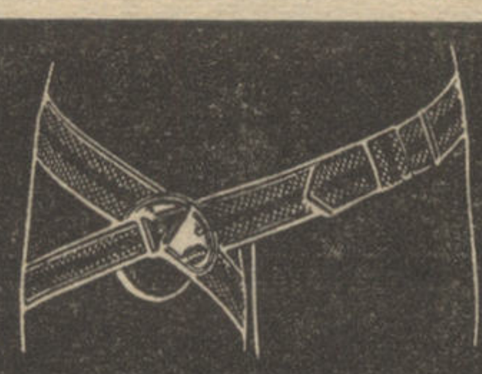
Learn About My Perfected RUPTURE INVENTION!

FILLED WITH AIR. No more hard, unyielding pads since invention of Brooks Air Cushion.



The Double Inguinal Appliance is as comfortable to wear as a soft belt yet gives firm support.

Special Brooks Appliances are made for all types of reducible rupture and successfully fitted by mail.



A special handmade Cushion is used for Femoral Rupture with equal success.

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PROOF!

Read These Reports on Reducible Rupture Cases

(In our files at Marshall, Michigan, we have over 33,000 grateful letters which have come to us entirely unsolicited and without any sort of payment.)

"Doctor Says Cured"

"My son, Ivan, wore your Appliance until three years ago. The doctor pronounced him cured a year or two before that time. He is now on the Rice Institute track team of Houston, Texas, is a dash and relay man. He participated in track meets at Milwaukee and in the National A. A. U. at Buffalo this past June."—Mrs. Wm. H. Jones, Box 802, Hedley, Tex.

"Gymnasium Instructor at 54"

"My rupture is greatly reduced after wearing your Appliance for a year. I have taken up my old work as gymnasium instructor for Stanton Park Baptist Church, and in showing the boys all the stunts, I have felt no ill-effects. Remember—I am 54 years of age, and I think it is very unusual for a man of my age doing hand-balance, especially with a double rupture, that the Brooks Appliance held me in. The above statement is true and correct."—Wm. H. Robertson, 1329 17th St., Detroit, Mich.

"Appliance Discarded"

"I discarded your Appliance about three months ago, having no further need for it. By that I mean I am perfectly cured and have no discomfort whatever after lifting pianos, etc., at my work."—G. Swindells, Long Beach, Miss.

"Brooks Holds"

"I can't tell you how much I think of your truss, it sure has done me worlds of good. I have hard work mining and so much lifting, but the truss held me and I never was bothered a bit with my rupture."—Joe Thumerelle, R. R. 2, Peoria, Ill., c/o Big Bear Coal Co.

SENT ON TRIAL!

If your doctor says you have reducible rupture, and advises a proper-fitting support, don't delay but get free details about the *Brooks* at once. It will be *sent on trial to prove its merits.* In trying it you risk no money—and if it doesn't "work"—if it fails to completely satisfy you or your doctor—you return it and the trial costs you nothing. Beware of imitations! The genuine *Brooks* is not sold in stores or through mail order houses. Stop Your Rupture Worries—send coupon now! All correspondence treated as strictly confidential.

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Rush me your Free Book, self-fitting chart, proof of results, **all without obligation,** and in plain envelope.

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Inventor

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State whether for man, ☐ *woman* ☐ *or child* ☐

They were doomed to slow starvation, until they found the weird, transparent cone imbedded in the nitrogen-ice of Pluto's surface. And then they thought they were saved, for it showed the way to a warm, fertile world—*but were they?*

DAY OF THE COMET

CHAPTER ONE

The Cone

THE great Plutonian plain stretched bleak and desolate off into the dim star-lit gloom . . . a nightmarish wasteland, grim, terrible. Solid banks of nitrogen, like snow, icy stretches of frozen neon, sluggish pools of oxygen . . . all the atmosphere of the outermost planet, condensed by the staggering cold to form a deep blanket over the soil below. Here and there peaks of grey granite thrust upward from the solidified atmosphere, vaguely resembling the tops of man-made towers. About one of these towers, a

Novelette

group of bulky, space-suited figures toiled, digging, clearing away the ice, their shadows sprawling vast, monstrous, in the white light of a big *radite* arc.

Some distance to the right of this group, the burnished hull of a spaceship was visible, half-buried in snow. The *Lodestar,* base of the First Plutonian Archaeological Expedition, had lain immobile for over seven months, while her crew probed the secrets of the lost civilization of the planet.

By FREDERIC ARNOLD KUMMER, Jr.

Within the ship Mark Vallard stood before the homemade oxygen vaporizer, idly watching the rows of dials. In the early days of the expedition they had discovered the pond of viscous gasses . . . . oxygen, mainly, though mixed with methane . . . and decided to utilize it, thus saving the fuel required to run their air-purifier. Led into the ship by pipes, the mixture was collected in tanks, separated, the oxygen retained, the methane released. Vallard stared at the vaporizer absently, his thoughts turning to the past.

Seven months on this bitter, gloomy world! But what secrets they had brought to light! The great Plutonian city, incredibly old, preserved by the cold, the lack of wind, rain, or sun. Their shafts sunk into the ice had revealed evidences of a mighty civilization, a race of powerful, highly intelligent beings, similar to the people of earth. Bits of wood, pictures of flowers and trees, indicated that Pluto had been warm in those days, capable of supporting life. It was hard to believe, Vallard reflected, glancing through a porthole at the weird, starlit terrain outside.

As he stared through the observation port, Vallard suddenly stiffened to attention. A sleek rocket-sled, exhausts flaring, was racing toward the ship. Brakes sending up a spray of ice, it ground to a stop before the *Lodestar's* airlock. A moment later a huge figure encased in an electrically-heated space-suit entered the cabin, threw back his transparent plastic helmet.

"What's up, Doag?" Vallard demanded, studying the big man's broad, alien face. Doag was a native of Jupiter, but had studied archaeology on Earth. More, he was a genius in his line, and was subordinate on this expedition only to the peppery little Doctor Fowler.

"I'm not sure myself." The Jovian grinned, flexing his huge muscles. "I was working in shaft twelve, clearing off some inscriptions on a stone wall, when I heard Fowler's voice in my micro-wave earphones. He was hopping around like a Martian sand-flea, and told me to go get you quick. Maybe he wants a chemical analysis of something he's found. You'd better come along before he pops an artery."

"Oke." Vallard slipped into his space-suit, followed Doag from the ship. A moment later they had boarded the rocket-sled, were racing across the ice toward the excavations.

Vallard propped his feet up on the control-panel, leaned back in his seat. The sled was doing a mild seventy or eighty, since the distance was short, but with no wind to press against their suits, there was no illusion of speed. Overhead, the stars shone in dazzling brilliance, with no atmosphere to cloud them. One, slightly brighter than the others, was, he knew, the sun. They cast weird, hazily multiple shadows over the stretches of solidified nitrogen. In seven months Vallard had not been able to shake off the queer feeling of unreality the place gave him. The eternal wan starlight . . . the peaks of the ancient buildings thrusting above the thick ice like warning fingers pointed at the blue-black sky . . . the utter and terrible silence. . . .

"Hang on." Doag's voice rattled the earphones of his micro-wave set. "I'm braking her!"

White clouds showered them as the steel brakes bit into the frozen plain. The sled shuddered, stopped, her rockets died away. Vallard wiped the front of his helmet clear, climbed out.

THEY were on the edge of the excavations. A shaft was sunk several hundred feet down to a stone-paved street below. From the shaft galleries ran off, through the ice, leading into the massive buildings, along the ancient streets. At the head of the shaft were searchlights,

a dozen space-suited members of the expedition whose task was to operate the windlass, drawing up the specimens of the long-dead civilization to take back to the *Lodestar* for classification.

"Down," Doag said, following Vallard into the car. "Step on it. Fowler's in a lather!"

The man at the windlass-control grinned behind his helmet, tugged a lever, and the car shot swiftly down.

"Come on." Doag led the way along a gallery hacked from the solid nitrogen —a gallery that followed one of the corridors of an ancient building.

Vallard studied the exposed walls, with their faded murals, their bas-reliefs. A great civilization this had been, in a semi-tropical paradise. More, its science had been tremendous. Here were paintings of strange rocket-planes, of queer weapons, of mines, oil-wells, of unknown machines. They had come across some of these engines in the course of the excavations, but the delicate tubes were crushed, the fragile wires had long since rusted away.

A mighty civilization—what had destroyed it? Not the cold, surely, for that must have come slowly, as the planet cooled. Nor was there any mention of cold in the inscriptions on the walls. Something, apparently, had struck down this people in the height of their glory, long before the terrible sub-zero temperatures had solidified its atmosphere. What was this doom? Fowler and Doag had advanced scores of theories . . . and discarded them as implausible.

Now, as he hurried along the icy gallery, Vallard was thinking of the past . . . the great glory and power that had been Pluto's. A sharp irate voice in his earphones, however, brought him back to the present with a jerk.

"Vallard! Doag! Hurry up! The biggest discovery of the expedition and you mope along day-dreaming!"

Vallard glanced up, grinning. Fowler stood arms akimbo, his wizened face a choleric purple behind his helmet. Near him, at the end of the gallery, half a dozen men were hacking away at the wall of ice.

"Calm down!" Doag chuckled, glancing down at the sputtering little men. "Remember your blood-pressure. What's the excitement!"

"Excitement?" Fowler literally danced with it. "Look!"

Vallard glanced past the men hacking away the ice. In the light of the big arcs, half-buried in a bank of solidified gas, was a strange transparent cone, perhaps fifteen feet high with a base of the same diameter. At its top was a tangle of strange machinery, while a queer array of levers, a control-board of some sort, stood in the center of the cone.

Upon the floor lay two figures . . . two bizarre, fantastic figures. Of slightly less than human height, they were clad in short white tunics, legs bare, with loose sandals on their feet. Strangely terrestial in appearance, the two men, though shorter and more frail than most earth-dwellers. Their skin was very fair, of an almost albino hue, their hair a pale flame color. In dress and appearance they were exactly like the figures painted upon the walls of these ancient buildings. The two dead men were Plutonians of the race that had been extinct for millions of years!

"Jiminy!" Vallard stared. "Preserved by the cold! But why haven't we found others?"

Fowler drew a long sarcastic breath.

"Very brilliant, my boy," he said dryly. "If you had a spark of logic you wouldn't ask me such a question! Consider. This cold could not have come suddenly. It must have taken centuries, milleniums. Yet in these ruins we find no trace of heating units, the inscriptions mention only warmth, flowers, joy. Since

there is every sign of an abrupt end to life in this city, we must assume that this race died out before Pluto had cooled, when it was at the peak of its glory. Therefore, all bodies decayed, machines rusted away, cloth rotted, leaving only the buildings. Ergo, since these two men are perfectly preserved by cold, they must have come *after the planet had cooled!*"

"Meaning visitors from another world, like ourselves?" Vallard shook his head. "Won't do, Doc. For one thing, the cone-device is too big to fit through the door of this room. Must have been built inside it. For another, the inscription on the cone's base are Plutonian." He bent, brushed flakes of nitrogen from the twisty characters. "'The Future.'," Vallard translated slowly. "Now just what in hell that means. . . ."

"Means? Why . . . why. . . ." Fowler's face, behind the helmet, took on an awed expression. "Good God! Fugitives . . . from the cataclysm, whatever it was . . . arriving here . . . frozen before they had a chance. . . ."

A SHARP, excited cry drowned Fowler's mumbling from their earphones.

"Hey, you down there! Come up! Quick! A ship!"

"A ship?" Doag exclaimed. "Must be the relief party! 'Bout time, too! Let's go up!"

The Jovian, followed by Vallard, Fowler, and the others, raced along the ice-lined gallery toward the foot of the shaft. Thought of the supply-ship, already a month overdue, banished even the discovery of the two strange bodies from their minds. A ship . . . that meant news of home, and tea, coffee, the little luxuries they had long since run out of, and, best of all, letters from those who awaited their return. The men scrambled into the car, glancing upward impatiently as it drew them to the surface.

The other members of the *Lodestar's* crew were assembled on the plain, staring up at the two red spears that stabbed through the darkness. The exhausts of a ship, unmistakably.

Yet they seemed somehow far too small for the big transport job they had so long expected.

Minutes passed, and the twin rockets burned like two baleful red eyes through the darkness. The ship itself was visible, now, in the glare, hurtling in to land. All at once Vallard swore, fiercely.

"A life-rocket! By God, Doag, a life-rocket!"

The great Jovian wiped frost from his helmet, glanced up. Vallard, he saw, was right. No supply ship, this, nor, indeed a ship at all. It was only a slender twenty-foot life-rocket, such as are used to escape wrecked vessels. And since a life-rocket's air-supply was limited, it meant that some larger craft had been wrecked only a day or so from Pluto. Doag's big shoulders sagged, he emitted a stream of highly-colored Jovian expletives.

The life-rocket was dashing toward the ground, now, controlled apparently by an inexpert hand. Wabbling, swaying uncertainly, her flaring exhausts swept the icy plain. Fowler, somewhat in advance of the rest of the party, leaped back as the little craft's rockets tore up the ice not twenty yards from him.

"Damn fool!" he roared. "He's either drunk or nearly out of oxygen! We'll scrape him up if he doesn't. . . ."

The pilot of the life-rocket had seen that his speed was too great, had swung skyward again for another attempt. As he shot down for the second time, Vallard gave a cry of horror. The ship's rockets were pointed straight at the pool of viscous oxygen and methane . . . the pool which they had tapped, piped into the *Lodestar* to insure a constant supply of oxygen!

Even as Vallard shouted, it happened. The liquid oxygen and the liquid methane, ignited by the rocket's exhausts, united in a burst of searing, staggering flame! Like broken robots the group of men about the excavation stared at the racing flame as it swept along the pipe toward the *Lodestar.* Fowler's face went grey. When the flame hit the vaporizer tanks inside the ship. . . .

Noiselessly, for there was no air to carry the sound waves, the *Lodestar* flew apart in a violent explosion. Methane and oxygen, confined in the vaporizer tanks, ignited! Fragments of metal rained down upon the plain, the ground rocked.

Nor was this all. The little life-rocket, caught in the eruption of flying debris, staggered, crashed to the ground, a mass of twisted, shattered steel!

Vallard saw Doag race toward the wreckage of the life-rocket. Great muscles creaking, the Jovian tore aside the beams, bent plates. Too late. The man inside was only a bundle of red rags. Suddenly Doag straightened up, clutching a blood-stained bit of paper. Vallard, peering over his shoulder, was able to make out scrawled characters.

"Supply ship *Valerian,* bound for First Plutonian Archaeological Expedition, wrecked by meteors three days from destination. I managed to get aboard this life-rocket, and will try to reach the Plutovian base, the nearest point from here, if my air-supply holds out. If I don't make it and this rocket is found drifting in the void, notify. . . ." Blood smears obliterated the remainder of the note.

Silence fell over the group of men as Doag read the hastily-scrawled words. Fowler's gaze travelled from the shattered life-rocket to the blackened twisted girders of the *Lodestar.* Only her forward compartment, the control room, seemed intact, and the chances were against that being air-tight. The rest of the men, Adams, Kimsey, Bell, perhaps a score of others, seemed stunned. The cold bleak Plutonian darkness hung upon them like a pall. One thought hammered through their brains. Their supplies aboard the *Lodestar,* already beginning to run low, must have been destroyed by the explosion. And with the supply ship wrecked, all contact with the rest of the solar system was cut off! No radio could reach far-flung Pluto; it would be months before the failure of the *Valerian* to return would arouse fear, cause another ship to be sent out. Months . . . perhaps a year . . . and no food on this barren bitter world! They were marooned . . . doomed!

CHAPTER TWO

Hunger

THE explosion that had torn the *Lodestar* apart had, by some miracle, left her control-room airtight, even though the after end of the space-ship was a mass of wreckage. The twenty-five members of the expedition lay stretched out upon the floor, asleep. Only Vallard and Doag were awake, the former bent over the navigator's table immersed in calculations, the latter gazing forlornly at a small stack of food-tins.

"Twelve cans of Concentrate," the Jovian announced morosely. "I've eaten as much in a single day."

"For once I thank God I'm not your size," Vallard grinned, "and have an appetite of terrestial proportions. With luck those twelve cans will keep us going a week."

"And then?" Doag said, cracking his knuckles.

"That's what I'm trying to figure out. Water is no problem, with all the ice about. Nor power. As we know." He nodded grimly. "Plenty more pools of liquified methane and oxygen on the plain outside. That covers power and, with the

addition of some of that solidified nitrogen, we'll have no worries about air. Which means we could stay here indefinitely if it weren't for the question of food."

"Why not jump into a pool of liquid oxygen," Doag suggested softly, "and go into suspended animation until a rescue party arrives?"

"Skip the cracks," Vallard growled. "Now I've been down looking over our synthesizing outfit. Right badly banged up, but not hopeless. Could be repaired. Given carbon we could turn out fats, carbohydrates, maybe even a few lower proteins with the addition of nitrogen. It'd be one unpalatable mess, with practically no vitamins, but it'd keep body and soul together until a ship arrives, I think."

"If we had some bread, we'd have a ham sandwich, if we had some ham," Doag remarked to the ceiling. "How about the methane? That's carboniferous."

"No thanks." Vallard shook his head. "I want a nice solid carbon like coal or wod or even oil. No good blowing up what's left of the synthesizer with that stuff. Besides, there're no fats in it, and we need them most of all in this temperature." He stood up, peered through the big observation port at the shadowy, ghostly plain outside. "That's what makes me so damn sore. We know this crazy ice-berg was once warm, fertile. Somewhere under this ice and solidified atmosphere there must be great deposits of oil, coal, wood. All the carbon we could ever use. But where? No good tunnneling through 200 feet of ice in the hopes of striking a coal mine. If we only knew. . . ." He broke off, staring. A figure in a familiar patched and worn space-suit was approaching the ship. "Here comes Fowler. Where's he been?"

"Over to the diggings. Examining his two precious stiffs. Says that work takes his mind off his appetite."

There was a clang of the double door, and Fowler entered, picked his way through the sleeping men. Several of them stirred at the sound of his footsteps, but, worn out by the events of the day, did not awaken. Fowler pushed back his helmet, glanced briefly at Vallard and Doag.

"Thought I'd find you awake," he grunted. "Get your space-suits and come on over to the excavations."

"If you're thinking of carving up your two stiffs," Vallard grinned, "anthropophagy isn't in my line. Or have you discovered a prehistoric beanery?"

Fowler wiped drops of moisture from his dour chin.

"I suppose you think those poor attempts at humor in this crisis are a mark of bravery," he scowled. "Personally I don't. We're in a mess and we've got to get out of it. I think I may have a way. Come along."

DOAG and Vallard struggled into space-suits, followed Fowler across the plain to the shaft. The little archaeologist had a wire attached to the lever of the windlass machine, enabling him to send the car up or down unassisted. A tug at this wire, after they had climbed into the car, dropped them to the bottom of the shaft. Fowler led them along the gallery to the strange transparent cone they had been examining when the life-rocket arrived. A door in the side of the cone had been opened and the two dead men removed. Beyond that it was unchanged.

Fowler faced his companions, drew a portentous breath.

"Gentlemen," he said pompously, "we are now gazing at the greatest invention of all time. Not only will it save the entire expedition from death, but it will also reveal to us the secrets of a mighty and super-intelligent civilization. . . ."

"If we don't starve to death before

you come to the point," Vallard grunted. "What's the story?"

"Cease that alleged humor," the little archaeologist said stiffly, "and I'll try to explain. I've been examining this cone for the past few hours, and doing some thinking. Consider these facts. Some doom overtook Pluto long before it became an icy waste. We know that because there is no mention of cold, because cloth, wood, animal matter in this city decayed, rotted away. Had cold destroyed the city, these objects would have been preserved. Yet those two bodies we found within this cone were Plutonians. Dressed for semi-tropical heat. The inscription on the cone is the writing of Pluto at the period of the destruction of the race. And because those two bodies were preserved, they must have come here unsuspectingly, and been frozen. But how? How did they get here?"

"God God!" Doag's heavy face fell into deep lines. "You . . . you mean. . . ."

"The light begins to dawn, then." Fowler smiled complacently. "The thing's unbelievable but true. We know their science was great. We know that some doom threatened their planet. Suppose those two men saw it coming. Suppose they unearthed secrets of mighty forces, constructed this cone as a means of escape . . . *escape into the future?* They didn't dream that their world would become a frozen waste. They hoped to learn if any of their race would escape the cataclysm that impended. So they came into the future, found their cone imbedded in a bank of solid nitrogen. Before they could swing back into another time-cycle they were frozen, died. Their escape into the future brought them only death!"

"But . . . but it's impossible!" Vallard roared. "Time-travel's a dream! You're. . . ."

"Wait a minute!" Doag's big glove-encased hands gripped the belt of his space-suit. "I'm not so sure Fowler hasn't hit on the correct explanation. A man mentioning a space-ship five hundred years ago would have been considered mad. We of Jupiter say, 'What man imagines, man can do'. Time is a dimension. Why cannot it be travelled? The inscription on the ship reads, *The Future.*"

"All right." Vallard set his jaw challengingly. "Suppose this thing is a time-machine? So what? Can you run it?"

"COME here." Fowler led them into the cone, pointed to the tangle of apparatus in its apex.

"Machinery. Don't ask me how it worked. Vibrations of some sort, I'd say. But the machinery seems to be okay."

His gaze shifted to a lever projecting from the control board.

"According to the writing on these gadgets, this lever is the time control, the main switch. The notches are, I believe, milleniums. This notch, as near as I can make out, is the point where they started." Fowler straightened up, eyes aglow. "You see what all this means? Think! The three of us could go back to the days when Pluto was warm. Two of us can remain there while one comes back to the present, gets two more members of the crew. A few trips and the whole party is back in the past! Plenty of food, and a chance to study archaeology as no other men have studied it . . . first hand! We've learned to speak Plutonian from the inscriptions we deciphered! A perfect set-up! Every morning one of us could leave the past time-cycle, come back here to the present to have a look out for a supply ship. When it finally arrives, we leave the past, return to the present, and take off for earth! But meanwhile, we'll be well fed, able to learn priceless secrets of the solar system's past!"

"Sounds rosy," Vallard admitted grudgingly. "If this thing really is a time-travelling device and if it works. But suppose it's some sort of lethal-ray chamber? Suppose it killed those two Plutonians! We. . . . *Good Lord!*" He leaped forward as Fowler's gloved hand clutched the lever.

Too late. The little man had thrown the switch back to what he believed was the past!

As to what happened next, Vallard was not quite sure. He remembered Doag's face falling into strained, intent lines, he remembered Fowler saying something about there being more food for the others if they died.

Vaguely he was conscious of a high-pitched drone at the apex of the cone, and an eerie bluish light beating down upon them. Through the transparent walls of the machine an opaque greyness

was visible, a greyness that seemed as infinite as the void, yet alive with queer flickering lights. Like a window into eternity, Vallard thought, watching . . . a glimpse into the seething cauldron of cosmic forces that men call time.

A feeling of terrible solemn vastness seemed to fill the cone . . . a vastness of time and space, intangible, awe-inspiring . . . the vastness of the creation and death of worlds, of universes in which other universes were only atoms, of endless reaches of greatness and smallness, of past and future without end.

Then abruptly the strange frightening elation died away, and the grey infinity with its weird shadows faded from view.

CHAPTER THREE

The Plutonians

THE three men moved uneasily, with the queer spiritual feeling that follows delirium . . . the feeling of being far removed from things of the everyday world, of being half-material, half-intangible. Doag shook himself like a dog coming out of water, glanced through the transparent walls of the cone. The scene that met their eyes was disappointing. The room had changed but little, except for the removal of the last of the frozen nitrogen. Apparatus, machines of every sort . . . reduced to dust in the time-cycle from which they had come . . . littered the room, revealing it as a workshop. The very workshop, no doubt, in which the machine had been built. Vallard shook a dazed head.

"Works, all right," he muttered. "What next, Doc?"

Fowler pushed open the door of the cone, glanced at the air-gauge strapped on his wrist. The sensitive little instrument indicated atmosphere, rather high in nitrogen content, but satisfactory for humans. He threw back his helmet, snapped off the coils that heated his heavy asbestoid suit.

"Air and warmth," Doag grunted, stretching his huge limbs. "Feels good. Now if we can only get some food." He turned toward the door. "This leads, as I recall, to the outer rooms. We may as well. . . ."

"Listen!" Vallard held up his hand.

His companions paused, tense. A woman's voice was echoing along the corridor outside. She was singing . . . and the words of her song were in the long-dead language of Pluto! During their painstaking months of research, they had deciphered the inscriptions on the walls of the buildings, learned from certain phonetic writing, half-destroyed recording reels, the sounds that accompanied the word-forms. True, this singing voice placed accents differently, used queer idioms . . . yet the gist of her song was understandable. Vallard found himself mentally translating fragments of it. "Lost is the glory . . . the rulers dwindle . . . who will rule when they are gone. . . ."

Nearer and nearer came the voice. The three men waited, uncertain. Suddenly there was a flash of blue in the doorway . . . the blue of a short, strictly utilitarian tunic. Young, the girl was, with the same unnaturally pale skin, the flame-colored hair of the two bodies they had found in the cone. Shorter and more frail than an earthwoman, she was nevertheless quite feminine, very lovely in a bizarre, unearthly manner. As she passed the doorway, oblivious to the three men who stood before the cone, Doag gave an involuntary gasp. The girl broke off in the middle of her song, whirled about, eyes widening.

"The . . . the cone!" she whispered. "Jarth . . . Seki . . . gone! Who. . . ."

"We're from the third planet," Fowler began in halting Plutonian. "We found. . . ."

"The third planet!" The girl laughed

ironically. "Very likely. A mass of molten rock and steam! What have you outlanders done to Jarth and Seki?" Then, as if expecting no answer, she threw back her head, frowning deeply in concentration.

Uneasily, Fowler attempted to explain, but his stumbling Plutonian only confused matters. Then suddenly there came the patter of running feet, and several men, with pale skins and flame-hued hair appeared in the doorway, clutching queer tubes that appeared to be weapons of some sort. Like the girl, their bodies were frail, but their high foreheads, their keen eyes, gave an impression of tremendous knowledge. At sight of them, Doag's hand shot to his waist, then he swore, remembering that he was, for once in his life, unarmed.

"Iayleh!" One of the men cried. "Who are these strangers? And the cone . . . !" He broke off.

The girl spoke swiftly in an undertone, and the men nodded. With motions of their tubes, they waved the three strangers toward the door. As they strode through it, Vallard cast a sardonic glance at little Fowler.

"This was your inspiration, remember," he observed. "Well, here's hoping the condemned men get a hearty breakfast, eh, Doag?"

Doag did not answer.

Through interminable passages, a labyrinth of rooms and galleries, the captives were led. Some of the rooms they recognized from the inscriptions on the walls as those they had excavated from the ice of the future. But great changes had come over them. Rich furnishings, soft carpets, every conceivable sort of luxury, made the vaulted halls and passages places of beauty, while some, apparently workshops like the one in which the cone stood, were filled with queer apparatus, huge machines. All part of one vast building, these countless rooms; outside, Vallard could hear the crash and thunder of a violent storm, but most of the tall windows were blocked off, permitting no view of what went on beyond them. Warm lights of every hue flooded the huge rooms, casting weird shadows.

It was an odd place.

The girl Iayleh, and the pale men were talking as they led their captives through the building. Vallard could catch an occasional word. "Tarn . . . escape . . . Amnor . . the Zacites. . . ." He glanced at his companions. Fowler was gazing eagerly about, with an archaeologist's fervor, making notes on a small pad; five minutes' walk through these corridors had taught him more than seven months' work in the ice-encased ruins. Doag was silent, stolid, his huge figure towering above their relatively insignificant captors.

The corridor was widening, now. Suddenly it ended in a column of white light which poured upward from the floor and disappeared through a circular opening in the ceiling. With a wave of their weapons the Plutonians ordered the three men toward the pillar of light, motioned for them to jump.

SOMEWHAT hesitantly Fowler stepped into it, leaped upward. Gasping with surprise, he found himself floating gently through the aperture in the ceiling.

"Rings of Saturn!" Doag muttered. "An anti-gravity beam! Sort of elevator, I guess! Come on, Vallard!"

They followed Fowler into the beam, jumped, and felt themselves float, weightless, upward. Past floor after floor, they soared, until at the top they found themselves on a level with the upmost floor of the great building. Their captors appeared beside them, motioned them to step from the beam onto the solid flooring about the circular opening. As they

did so, Fowler drew a sharp breath.

They were in a large hall atop the building . . . a hall whose walls were of dark glass-like substance and whose floor-space was almost entirely taken up by rows of glass jars and retorts, shining apparatus of every sort, queer little engines, models of various sorts. Upon tables were spread great charts of the heavens, complicated calculations covering masses of paper, and well-worn books.

In the center of this strange laboratory sat a man . . . incredibly old, wrinkled, his hair and beard white. Solemn, majestic, there was something almost god-like about him, for all his alien Plutonian aspect.

"Most revered Tarn" . . . the girl inclined her head . . . "the time-cone has returned, bearing these three strangers who claim to come from the third planet. There is no word of Jarth and Seki."

"Jarth and Seki must be the two we found frozen to death in the cone," Vallard muttered. "Better explain, Fowler. You're good at it."

The wizened little archaeologist shook himself as though awakening from a dream, launched into the story of the expedition, the discovery of the cone, the journey into the past. As he spoke, the ancient Plutonian nodded somberly, stroking his beard.

"Jarth and Seki . . . gone" he murmured. "Yet we have proof that the cone works."

"But of what use is it?" Iayleh shook her head. "If the future we hoped to escape to is only a frozen waste. . . ."

"There remains the past." Old Tarn's eyes turned to the three time-travellers. "You have come at an unhappy time, men of the future. We, the Scientists, the brain-force of Pluto, are driven to refuge into this one building by the stupid, war-like Zacites. Nor is this all. Doom . . . terrible doom from outer space . . . threatens Pluto."

"Zacites? Doom?" Doag shook his heavy head. "I . . . we don't understand."

"Listen then." Tarn spoke gravely, sadly. "Our planet, the outermost, was the first to cool sufficiently to support human life, and our evolution has reached a point which that of your earth had not reached at the time you left it. Centuries ago a split in our race was observed. One group . . . our group, the Scientists . . . began to draw apart from the Zacites, or everyday people who reaped the benefit of our inventive skill. We kept to ourselves, forming an aristocracy of brains, breeding for brains. An aristocracy whose labors were solely for the people. And they, since we did all the thinking, ceased to use their brains, degenerated into strong, primitive emotional beings." He sighed mournfully.

"But slowly our numbers began to decrease. Inbreeding, perhaps, or the fact that high mental types are less virile. Yet to have mated with lower mental types, like the Zacites, was repulsive to us since we look upon them as you might upon your ape-man ancestors. As a result of this declining birth-rate, soon only a few hundred were left and we realized that after our race was extinct, the Zacites would be helpless.

"So, since these primitive, physically-evolved beings were dependent upon us, our leaders set about great works that would remain after we had gone. Oil pools of unbelievable size were tapped by wells, their flow directed into great engines. So vast were the oil deposits, so strong the machines that we knew they would run, without ceasing, for millenniums. About them we built factories, all automatic, which, at a touch of a lever, would be meshed into the great engines and would turn out clothes, weapons, synthetic food, articles of every sort. So we believed that when our race was extinct, the Zacites would have only to connect one of the many factories to the eternally-

running engines to obtain any necessity desired. And this we did because we pitied their ignorance, realized that without us they would lapse into barbarism."

HIS eyes began to snap. "Judge, then, how we were repaid! No sooner were they assured all the comforts of life without our aid than they declared we were useless, decided to strip us of our power! Fifty years ago those superstitious, bloodthirsty, brainless beasts arose, killed many of us, drove the rest into this building. Here we and our children have remained, protected by a dome of force, while our automatic engines provide for the Zacites. They keep close watch about the energy dome, hoping some day to force entrance, learn the secrets of science we have here. Without our guidance they have degenerated even further and, under Amnor their mad leader, have set up a strange religion, worshipping the engines we made as gods. Here behind our dome of force we have lived in peace, though captives, probing the great secrets of nature. Within a few years our race, only a hundred souls now, would have become extinct. So, shut off from the cruelty of the Zacites, we dwelt in peace."

The old man paused, seemingly lost in thought. Slowly he resumed speaking.

"Yet while we knew our race was dying off, life was as dear to us as to all living things. We wished to discover more of the secrets of life before we died. Perhaps even a way to prevent our extinction. And now there comes doom from the skies. Doom not only for us, but for all Pluto! The Day of the Comet approaches!"

"Day of the Comet?" Fowler repeated, frowning. "I don't. . . ."

"Look!" Tarn arose, pressed a lever on his desk. "Look, and understand!"

As he pressed the lever, blocks of polarized glass turned, and one wall became suddenly transparent. The three time-travellers, staring, went rigid. Through the wall of the building a scene of weird, satanic beauty met their eyes.

Like some great bubble about the building rose the dome of force, pale blue, transparent, shimmering. Beyond that, other great buildings of the city towered, while encamped in the streets about the dome of electrical energy were the armies of Zacites, evolved physically to the perfection of Greek gods, yet with coarse, stupid faces, vacant eyes, and expressions that were brutish, bestial, mad.

This scene in the streets, bizarre as it was, drew only a passing glance from Vallard and his companions. A terrible, awe-inspiring spectacle sent their gaze to the sky. One entire corner of the heavens was blotted out by a gigantic ball of flame, like some immense sun, casting a cruel white-hot glare over the city, sending shafts of dazzling supernal brilliance through the banks of lowering ominous black clouds. Mighty bolts of lightning ripped and tore across the sky, frenzied gusts of wind bent the strange greyish trees, the mass of weird Plutonian vegetation.

A scene of fearful cosmic wrath, the great comet coming nearer and nearer, the alternate gloomy shadow and dazzling light, the low-hanging sable clouds, the incessant lashing of lightning. A day of doom . . . a picture of some new and mephetic inferno . . . a spectacle of sheer stark horror, yet fascinating in its terrible beauty.

"Good God!" Fowler shook a dazed head. "And this is what we've landed in!"

"The comet will not strike," old Tarn said gravely, "if my calculations are correct. Yet within another twenty-four hours it will be sufficiently close to wipe all life from the surface of Pluto, by heat and the gasses in its wake. More, it may pull our planet from its orbit far out into the reaches of the solar system. It was

to escape this doom of the Comet that we built the time-cone, hoping to escape into the future, found a new civilization there. Now, since we know the future to be a world of desolation, we have no recourse but to flee to the past!"

"But—" Doag leaned forward, his broad face tense, "—what about us? Our companions aboard the *Lodestar,* starving. . . ."

"You will come with us, into the past," Tarn said, stroking his beard. "A score or so trips of the time-cone will take us back. The era of the ancient mound-builders will be the most pleasant, and with our knowledge we will rule as gods. Once there, we can fill the cone with food, send a load of provisions every day to your comrades. When your rescue ship arrives you will return to your own era, one of our people going with you to bring the time-cone back. Thus all will be saved and only the cruel, savage Zacites will meet the doom of the Comet."

Tarn turned to the girl who, along with the men, had stood at respectful attention as he spoke. "Summon the others, child. We must tell them that the cone has returned and our way of escape to the past is open."

Again the girl threw back her head, frowned in concentration. Telepathy, Vallard thought, watching. Her silent message was answered by the appearance of other men and women with the same pale skin and reddish-yellow hair. Their heads were large in proportion to their bodies and their expressions spoke of great intelligence, deep knowledge. Young and old, male and female, there were less than a hundred of these Scientists on Pluto. Their type was passing, and with it the brains of the planet. Many of them carried tools, papers covered with diagrams and calculations, showing that they had been at work devising some means of escape when Tarn summoned them.

Vallard's gaze swept the weak pale figures. Evolved for brains, bred for brains, they were puny physically, just as the Zacites outside had developed physically with no need of brains, education, knowledge, during the centuries that their thinking had been done for them by the Scientists.

Vallard glanced outside. Beyond the dome of shining force, the brutish figures were glancing uneasily at the sky where the dazzling light from the glowing comet pierced the dark banks of cloud. The tongued forks of lightning had increased in violence, were smashing earthward in a deadly blue hail, yet without apparent sound, since the energy dome shut off all vibrations of the air.

The crowds of Zacites were thickening about the dome; they seemed to sense that the Scientists had some means of escape, and were eager to force entrance, take advantage of it to flee the doomed

planet. Several, hurling themselves frenziedly against the dome, were instantly burned to a terrible blackened crisp by the pulsating bluish wall of force. Vallard turned away, sickened by the sight.

Tarn rose to his feet, faced the little band of his people.

"The time-cone has returned!" he exclaimed. "Jarth and Seki have died and these, who are explorers from the third planet, returned in it. The future of Pluto is as terrible as its present. Our escape must be into the past. Nor is there a moment to lose, for the comet draws near. We will leave at once to seek refuge in the long-dead past!"

CHAPTER FOUR

Revolt of the Zacites

A SHOUT of approval answered him and the pallid people of the dying race turned toward the aperture in the floor through which the anti-gravity beam poured. Two of them had stepped into it, were floating gently downward, when the girl Iayleh, glancing through the transparent glass wall, gave a cry of horror. Three immense bolts of lighting, crashing downward, had struck the dome of force . . . and the protecting screen was fading from view! As it disappeared, a horde of furious Zacites, howling, waving their weapons, rushed toward the building!

"Gods of Pluto!" Tarn whispered. "The added electric energy given by the lightning has burnt out the generators!" He snatched a ray-tube from his desk. "Arm! Arm! Fight your way to the time-cone! Some of us may yet escape!"

The pale little Scientists were descending by the anti-gravity beam, now, leaping one after another into it, tubes in hand, floating to the floor far below where the time-cone was located. Fowler, Vallard, and Doag stood for a moment, dazed, then the girl Iayleh and old Tarn were urging them forward.

"Hurry" Iayleh whispered. "If we can reach the cone. . . ."

Quickly Vallard leaped into the beam, followed by his companions. Below them they could hear hoarse shouts, the hiss of ray guns, the cries of the wounded. Then they had landed at the base of the beam, Iayleh and Tarn beside them.

The corridor ahead was a hell of lurid red rays. The Zacites had burst open the main door of the building, were pouring, ray guns in hand, along the passageways. Ray guns, Vallard reflected, that had been made by the great automatic machines the Scientists had built to provide for the physically-evolved, stupid brutes after they, the Scientists, had become extinct. And this was the Zacites' gratitude!

Of the hundred Scientists, only a few were armed. These returned the deadly fire of their opponents, their ray tubes spitting red death . . . but their comrades, racing desperately toward the room in which the time-cone was located, were swept away by the overwhelming numbers of the enemy.

Crouching helplessly at the foot of the anti-gravity beam, Vallard watched a frenzied mass of Zacites, brutish, ape-faced men, dressed in glittering finery of the wildest colors, rush around a bend in the corridor toward the defenders, their weapons spouting death, saw the charge break before the cool, deadly fire of the Scientists. A huge black-bearded man, whose beaked nose and thick lips made him seem a savage bird of prey, was urging them on with fierce shouts.

"Here there must be some means of escape!" he roared. "Conquer them and it shall be ours to flee the doom of the comet!"

Again the Zacites charged around the bend in the corridor, and again the attack broke as a score of them slumped to the ground, torn to heaps of bloody rags by

the red rays of the force-guns. Yet for every charge that failed, one or two of the Scientists fell. Outnumbered a hundred to one, it became apparent that they could not hold out long.

Doag, Fowler, and Vallard lay huddled against the wall of the passage, unarmed, helpless, as a red fury of rays swept over them. A mad nightmare it seemed. The few white-clad Scientists firing from behind a barricade of bodies, the frenzied attackers surging forward again and again, like waves on a crumbling wreck, while outside the ceaseless thunder rumbled and roared, rising to a furious crescendo as the great comet swept nearer to the doomed planet.

WHITE-CLAD bodies littered the end of the corridor now; scarcely a score of the defenders were left. Old Tarn, his snowy hair flying, a grim and terrible figure as he swept the ranks of the enemy with his ray-tube, shot a glance at Iayleh.

"No hope here, child!" he muttered. "Amnor and his men are too many! You, Tzil, Rannu, and Onra, and these three strangers, seek an upper level, reach the room in which the cone stands by another passage! We will keep them busy while you escape!"

"But you . . ." the girl began.

"It is an order," Tarn cried. "Hurry!"

Two men and a woman had detached themselves from the group of defenders. These, Vallard decided, were Tzil, Rannu and Onra. As the maddened Zacites rounded the bend in the corridor for another assault, they sprang into the anti-gravity beam, followed by Iayleh.

"Come, men of the future!" she cried. "You are no help here, unarmed! Quick, while there is time!" Her eyes, bright with emotion, swept old Tarn, the defenders crouched in the corridor. "Their fate is more glorious than ours, whatever happens!"

Blindly little Fowler leaped into the beam, sprang upwards, Doag and Vallard at his heels. This time, instead of rising to the topmost level, Iayleh and the three Plutonians checked themselves at the floor above.

"Here!" the girl exclaimed. "This way!"

Then they were running along a corridor, the four frail Scientists gasping for breath, fighting to keep up with the three time-travellers. Vallard and Fowler were forced to cut their speed to enable these weak people of the past to maintain step, while the huge Doag merely loped along.

Through room after room they ran, Iayleh directing them. The sounds of the hissing rays died away in the distance, but the ceaseless crash of thunder continued. Suddenly, as they rounded a corner of the passageway, Iayleh gave a sharp cry. Two of the fierce, brutish Zacites, ray tubes in their hands, faced them!

As the two savage-faced warriors raised their weapons, Doag and Vallard leaped. A red lance of flame tore at the wall over the latter's head, showering him with splinters of stone, but he plunged on. His fist crashed into the Zacite's chin, sent him reeling to the floor, where, aided by Fowler and one of the Scientists, the man was disarmed, bound. Doag, meanwhile, had come to close grips with his opponent; powerful though the big Zacite was, he could not match the Jovian's tremendous muscles. In one swift surge of strength Doag lifted the man high above his head, slammed him against the wall. There was a sharp, sickening crack and the Zacite lay still.

"By the Ultimate Knowledge!" one of the frail Scientists exclaimed. "You have strength, men of the future! We may need it if we hope to reach the time-cone!"

They were running again, then, through rooms filled with elaborate and

curious machinery, through laboratories cluttered with apparatus. At length, in a large hall lined with great engines of an unknown type, Iayleh halted.

"The room in which the time-cone rests is below us!" she exclaimed. "If we can penetrate the floor. . . ."

The pallid Tzil drew a force-ray from his belt. Its crimson beam struck the stone floor, tearing like a giant drill, reducing the grey granite to powder. In an incredibly short time an opening yawned in the floor. Vallard, peering through, could see the time-cone, intact.

"I'll jump down, help you others through," he cried, swinging into the aperture. When he felt his feet strike stone, he straightened up, arms raised.

Iayleh, her flame-hued hair awry, her pale cheeks flaming with excitement, gripped the edge of the hole, swung down into Vallard's arms. Setting her lightly upon the floor, he aided the other three Plutonians to the ground. Next little Fowler, muttering softly to himself, until only Doag remained. Vallard moved toward the cone; the Jovian needed no help to make such a comparatively short drop.

Hardly had Vallard taken one step, however, when Doag's voice reached him, shouting a deep, excited warning.

"The Zacites!" he roared. "Go on! Now, while you can! I. . . ."

VALLARD'S eyes turned upward in time to see the big Jovian totter on the edge of the opening, then fall through. Crashing against the floor, he lay still, the wind knocked out of him.

"Into the cone!" Vallard exclaimed. "Quick!"

Too late. A storm of red rays burst from above, Tzil and Rannu toppled to the floor, leaving only the two women, the three outlanders. The hawkfaced Amnor, followed by a dozen of his men, leaped through into the room.

"Take them alive!" Amnor shouted. "We must learn their secret!"

Vallard and Fowler struck out desperately but were quickly subdued by the muscular Zacites. Amnor raised his voice to make it heard above the increased rumble of thunder outside.

"Who are these strange creatures?" He waved toward the earthmen.

"Men from another world," the girl Onra replied. "They. . . ." She broke off as Iayleh motioned her to silence.

"Another world!" Amnor's dark countenance lit up. "Then the Scientists have found a way to escape the doom of the Comet!" He glanced at the time-cone. "Perhaps even this device. . . ."

Iayleh smiled mockingly.

"That weak machine reach another world!" she laughed. "In this building are rooms full of machines. Guess, Amnor, which is our means of escape! And guess, when you find it, how it is controlled!"

The brutish Zacites gazed stupidly about. Bred for strength, leaving all mental work to the Scientists for centuries past, they knew nothing of the intricate equipment within the building. Amnor stamped impatiently; the raging of the elements outside told of the comet's approach; already terrible heat from it had penetrated even the massive walls of the building.

"You will be made to tell!" he muttered. "Unless we learn the plans of your people for escape, we are doomed! Take them out!"

Doag, Fowler, and Vallard, with the two Plutonian girls, were dragged from the room. The big Jovian was still stunned by his fall, but Fowler was vehemently conscious.

"Whatever happens, don't mention the time cone!" he whispered in English. "Once Amnor learns of it, how it's operated, he'll head for the past, taking with him a few choice friends! And you can

bet he won't be back for us or anyone else! With the time-cone gone, we'd be doomed, like the rest of Pluto. But as long as it's here, there's a chance of escape!"

Vallard nodded, stumbled, secure in the grip of his captors, from the building. Outside, a scene of stark horror greeted them. The streets around the Science building were crowded with frenzied, panic-stricken Zacites, men, women, and children, milling about the great squares and highways. The comet seemed to fill half the sky; its brilliance was blinding, its heat was like the breath from a furnace.

The banks of sable clouds were thickening, mist rose to temper in some measure the white, dazzling radiance of the comet. Lightning continued to dance in a blue frenzy about the tops of the tall buildings and the roar of thunder was ceaseless. Queer hot gusts of wind, like the fetid breath of some monstrous beast, screamed through the streets; ominous rumblings sounded deep within the planet.

Vallard gazed about, gripped by a feeling of awe. The comet would not strike, Tarn had said, and their excavations of the future had proven that the buildings would remain standing. Yet each second the heat grew worse and traces of the deadly gasses Tarn had predicted could be sensed in the atmosphere. Vallard, sweat running down his face, tugged at the fastenings of his spacesuit, but Fowler, sniffing the gasses, motioned for him to keep it on. Thus, should the atmosphere grow worse, they had only to snap shut their helmets to protect themselves.

As Amnor and his captives issued from the Science building, a shout arose from the frightened crowds in the streets.

"Save us, Amnor! Save us! Make

offering to the machine-god before Pluto falls!"

CHAPTER FIVE

Flight Through Time

THEIR leader glanced at the five prisoners, a dark smile on his saturnine countenance.

"The people have spoken!" he cried. "Reveal to us the means of escape or die in the maw of the machine-god!"

Little Fowler laughed dryly.

"Very transpontine," he chuckled. "Sounds like the villain of a third-rate melodrama. If those gasses grow strong enough to bowl them over, we can close our helmets and make a break for the cone. And if we ever get out of this mess, to say nothing of the mess we left back in the future, I'll write a book on early Plutonian civilization that'll make me the top archaeologist of the solar system!"

Doag grinned, the two girls remained silent, heads high. In spite of Fowler's dry humor, the terror of the scene pressed down like a great dark hand upon them. Amnor and his men led them through the city toward a low mound on its outskirts.

As they drew closer, Vallard could make out huge wheels, great masses of machinery, grinding slowly, inexorably, endlessly. About the base of the mound were a series of low buildings. Sudden realization swept over the earthmen. This must be the great work the Scientists had built to provide for the Zacites when their race was extinct. Engines, fed by vast subterranean oil deposits, built to run for centuries, scores of centuries, without stopping. And the low buildings at its base were factories, factories that could turn out all the necessities of life at a touch of a lever, powered by the eternally turning cogs of the great engines.

It was this mighty work which had made the Zacites independent of their Scientist leaders and had, ironically, hastened the end of the super-intellects through the revolt of the rising Zacites. Built to last for milleniums . . . and in a few hours the doom from the skies would bring gasses which, supplanting the necessary oxygen, would choke the huge engines, prevent combustion, bring them to a stop.

Slowly the captives climbed the steps cut into the side of the mound. Behind the thickening banks of clouds the white-hot fury of the great comet burned. The searing hot wind howled like a banshee, whipping the robes of the two frail Plutonian girls, tearing at their hair. The choking noxious odor increased and the lightning raged against the background of the towering city. Masses of pallid weird vegetation had wilted with the heat, the queer trees were bowed by the hot wind, stripped of leaves, their bare limbs fluttering helplessly as though pleading for mercy. Doom . . . doom over Pluto!

Upward the captives toiled, hands bound, Amnor and two of his men beside them. The multitude of Zacites, assembled below, shouted in frenzy.

"A sacrifice! A sacrifice to the machine-god! Amnor, save us!"

The machine-god, Vallard reflected. So they worshipped this mighty mass of grinding cogs because it gave them the necessities of life! But how could one be sacrificed to a machine? He glanced at his companions. Doag was tugging at his bonds, muttering in sibilant Jovian. Fowler was studying his surroundings as though at an exhibition, making mental notes of the ancient Plutonian customs for a monograph he could never hope to write. Of the two girls, Onra was silent, stunned with horror, but Iayleh held her head high. She smiled as Vallard glanced at her.

"Gaze upon me, outlander," she cried.

"I like to know that your eyes, at least, are mine. I have dreamed of men like you, stronger, bigger than our frail men, yet not cruel like these brainless beasts. Had fate been otherwise, I, the past, and you, the future, might have been joined by deeper bonds than death."

THEY were at the summit of the mound now. The massive wheels, sunk into a pit hollowed from the top of the mound, were grinding as inexorably as the mills of the gods. Amnor shot a glance at the sky. The great comet was rushing down upon them, its blazing brilliance burning through the clouds. The crowds of Zacites were wailing, screaming with horror. Death from the cosmos shrieked down upon them!

Amnor motioned to the two guards to seize the girl, Onra.

"The secret of escape!" he snapped. "Quick! Time is short! How did these earth-dwellers reach Pluto?"

Stunned with horror, the girl made no reply. A bolt of lightning flashed from the hanging clouds, illuminating Amnor's furious face.

"A sacrifice!" he cried. "God of the machine, save us!"

A roar went up from the assembled multitude as the two guards lifted the girl. Once, twice, they swung her, then hurled her slim body forward. The three time-travellers froze with horror. The girl's pale figure had landed in the very heart of the immense grinding cogs!

The huge wheels did not for an instant slacken their relentless turning . . . but the cogs coming up into view were a bright and terrible red!

"You see your fate!" Amnor's eyes glittered with insensate fury. "Will you tell the secret plans of the Scientists for escape?"

Iayleh squared her slim shoulders, a fair clean figure in that scene of macabre frightfulness.

"What difference if we die by the machine or by the comet?" she said steadily. "This way I know that you, the murderer of my people, will die also! This is the end, Amnor! The end of all life on Pluto!" She threw a glance over her shoulder at the three space-suited figures behind her. "Escape back to your own time, men of the future! I, last of my race, give you your chance!"

Vallard saw her slender form hurtle forward and leaped to stop her. It was too late. Full tilt into the two guards she plunged, and, frail as she was, the desperate charge caught them by surprise. For just a moment the three struggling figures tottered on the brink of the platform, then whirled down into the mass of cyclopean machinery! A terrible cry floated upwards toward them. Inexorably the reddened cogs turned on.

AS IAYLEH leaped, Doag sprang toward Amnor. The Jovian's hands were still bound, but his head was lowered to point at the dark leader's chest. Frantically Amnor drew his force-gun, but Doag's head, striking him, sent him to the floor of the platform. And the red ray of force, spouting from his gun, struck the huge whirling cogs!

Strong the mighty machines were . . . but the force ray was stronger. Its blast shattered one of the giant wheels like crystal. Grinding, smashing, tearing, the great engines began to break up. Chunks of metal were thrown into the air, the mound shook as the wheels crumbled. Suddenly, with a splintering roar, the immense machines collapsed; oil from severed pipes gushed into the cup-shaped hollow, covering the shattered remains of the last great work of the race of the Scientists. The finishing touch, this crumbling work, to the scene of unutterable desolation.

As the gargantuan engines broke up, a wail of terror rose from the crowds of

Zacites. "The machine-god has fallen! The god of the machine is dead! Doom, doom, to Pluto!" A sudden panic seized them; they scattered, fleeing through the streets of the city, racing in senseless horror from the fate they could not hope to escape.

The three earthmen, momentarily stunned by the sudden turn of events, suddenly sprang into action. A sharp-edged piece of steel from the broken engine lay on the edge of the platform. Fowler backed up to it, sawed his bonds through, then released the others. Doag glanced at the sky. The heavens seemed ablaze. The chokingly mephitic gasses were thickening, the heat was unbearable. A half-hour, an hour, at most, and the fiery tail of the comet would wipe Pluto clean of life.

"Come on!" the Jovian rumbled. "Hurry! If we can reach the time-cone. . . ."

Then they were pelting down the steps, at top speed, without a glance at the fallen Amnor. Had they looked back, they might have seen him sway to his feet, gun in hand, set out in pursuit. But bent only on escape, they kept their gaze fastened on the building of the Scientists.

Curiously enough, none of the three retained any clear remembrance of that flight through the ancient city. Certain kaleidoscopic pictures clung in their memory . . . the flaming brand in the sky . . . the raging elements . . . the frightened crowds of primitive Zacites fleeing helter-skelter from the doomed city . . . the great buildings in all their stark majestic beauty. . . . Seared by the terrible heat, Vallard fought against a desire to tear off his heavy space-suit. The swirling gasses had him groggy, reeling.

"Shut . . . helmet. . . ." Fowler gasped, snapping the transparent headpiece of his own suit closed.

The others obeyed, blindly. Doag, in the lead, fought his way through the panic-stricken mob. Great clouds of dust were falling from the sky, plunging everything in ghostly gloom. A smell of ozone was noticeable. Terror . . . darkness . . . chaos. . . . Overhead was a screaming, roaring sound, as the cataclysm approached.

Then suddenly thew were entering the tall building of the Scientists. Vallard, glancing over his shoulder, saw a grotesque figure staggering in pursuit.

"Amnor!" he gasped into the speaker of his micro-wave communications set. "Hurry!"

The others redoubled their efforts, wondering as they ran why Amnor did not shoot. One blast from his force-ray would blow them into oblivion. Unless he was determined to escape wtih them. . .

Through rooms littered with dead . . . Scientists and Zacites . . . they ran. Onward, while the building rocked and blue lightning danced before the windows. At last the small chamber in which the time-cone lay!

In one bound Fowler leaped through the door in the side of the cone, stationed himself at the controls as Doag and Vallard sprang to join him. Amnor, face twisted with bestial fury, gun clutched in his hairy fingers, hurtled toward the cone. Just as Fowler threw the switch, he sprang.

As to what happened next Vallard was never quite sure. He remembered falling to the bottom of the cone in a confused tangle of arms and legs, along with Doag and the half-mad Amnor. As they struggled, the grey mists of time enveloped the cone, the terrifying knowledge of the cosmos beat in upon them. Then, after an instant that seemed an eternity, the swirling mists rose, the familiar scene of ice, solid nitrogen, crumbling ruins, was visible through the walls of the cone.

Amnor, wrenching himself free of the two men, backed against the wall, gun pointing toward Fowler. The leader of

the Zacites was blue from cold, gasping frantically as the air, condensed, drifted like snow to the bottom of the cone.

"Back!" he gasped. "Back to the past! Quick!" But the others, encased in their suits, could not hear him. Fowler, however, needed no words to understand the threat of the ray gun; as the vulpine Amnor fired, he sprang to one side.

The scarlet spear of force missed Fowler, but the controls at which he had been standing a moment before were blasted into a twisted heap of scrap metal. Nor was this all. The red ray tore a hole in the side of the cone, wrecking the strange apparatus, the queer machinery. At once the remaining air escaped through the opening and Amnor, his lungs collapsing, toppled in a heap on the floor.

CHAPTER SIX

Marooned on Pluto

"DEAD," Doag said solemnly, pocketing the force gun. "And" . . . his gaze turned to the ruined mechanism of the time-cone . . . "so are our hopes of bringing food from the past!"

Frantically little Fowler pawed at the smashed and twisted metal. His voice in their earphones was almost tearful.

"Ruined!" he cried. "Beyond hope of repair! And no one left who understands the forces it employed! The greatest dream of archaeology! No more poking about crumbling ruins, but actually seeing, hearing, living the past! All my dreams of taking it to other planets, of discovering the truth of the Atlantis legend, finding out how the Martian canals were built. . . ."

Vallard laughed, bitterly.

"Better, perhaps, if we'd remained in the past," he said. "Death from the comet's blazing tail would be quicker than starving to death!" He turned, set out along the ice-lined gallery. "Might as well go back to the *Lodestar.*"

Silently the three men returned to the shaft, rose, by the car, to the surface. Eternal bleak and desolate night hung over Pluto; no light issued from the control room of the wrecked spaceship. Doag frowned.

"Hurry!" he muttered. "No lights. I don't like it!"

They hastened to the ship, strode through the air-lock. A terrible scene greeted them. The twenty-odd members of the expedition lay upon the floor, gaunt skeletons, their faces hollow, wasted, the skin drawn tight over protruding cheekbones, eyes sunken pits.

"Good God!" Fowler fell to his knees beside Bell, the geologist, felt his pulse. The man stirred, muttered deliriously.

"But . . . but. . . ." Vallard glanced dazedly about. "Starving . . . and we've only been gone a few hours! How. . . ."

"The time-cone!" Fowler muttered. "My fault! I . . . instead of returning to the time we left, we've arrived a couple of weeks in the future! You see? If I'd only known how to handle those controls more exactly. . . ."

Vallard was examining a tangle of apparatus near the observation port.

"The synthesizer," he said slowly. "They repaired it. Used it, too, I think. Getting carbon from what little paper and wood they had aboard." He pointed to a knife-blade from which the wooden handle had been removed, a book, its pages gutted. "No wood or paper left. Hopeless. And we're bound to share the same fate."

"Carbon!" Doag suddenly sprang to his feet. "By all that's holy, I think. . . . Come with me!"

The big Jovian snapped shut his helmet, leaped through the airlock. By the time Vallard and Fowler had emerged from the ship, Doag was well on his way to the excavations, racing across the icy plain with all the power of his great muscles. At the top of the shaft he paused, gazed about as if trying to orient himself, then struck out across the barren stretch of ice. When Fowler and Vallard at last rejoined him, he was standing atop a slight mound of solid nitrogen perhaps a mile from the ship, Amnor's force-gun in his hand.

"Stand back," he warned. "I'm turning her on!"

As he spoke, he pressed the trigger. The red ray shot out, tearing up the ice as an auger bites through white pine. Down, down, the red ray bored, cutting a slanting shaft in the solidified gas. Vaporized under the blasting beam of energy, the nitrogen arose in clouds, fell like snow about the pit. Doag, cutting steps in the shaft, followed it down.

At a hundred feet, Doag gave a sudden cry. In the lurid light of the red beam, earth was visible. Great streaks of red rust, green bits of bronze that vaguely resembled parts of a mighty machine. And all about the metal was a black, coal-like substance, glistening in the crimson glare. Fowler gasped.

"The machine of the Scientists!" he cried. "The machine that Amnor destroyed! And that black stuff is. . . . "

"OIL!" Doug said triumphantly. "Oil frozen solid! The comet's gaseous tail may have wiped out all life on Pluto, but it didn't stop the oil from gushing from that well! I suspect that the comet, in addition to wiping out all life, drew Pluto from its orbit, far out to its present position on the very edge of the solar system. The terrible cold followed a few hundred years later and the oil, continuing to pour out of the well over the remains of the machine, was frozen! Carbon! Pure carbon!"

Vallard stared at the streaks of rust that meant life.

"We've got to get back!" he exclaimed. "While there's a chance of saving them!" Staggering under the load of frozen oil, he led the way up the shaft.

Within a few minutes they were back aboard the wrecked space-ship. Vollard shoved a large piece of the oil into the synthesizer, started the motors. Burning methane and oxygen powered the generators, the machine hummed into life. Within twenty-five minutes the carboniferous matter had been broken down, its atoms rearranged to form carbohydrates, fats, while the introduction of nitrogen enabled them to produce certain lower proteins. The result was a pasty brown mess, lacking vitamins, calcium, iodine, salt, other important minerals, and about as appetizing in appearance as a bar of laundry soap.

"They say you get used to anything in time," Doag muttered doubtfully. "And I guess our ultra-violet set will supply vitamin D, if we don't get any others. But

the thought of living on this stuff 'til a rescue ship arrives. . . ."

But as Doag stared at the brown paste, Bell, the geologist, swayed to his knees.

"Food!" he croaked. "Food!" Plunging both hands into the sticky mess he began to cram it into his mouth.

"Easy! Easy!" The Jovian held him back. "You'll kill yourself if you eat too much! Guess the stuff's edible, then."

"Edible!" Bell licked his fingers. "It's all we've had for the past two weeks. Until the wood and paper ran out, and we had no more carbon. And this is better because it's got grease in it."

"Then . . . then we're okay!" Vallard watched Doag feed the other members of the crew and his spirits began to rise. "Enough oil there to last us until a rescue party arrives! More than enough! And what a story we'll have! A story that no one. . . ."

"Will believe," Fowler finished ironically. He drew a sheaf of notes from his pocket, tossed them into the synthesizer. "Just . . . more carbon!"

"What?" Vallard exploded. "You mean you're not going to write that monograph? The most remarkable treatise on early Plutonian culture ever to be written? Why, you'd be hailed as the greatest archaeologist. . . ."

"The greatest liar, you mean!" Fowler stared bitterly out at the bleak plain. "This is the hard, matter-of-fact 26th century, Vallard! People know that such things as time-cones, anti-gravity beams, and force shields are impossible. If the time-cone hadn't been wrecked, then . . . ah, then. . . ." he paused, eyes barren.

"What proof have we? A shattered transparent cone of some sort . . . a curious memento of a lost civilization. Some brilliant professor will write a treatise to prove it was a prehistoric gas-range, I'm sure! Then we have a couple of bodies, preserved by some strange embalming process, or maybe the cold. A force-ray gun, probably found in the ruins. Do they prove we travelled time? These men here in the ship believed that we went out in search of carbon. A heroic attempt. After days of wandering about the icy plain we found an old oil deposit not far from the ship. Pure bull luck. Maybe we'll get medals for it. . . ."

"You're a chemist of some note, Vallard. Doag and I have reputations as archaeologists. How long do you think we'd have our reputations if we showed up with a yarn about time-travel? I can hear them now. 'Poor old Doag. Mind gone. Privations, hunger, did it.' Or, 'Fowler always was queer. Shame he's gone completely off his rocker.' You see? If nothing else, they'll claim it was hallucinations while wandering about the ice in search of a carbon base. One of the science-fiction magazines might take the yarn, but as a scientific monograph. . . ." Fowler laughed harshly. "Forget it, Vallard, if you don't want to wind up in a nice, quiet room. You too, Doag. That's the best way. Just forget it. Hallucinations, that's all."

Vallard stared at the little archaeoligst. Forget it? Forget the great city of the past, the Scientists, the physically-evolved Zacites . . . the Day of the Comet? Forget Tarn, Amnor . . . Iayleh?

Doag, feeding the skeleton figures on the control-room floor, nodded gravely.

"Fowler is right," he said. "They would laugh . . . or call us insane. We on Jupiter have a saying that, "There is no stupidity like that of a wise man asked to believe something new.' "

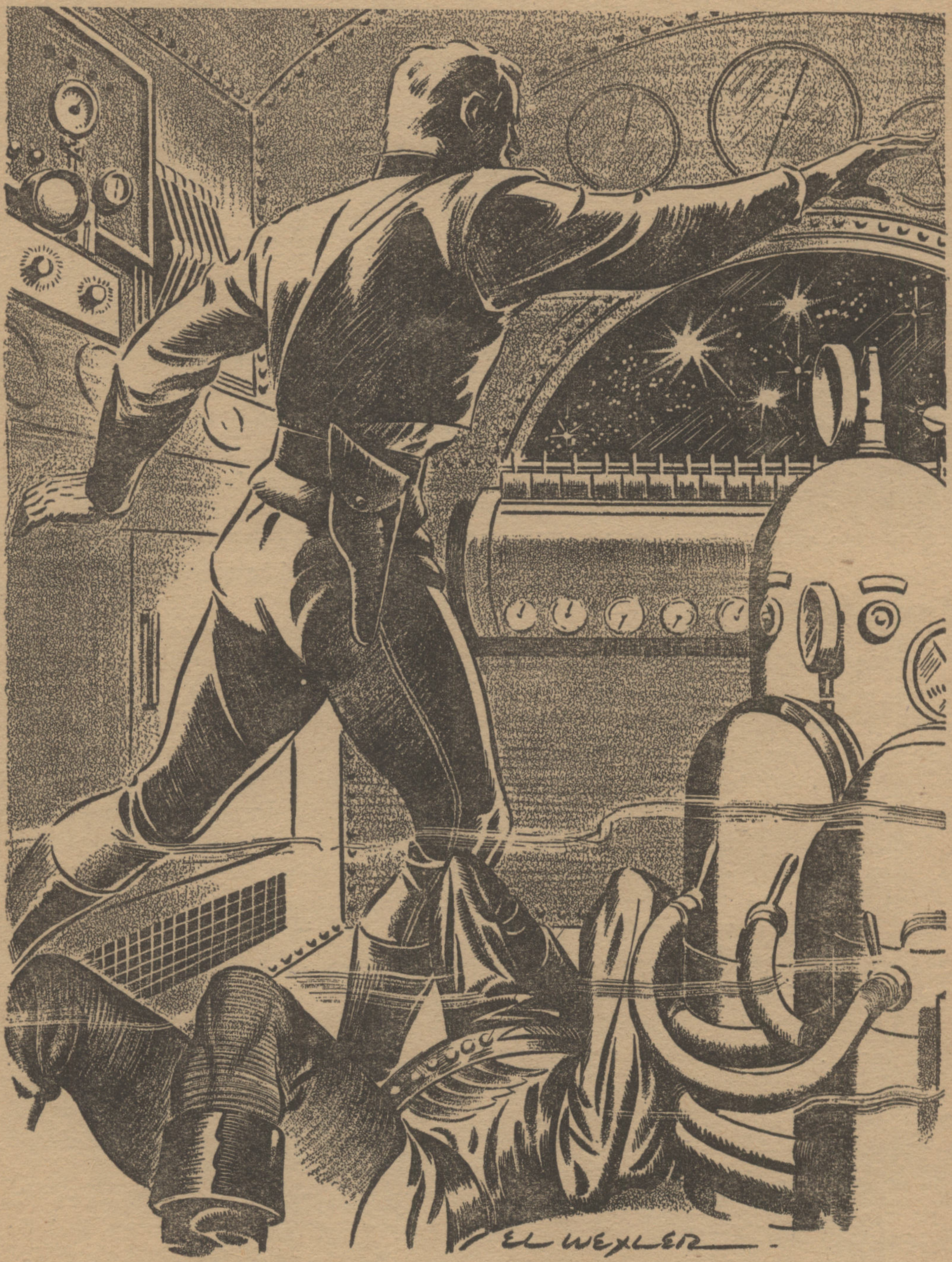
"Say, you fellows," Bell, the geologist raised himself on one elbow. "What's all this talk about the past, and force-shields, and anti-gravity beams?"

"Nothing." Fowler's smile was like alum. "Just hallucinations we had out there!"

THE END

THE TIMELESS ONES

Precisely calculated, the crew of the *Faraday* had one chance in thirty-seven of returning safely to Earth. But even that chance grew smaller when they shipped a new hand, a dead space pioneer, whose body was inhabited by—*The Timeless One!*



GRANT CARSON, his eyes to the course 'scope in the navigation cubby of the *Faraday,* grunted pessimistically as cross hairs centered upon a tiny globe near the distant sun.

"Ten to one we don't make it," he muttered as though to himself. "Ten to one we're left drifting in the asteroid belt."

He shot a glance at the hunched figure of William Van Lune, bent over his eternal notes, his pencil even now scurrying among mathematical symbols. A lean,

By HARRY WALTON

dour chap, the Geodetic Survey man. Even the loss of most of their fuel hadn't cracked him into the semblance of a plain human being.

The loss of that fuel, due to a leaking tank, was stacking the odds against them now. Most of what had remained had gone to push the ship, via the intergalactic polarizer, back to the fringes of the solar system. They'd had to depolarize then, or risk overshooting the system entirely. And now, depolarized as they were, they would have to cover the huge planetary gap between Pluto's orbit and Earth at ordinary rocket speed—which meant running out of fuel by the time they touched Mars' orbit.

Even if Carson could nurse the ship along as far as Earth, there was the problem of braking down for a landing. Already the gauge needles stood close to the red sectors which marked the minimum fuel reserve needed. With less, you couldn't brake down to a safe speed. Your ship fell, and air friction turned it into a glowing meteor. He'd seen one come down that way once, when the ignitors failed.

"Our chances," announced Van Lune coldly, "are not ten to one. Far from it. If we are lucky enough to require blasts only for navigation corrections, we have one chance in thirty-seven of reaching earth with sufficient braking power. And that's only if nothing happens—"

Carson shrugged annoyance. A fine pal for a Betelguese cruise, for the fix they were in right now. Worked the thing out for you, so that you didn't hope for too much—the miracle that might, for example, land them right side up on the green earth instead of as a mass of fused oxides that had long since ceased being a ship. If nothing happened!

Carson stiffened suddenly to a subtle change in the tempo of the driving blasts, every space-attuned faculty alert to disaster. The ship was pounding, labouring against resistance. He turned and leaped frantically for the controls—and that instant the *Faraday* yawed violently, as though it had grazed a rounded body. As Carson clutched wildly for support, a second and more severe lurch threw him heavily. The Faraday whipped her tail about and plunged off-course with a terrific jerk that left her vibrating from keel to deck plates with a sickening oscillation.

Slowly Carson rose above the mists of insensibility. He had been stunned, rather than unconscious, and his eyes first met those of Van Lune, glaring accusingly from across the cabin. The navigator stumbled to his feet, surprised to find the ship apparently motionless now. Incredulously he read the instruments. Meteor detector and gravity indicator showed nothing. According to dials, the Faraday hung free and alone in space—motionless, if the space-inductor speedometer was to be believed. But those instruments were notoriously fragile and undependable. Carson peered through the course 'scope for a check reading, and, staring, swung the focus of the instrument in a quick, all-embracing arc.

"Blotto!" he muttered unbelievingly. "We're blotto!"

The word—long since devoid of any humorous implication, brought Van Lune into the control cubby. But the dour surveyor stepped forward, to the quartzite visi-port set in the nose of the ship. Carson joined him there. Van Lune said nothing, and thus gave tacit consent to Carson's muttered statement. For to be blotto means, in space parlance, to be utterly lost without the means of taking bearings.

THE *Faraday* hung in a featureless void, a nebulous, sullen violet twilight, a substanceless haze terrifyingly unlike the familiar star-dotted heavens that were the ship's element. Space itself seemed shrunken, collapsed into this purple lu-

minescence that was not space, but a shriveled sphere of nothingness, without circumference, without content, whose extent might be a hundred yards—or a hundred parsecs.

Were they moving, or motionless? Were they rushing toward finite boundaries, or swinging in an invisible orbit about an unseen body? The questions were unanswerable, meaningless here where the familiar stellar field had ceased to exist.

It was Van Lune who first broke that silence. His eyes were bright—and not with fear, Carson suddenly knew. Van Lune was strangely aroused.

"You'll try power, of course?"

Carson nodded. What man, faced with that nothingness outside the port, wouldn't try to jerk his ship out of it? Almost unconsciously his hands had gripped the controls. Overload relays had cut off the driving blasts when the *Faraday* first swerved. Now he cut in again, the thrum of them earthy, confident. Orange flame, invisible from here, must be flaring from the stern. The faint roar of blazing gas traveled from the combustion tubes through the structure of the ship and trembled on the air in the control cubby. From force of habit both men grasped handrails to brace themselves against acceleration.

But the expected forward thrust of the ship failed to come. Slowly Carson fed the blasts more gas, until the roar of automically-fired fuel reverberated full and deep as the tone of an enormous organ. The *Faraday* quivered under forces sufficient to lift her even against the tremendous gravitation of Jupiter—and still inertia needles remained motionless, and the void outside unaltered. He flung the controls back. All vibration, all sound, came to an end.

"The only time I ever used full blast before," he said, "we were strapped in—and the straps broke. Now it's as though we're in a gravity trap. But if so, why don't the instruments show it?"

Van Lune turned upon him, his dour face curiously altered. For the first time Carson realized that the surveyor was a comparatively young man, little older than he. Van Lune's eyes were sparkling; they were fires of astonishing energy instead of the almost expressionless orbs Carson had known.

"There's one possible explanation. We've slipped into a space groove."

"Space groove!" snorted Carson.

"An unscientific name, but descriptive. They have accounted for many missing ships. Vornhall was swept away in one a couple of centuries ago. His log observations agree with this." Van Lune jerked a thumb toward the visi-port.

"But Vornhall's ship was found, undamaged."

"And empty," added Van Lune. "Vornhall wasn't aboard. His pet Tcizur was, but the bird was dead and queerly so. It's internal organs had been transposed to the outside of its body, its external ones presumably inside. It had been literally turned inside out. Vornhall himself must have left the ship; his space suit was missing. His last log entry stated that the controls were useless, instruments out of order, and all signs of the solar system wiped out by a luminous purple fog."

Carson whistled softly. "Okay—what *is* a space groove?"

"Half myth, half hypothesis—based on the assumption that there is no absolute time flow, that time may appear to be moving forward from our standpoint, yet may seem to be moving backward when viewed from another co-ordinate system, just as a ship may seem to one observer on earth to be flying at high speed, whereas to a second observer in a faster ship it might appear to be drifting backward.

"But time forms part of the frame of space-time in which events take place. The gravitational field or track of a sun or planet, for instance, is impressed upon

three space-dimensions and a time-vector at right angles thereto. When the body is gone the impressed portions of these vectors separate and the field disappears. Actually it's torn into two parts, and the chance that these will ever again coincide is remote.

"NEVERTHELESS the chance exists, and when such impressed regions coincide the result is a synthetic field moving tangent to space-time and having only a momentary existence at any given point in normal space. It's gravitation self-existent, a self-enclosed force. The indicator can't show it because it's equal all about us. We're not dragged along by gravity; we're imprisoned *in* it and must move with it."

"Double stars of Hesperides!" gasped Carson. "You're telling me we're caught by a—a gravity-ghost?"

"By the attraction of a body which may no longer even exist, and is certainly nowhere near us. The rocket engines can have no effect. In this artificial, abnormal region action and reaction are no longer equal and opposite. Power means nothing. Physical energy is futile against the very flow of time itself."

For a time both men were silent, staring wordlessly from the visi-port.

"The intergalactic polarizer!" suggested Van Lune suddenly. "Its field polarizes matter—perhaps it can rotate the ship back into normal space-time."

"Daren't try it," grunted Carson. "Polarize us in a gravitational field and there won't be enough ship left to bounce an electron on. No good—"

Van Lune's fingers clawed at his sleeve. The surveyor was staring ahead with a terrible intensity. Carson, following that glance, shuddered as he saw—

Something in the infinite depths of the void at last. Something growing in size, expanding from a pinpoint to a dot, from a dot to a globe, swelling with incredible swiftness into a flaming white sphere dead ahead on their unalterable course..

"A star!" groaned Carson. "We *have* to try the intergalactic."

Van Lune nodded. Carson's fingers tightened upon the polarization controls. Only too well he knew the certain effects of polarization in a powerful gravitational field—a shattering of the very atoms composing the ship and their own bodies. Death—but swift and merciful compared to the living cremation ahead. What little choice there was lay this way.

Yet his hands hesitated upon the levers. A warning hope, first dimly comprehended, grew clearer as he waited. Slender it was, yet irresistible. Deliberately he relocked the controls.

"Suppose," he said slowly, "that what we see is only a re-creation of light, produced in the same way as the space-groove. *What if there is nothing there?*"

Startled, Van Lune nodded after a moment, and Carson knew that he had accepted hope and hazard alike. Both turned back to the port, fascinated in the very face of death.

AMAZINGLY huge the great sphere grew, hot violet-white, its corona a wreath of clear lightnings against the purple murk. Carson swung sun filters before the visi-port, dimming the brilliance of the sight but not its splendor. The glory of this stellar giant—perhaps long since cold and dead—was an incredibly soul-stirring thing. It overspread all space; its immense presence thrust back the void. In its blinding heart writhed serpents of living flame, restless, terrifyingly beautiful. For an instant, it seemed to Carson, he and Van Lune looked into the very womb of light.

The *Faraday* sped on, was engulfed in all-pervading brilliance. The walls of the control cubby glowed eerily with it. And suddenly, with a soundless rush, that radiant effulgence vanished.

Half blinded, they were minutes recovering their sight, ordering their thoughts after the expectancy of death that had been upon them.

"A chance in a million," breathed Van Lune. "A slight shift in the vectors and it would have been the infra-red that was reproduced, instead of the visible and high frequency range. We could have been burned to a cinder by radiation that wasn't even visible! We—"

He broke off abruptly. Carson felt his skin crawl, saw the hairs on Van Lune's fist stir, rise, and lie flat back as in a high wind. A whisper seemed to start about them, thin and faint, but increasing in volume. It grew to a squeal, to a shriek. The hull vibrated with it. Their bodies shook agonizingly to it. It was part of them, part of the ship. It echoed from every strut and rivet, and strummed upon every single bone and nerve in their aching bodies. It grew to a shrill, piercing scream, amplified a thousand fold by the narrow confines of the ship. Vibration flayed them.

The *Faraday* shuddered to resistance, seemed to plough with slackening speed into an elastic substance that absorbed its motion like an infinitely long steel spring. Carson, standing free, did not even teeter on his feet. He had the sensation of stumbling across a threshold, and being unable to fall because the room beyond was filled with a yielding yet resilient substance.

The shrieking, incredibly shrill, passed away. Agonizing vibration ceased. Carson felt utterly exhausted. His feet, when he first tried to move, were numb, nerveless clumps. Slowly strength flowed back to him, yet when he moved to swing back the sun filters from the port, no amount of effort would propel his aching body at more than a sluggish crawl. The very air felt heavy, viscid as cold oil. It plucked at his clothing, dragged at his heels.

Beyond the port, when the sun screens were shifted, appeared the same featureless purple vacuity. The *Faraday's* lights, hastily switched on, bored a short tunnel of foggy light into the nothingness beyond, revealing nothing.

"Something stopped us," said Carson slowly. Words were difficult; it was drudgery to speak. "We hit something."

He clumsily dragged forth two vacuum suits. They had to help each other into them, soon learning that a deliberate slowness made movement easier. By silent consent they entered the air lock, and after it had been emptied of air crawled like sleepy flies out upon the silvery skin of the *Faraday*.

Here was only the same void they had seen through the port. They clambered over the hull and peered vainly through the purple mist. Their radio communicators proved useless. Carson connected their suits with a telephone line.

"We're still—blotto." He flung an arm out in a strained gesture. "What is this? And where—?"

"THIS purple tinge—it isn't real, actual," responded Van Lune slowly. "Light isn't normal to this region. The sensation may be produced by some other property, or by sheer eye-fatigue, by trying to see where there is nothing—absolutely nothing—to excite the retina. As for where we are, remember the old poser —'if space-time is finite, what's beyond it?'— and remember that the vector of a space groove must be tangent to space-time."

"Then we're—beyond space-time?"

"In timeless, absolute space—the universal continuum in which space-time is a finite bubble, a rarefaction of absolute space, which must be far denser. We felt its resistance inside the ship as well as upon the ship itself. The sound was a by-product of that resistance. And somewhere that dead Tcizur fits in—if we only knew how."

Carson stifled a mirthless laugh. There was something in this unending vista of purple, blind non-darkness to grate on a man's nerves beyond endurance.

What was moving out there?

His eyes groped for light, thwarted by a mockery of purple shadows commingling in absurd shapes, flowing, melting and reforming.

The thing was approaching, a moving patch of purple-grey solidifying in outline as it came nearer the *Faraday*. Behind it lanced a thin yellow flame.

"Shades of Pluto!" gasped Carson. "It's somebody in a space suit, with an old fashioned repulsion gun."

The man floated up to them, braking himself expertly to a halt with his outmoded repulsion pistol. An ancient space suit bulked awkwardly about him. The tiny face-glass hid most of his face, but the eyes, magnified to unusual prominence by the glass, were courageous yet eloquent of suffering. His suit had no communication sockets, and the three stood awkwardly silent until Carson led the way to the air lock. Once inside the ship, all removed their helmets. The stranger stared wonderingly about him at the livable, compact cabin.

"It is—so confusing," he murmured apologetically. "I owe you my life—but first let me state my name. I am Randolph Vornhall, citizen first rank, of the Germanic State."

"What?" exploded Carson, and subsided under a glance from Van Lune. Vornhall looked from one to the other, obviously ill at ease.

"You are earthmen, surely? This ship —is strange."

"We are earthmen," said Van Lune, "who have heard of you and are glad to be of service. May we ask how long you have been marooned here?"

Vornhall frowned. "I can only guess. My oxygen tank is almost empty, and its full capacity is twelve hours. Let us say I have been here ten hours." His speech was the precise, hesitant English in international use two centuries before.

"But you have guessed the nature of this region?" asked Van Lune. "You realize this is absolute space—*timeless space?*"

Vornhall sprang to his feet, eyes blazing, his figure tense and threatening as a taut bow. Carson's hand went to his beam pistol, but Van Lune stepped in front of him, his hands at his side, speaking calmly.

Vornhall sank down on a chair, his face buried in his hands. Carson went to the ship's galley and returned with a cup of steaming broth. Vornhall looked up gratefully as the rich aroma roused him. Almost greedily he drank the scalding stuff.

"Forgive me. They taunted me with that—the Timeless Ones. I have been close to madness. But how long—?"

"LONGER than you think," responded Van Lune gently. "Remember that the time dimension does not exist here except as the product of your own infinitesimal mass. The Germanic State was dissolved almost two hundred years ago."

"Two hundred years," whispered Vornhall.

"In reality, so far as you are concerned, ten hours only," corrected Van Lune softly. "But, tell me, who are the Timeless Ones?"

"Intelligent inhabitants of this region. They are utterly unlike us, bodiless, physical only as light is physical."

"Intelligent? Then you can communicate with them?"

"By thought only, and then only as they will. Mostly they seek knowledge of our universe, which they know of mathematically, in the abstract, but dare not penetrate in their own form. They also have an abstract conception of time. Perhaps because I come from a time-world they chose to call themselves, in answer to my questions, the Timeless Ones."

"How did you lose your ship?" Carson asked.

"When I felt it brought to a stop, I went outside. Two of these creatures appeared and forced me away from the ship. A third settled upon it and moved it off."

"But how did you find us?" asked Van Lune sharply. "What told you there was a ship here?"

Vornhall paled. "I was impelled to move in this direction—perhaps by the Timeless Ones themselves. They would sense your presence immediately by the disturbance your ship caused. If they know of it, we are in danger."

"Only one thing to do," snapped Carson. "We'll try the polarizer. If that doesn't work, we're done."

Vornhall rose nervously, the ridiculous old space suit creaking with every move. The others doffed theirs, for it was now plain that only within the ship were they safe—if there.

"They will come," murmured Vornhall. "They are tremendously curious. They will surely come."

Van Lune, in the course of stowing the suits away, paused in mid-stride to stare curiously at a ceiling corner of the cabin.

"Carson!" he roared suddenly.

The navigator followed Van Lune's glance. A scarcely visible aura, like the charge on the plate of a vacuum tube, shimmered over the burnished metal of the ceiling plates.

"The Timeless Ones!" shouted Vornhall.

A FORMLESS, swirling mist, sapphire blue and bristling with myriad brush-like sparks, detached itself from the hull plates. An electrical phantom, it moved majestically through space. There was no suggestion of a body or form, no sense organs. Yet the thing was not blind.

Rather, Carson felt, it was all eyes—the living shapelessness of its ears and nerves and brain, of an alchemy alien to man. For a few seconds it drifted, then with disconcerting suddenness dropped.

At once Carson felt a mental probing, a driving and wilful curiosity. With all the strength of his own will he resisted it, and triumphantly felt it retreat, baffled. Super-being though it might be, it could not enter his consciousness while he remained on guard. Van Lune, he saw, also resisted that mental attack. But Vornhall was already staring at the thing with a cringing hopelessness. Plainly fear and the mental stress he had undergone, as well as his former subjection to the Timeless Ones, had rendered him helpless.

Carson moved toward him, although with no idea how he might aid him. But the thing bristled at that. A tendril of prickling, cold-blue flame lashed out, caressed the sleeve of Carson's shirt, stinging the flesh beneath with a thousand fiery darts. Muscles bunched in agony, he jerked away. The flaming lash followed, deliberately licked his throat and chest. Pain lanced through and focussed like a burning spark within. He felt it move, knew then that it could touch his heart and still its beat as one stills a vibrating reed. The thing could kill!

Another flame lashed out toward Van Lune, and under threat of those electric whips both men retreated to the control compartment. When they had entered it flame licked the door, which closed of itself.

"Vornhall—in there alone with it!" grated Carson. "The devilish thing will—"

From the main cabin came a soft, dull thud—the sound of a man's body falling under the ship's slight artificial gravity. Carson ripped the door open and rushed out, Van Lune close behind him. Vornhall lay prone. The navigator ripped open the space suit and listened for a heartbeat. There was none.

"Dead!" His voice choked with helpless rage. "Dead—not ten minutes after he reached us."

He and Van Lune lifted the body into a bunk and removed the cumbersome space suit. There was a slim chance that artificial respiration might renew the heart action, since Vornhall had, so far as could be ascertained, suffered no external injury. But as Carson set about the task the Timeless One, hovering near, darted threateningly forward. Its meaning would have been plain even without the wordless, imperative command that beat in upon his consciousness.

They were not to revive Vornhall! Instead, Carson understood, they were to start the ship moving. Again and again the order was given, at last with a threatening overtone. And, Carson knew, the creature had the power to enforce its commands.

To disobey now would gain them nothing but a relentless punishment. He nodded to Van Lune, and they returned to the control cubby. Carson started the engines. The ship edged forward. Immediately began that plucking, nerve-shattering vibration which accompanied their plunge into absolute space.

Where were they going? To some gathering place of the Timeless Ones? Could there be such a thing as a city, a governing center, in this region?

He watched the useless instruments critically. Better that way—better not to think. Thinking was making him dizzy. Dials and needles blurred ridiculously before his eyes. His hands on the instrument panel shimmered with a strange semi-transparency that was vaguely familiar. But the torturing vibration which had been part of their motion was completely gone.

"Polarization!" he shouted. "The thing has polarized us."

Without waiting for Van Lune's answer he tore the cubby door open and rushed

into the cabin. The Timeless One was nowhere to be seen. But Vornhall's body, erect, alight with the weird aura of polarization, walked awkwardly toward him.

VORNHALL'S body! For this was not Vornhall, this blazing-eyed automaton, this ghoulishly resurrected corpse! In a flash of comprehension Carson knew why Vornhall had been killed, not by a fatal wound, but by a delicate stoppage of the heart—in order to leave his body intact for the creature which now tenanted it—the Timeless One.

A gout of fury, hot and heedless, seemed to burst in Carson's skull. He flung himself forward, obsessed with the desire to choke the breath from this thing of living death, to cast out the light of unholy life that blazed in its eyes.

The thing raised its hand—Vornhall's hand. From outstretched finger tips a blue-white trident of flame leaped hungrily at Carson, drawing red welts where it struck. He shrieked with the pain of it, but with the agony came also a return of sanity. He retreated again to the control cubby, almost colliding with Van Lune, who led him forcibly to the visi-port.

"This isn't ordinary polarization!" the surveyor shouted. "It's three-dimensional, rotating the entire atomic field. Look!"

The quartz bullseye of the port, blurring vision with the haze of polarization, was no longer a dead violet, but dark with a soft, deep blackness in which swam hazy pinpoints of light. Carson's pulse leaped. There was something blessedly familiar about that constellation.

"Ursa Major!" he muttered. "It *is* Ursa Major—back in space time." He swung the ship through an angle. The earth, large, blue-green, hung suspended before them. Sunlight glinted obliquely from the bullseye. "We can land now. We've fuel enough to make it, since we didn't have to use any coming in from Pluto's orbit—"

As though in confirmation came a command from the thing in the cabin, wordless, significant. They were to proceed to their own world, to land as usual. With the order came a sharp decrease in polarization, until the *Faraday* was normal. Quickly Carson told Van Lune of what had happened in the cabin, of the ghastly resurrection of Vornhall's body.

"And you want to land," interjected Van Lune cuttingly, "with *that* on board?"

"My God!" whispered Carson. "That's what it wants! Vornhall said they were curious, that they had a conception of space-time. Their capturing him, sending his ship back, and now us—with one of them on board—are all part of the same plan. But why—?"

"Why?" said Van Lune harshly. "Because this is a scout for the rest. Can you imagine it on earth, in Vornhall's body—manlike but inhuman, merciless, master of our kind? It could commandeer ships, men, equipment to carry it back—and to return with others of its damnable breed. The solar empire would be their laboratory—if we land."

Carson stared at him, wondering at the grim, cold courage of the man—and offered his hand. Van Lune took it firmly, sealing a compact of death—that the *Faraday* would never land on earth while the Timeless One was aboard.

And Carson, setting the course, aimed the nose of the ship apparently for the blue-green planet—but with a slight deviation that would carry it past and into the yellow-white maw of the sun.

"If we weren't so helpless—" muttered Van Lune. "If there were some weapon to use against it. But we don't even know the physical nature of the thing—only that, according to Vornhall, it cannot enter space-time in its normal state. That state certainly is not atomic. Electronic? Even electrons—even positrons, for a limited time—*can* exist in

space-time disassociated from matter."

"But not together!" Carson whirled excitedly. "It may consist of both—electrons and positrons, which can't exist side-by-side in space-time because they cancel each other electrically, but can in absolute space—"

"—because of its non-curvature," interjected Van Lune. "It's possible! Then to enter space-time they'd have to superimpose themselves upon normal atoms. The Timeless One has done that—with Vornhall's body, which must carry a tremendous surplus of positrons and electrons. Let those destroy each other, and the Timeless One is—killed."

But how, Carson wondered, could the annihilation of these particles be brought about? An ionization gun such as earth's weather control stations used to discharge dangerous thunder clouds might do the work—but that was mere fantastic, wishful thinking.

IONIZATION! Here in space, out from the sheltering envelope of earth's atmosphere, there was a powerful ionization force always present. The ship was screened from it now by an electrical field, so that one forgot the very presence of those deadly cosmic rays that had once played havoc with human life in the space lanes. But the cosmic ray screens could be cut—

"It might work!" he breathed. "Lord, when we open the screens out here the rays will jack up air conductivity several thousand times. And *it* now thinks air non-conductive."

He turned to Van Lune, who was staring uncomprehendingly.

"We cut the screens, and ionization practically short-circuits the Timeless One. If we're right—. Of course we'll be burned—cosmic rays are worse than radium, if you're unshielded for long."

"Try it!" said Van Lune. "It's worth any risk—"

Carson went to the panelboard. A sudden shout from Van Lune swung him about even as he reached for the switches. The cubby door flung inward with shattering force. Framed in the opening stood the thing that had been Vornhall, understanding in its fiery eyes—and fear also. It had listened, by what super-senses could only be guessed.

It knew—

Those blazing eyes sought Carson. A hand jerked up, sparks jetting from outstretched fingers, blue-white, murderous. He was trapped between the creature and the panelboard at his back, unable to retreat. A slender, crackling arc struck his shoulder, drew a scream from him as it seared skin and flesh. It was the first and weakest. The thing was closer now—the next would be a bolt of hot white lightning—of instant death.

Through nightmare mists he saw Van Lune rip the emergency visi-port cover from its wall clamps, saw him charge the Timeless One with gallant, reckless courage, holding the cover before him as a shield, saw it turn cherry-red in Van Lune's hands as snarling arcs splashed against it, saw Van Lune himself crumple senseless to the floor before that irresistible electrical barrage.

Carson saw the Timeless One, victorious, turn to hurl its bolts again at him. Frozen by what had gone before, he goaded himself now into desperate action, knowing that his life—perhaps the life of all earth—depended upon speed. His fingers hooked about the screen switches, jerked them open. He flung himself headlong the same instant. Where he had stood flames impinged, melting the panelboard like so much wax.

Nor had he yet escaped. The thing had only to direct its bolts downward. He kicked out backward, smashed his shoulders against Vornhall's legs, felt the jarring shock of a high tension current as he hurtled past.

He was free of the trap, but found no escape from the cubby itself. The thing held the doorway, Vornhall's body swaying, blurry before Carson's pain-dimmed eyes. Upon it gathered a spinning coruscation, a restless mosaic of light flickering from spot to spot. And abruptly, amazingly, the body buckled, sprawled inert upon the floor plates.

HIS wound a spreading agony, Carson clung to the control housing and stared at the prostrate body. A strangeness there—a difference. About the head formed a sphere of opaque, softly glowing mist. It swelled, lifted as though tugging to be away. The luminous streamer connecting it with the head thinned, snapped soundlessly asunder. The sphere floated free, a tenuous, spinning globe of energy. Sluggishly it rose to the ceiling plates—and there burst into blinding brilliance that lit the control cubby with its stark glare.

Carson flung an arm before his eyes to shield them from that harsh radiance. The cosmic rays had done their work, and the Timeless One, fighting the destructive attraction of its component parts, had infused electrons and positrons with a temporary energy of motion, creating a curious, almost massless form of matter. But the thing's strength was failing; already the novel and abnormal structure was breaking down. This radiation was the result of the annihilation of electrons and positrons—visible light, soft and hard gamma rays—and what others could only be guessed.

What others? For with a dread hopelessness Carson saw that the ceiling plates now shared that self-consuming brilliance. Directly above the globe they were mottled, pock-marked with a cancer of disintegration. Even in death the Timeless One was striking a last fatal blow against the man things that had defied it!

In that taut silence arose a faint, ominous hissing of escaping air. It would become a rushing blast as the gap in the plates widened under that blasting radiation. Carson shot another glance at the sphere, smaller, yet more brilliant, more fiercely effulgent in its death throes. Would it dissipate itself before the *Faraday* was emptied of air—and life? Already he felt a tightening of the ear drums as the pressure fell.

How could he speed that disintegration? His eyes fell upon a large wrench kept here for periodic tightening of certain parts. Upon a desperate impulse he ripped it from its rack and hurled it full into the blinding glare of the globe.

It missed by inches. The hiss of air was louder. He was bleeding from nose and ears with the drop in pressure, and his eyeballs were a flaming agony from staring into that ghastly light. Despairingly he searched for another missile. If he could hit the thing squarely, it might vanish in an instant burst of uncontrolled energy instead of the deadly, calculated bombardment of disintegration that was consuming the hull plates. But he found nothing else. Equipment cannot be left loose in a space ship, and everything within reach was literally riveted down. Given time, he could have ripped something free. But minutes—even seconds—were precious as life.

He bent, jerked a slide fastener, and frantically worked one foot out of its clumsy space-boot. Metal sheathed and built to withstand pressure, it was a massive thing.

He threw it, watched it hurtle toward the globe, penetrate it, and for an instant hang suspended within, veiled by very brilliance. But an instant only. Then there burst forth a glare of radiation as terrible as it was brief—an explosion of energy almost physical in its impact.

Blinded, lungs bursting for air, Carson staggered to the door. The *Faraday's*

atmosphere was escaping at a furious rate now. His senses were leaving him, his skull pounding, strange bursts of light before his sightless eyes. Blindly he grasped Van Lune's body and dragged it into the main cabin. He stumbled over Vornhall's in the doorway and unthinkingly pulled that also to safety. Then he closed the connecting door, pulled the safety dogs pressure-tight, and slipped into the soft darkness of oblivion.

VAN LUNE it was who, when Carson awoke to consciousness, held a cup of stimulant to his lips. One of Van Lune's hands was heavily bandaged. Carson's own skull felt like a bruised eggshell, but his shoulder wound no longer pained him, and he saw that it also was dressed.

Gladly he drank, unwilling for the moment to speak. He was happy to see Van Lune alive, and realized that the metal port cover had saved both their lives, short-circuiting most of those deadly arcs so that the surveyor had been only stunned. He was glad that the weird creature from absolute space had been destroyed—

But had it been? Carson rose on an elbow and stared bitterly at the far end of the cabin, at the upright figure of Vornhall. They had lost, then! The Timeless One lived!

"You were out a long time," said Van Lune. "We've been waiting for you to land."

"Land?" Carson looked significantly across the cabin, and was astonished to see the surveyor nod. He was still more amazed when Vornhall approached, not jerkily, but with the casual movements of a normal human being. Vornhall, the man!

"The Timeless One had to start his heart beating again to make use of his body," Van Lune explained, "and left it so when your cosmic ray barrage drove it out. I've repaired the board and set the screens again, by the way."

"I am glad to be alive," said Vornhall in his precise English. "Today's world must be a fascinating one."

"Today's?" blurted Carson. Memory struck him with bitter force. "We can't even know what year this is. You're forgetting that we were out there—in absolute space, where you, Vornhall, lived two centuries—at least a half hour by our chronometer."

Vornhall nodded gravely. "It is so. And if the same ratio applies as did in my case, ten years have meanwhile passed on earth." Carson groaned.

"Ten years! There was a girl—"

"There still is," interrupted Van Lune, with a rare smile. "Vornhall was alone, but the presence of the ship gave us a mass field tremendously greater than that of a single man. That field gave us a certain small time dimension, but a much greater one than Vornhall had. Our half hour was the equivalent of not more than a few days, Earth time. What I cannot understand, even now, is how the pet Tcizur was killed in Vornhill's ship, which the Timeless Ones returned to space-time."

Carson grinned with relief. "I can clear that up. They polarized the ship, of course, same as they did ours. But they couldn't polarize the Tcizur. It insulated itself."

"You're crazy!" announced Van Lune.

"But I'm right. Any spaceman knows that air will polarize, but won't transmit polarization. The Tcizur insulated itself because, being excited, it did what any bird would do. It flew wildly about *in the air*. Which reminds me that I'm anxious to breathe some real, untinned ozone myself," Carson finished, making for the control cubby, "and I'm going to land where there's plenty of it. Right on the good old green earth—"

THE END

OUTLAWS ON VENUS

Someone had been smuggling weapons to the natives, inciting them to rebellion against the Earth-government. And it was up to two weaponless traders to stop that someone.

By JOHN E. HARRY

JOHN STRAND panted to a stop in the narrow jungle trail. "Hold on, Westy," he growled to his companion. "Time for a breather." He dragged one khaki arm across his dripping forehead, and shook a damp lock of hair out of his eyes. Idly, he turned and sent an inquiring glance down the trail they'd just traveled. And just then two natives dog-

trotted into view around the last bend in the narrow path.

It took Strand only one glance to see that the pair were on his path, and he didn't stop to question his sudden certainty that they were out for blood. Each of them carried a cutlass that appeared to be Earth-made, and the killing lust was written hot on their faces. With a gasp, the trader grabbed for his Spre pistol, swinging at his hip.

The two Venusians saw him nearly as quickly as he sighted them, and with a howl from the leader charged down upon him, their cutlasses swinging high. Strand swept up his pistol, aimed, and fired in one flash of motion.

Now, a Spre gun works silently, by means of tightly beamed rays which can disintegrate solid lead at a distance of as much as three hundred yards. The second Venusian, therefore, heard nothing when Strand cut down the first one. His first intimation of trouble came when he tripped headlong over the leader, who sprawled in the path, headless. It took him a second to get to his feet again, and that second was his death. Mercilessly, John Strand beamed him down atop the first corpse. The trader smiled at him, a tight strained smile.

He stuck his pistol back in its synthetic plastic holster—leather was worthless in the humid Venusian air—and shook his head wonderingly. What could this attack mean? No mere attempt to kill him and Westy for their packs of trade goods, he was sure.

Westy Peters was staring, big-eyed, at the two natives and the trader. This was Westy's first trip "inside", and he looked scared by this sudden death.

"Wh-what were they up to, Jack?"

"Going to jump us, I guess," Strand grunted briefly. "Don't know why. Let's look them over."

The Venusians, however, were exactly like a thousand other such natives Strand had seen. Web toes, yellow skin, and abnormally developed chests. Their heads were gone, so Strand couldn't tell if he'd ever seen them before. Thick, brownish-red blood oozed from their stumped necks and dropped to the ground.

Westy Peters lost color. He sat down on his pack, staring sickly at the dripping blood.

"LET'S get out of here, Jack," he begged urgently, with a frightened glance at the green face of the jungle frowning on the narrow path. He clutched the butt of his Spre pistol with a nervous, spasmodic gesture. In spite of the mysterious menace that seemed to have picked them out for victims, Strand had to turn away to hide a grin. The kid probably wouldn't know how to use the gun if something did happen.

Strand's grin vanished, however, as he glanced back at the two sprawled forms in the path. He turned one of them over with the toe of his bush boot. The cutlass the fellow had been carrying clinked on a stone. Strand grunted and picked it up.

He weighed it in his palm and then, stepping to the side of the trail, cut down smartly on a branch of one of the tough little trees that stood there.

The branch crashed to the ground, cut through as easily as though it were made of cheese.

Strand grunted again. "Japanese made cutlass," he said, significantly turning to young Westy, who still sat on his pack eyeing the two native corpses.

Westy glanced up, his sick look changing to surprise. "I thought weapons couldn't be sold to natives," he said.

"They can't," answered Strand laconically. "Somebody smuggled these in. Let's pull out. There's something fishy here." He stuck the cutlass carelessly under a strap on his pack while Westy stood up, shouldering his load. Then they were off.

Strand took the lead, and set a smart pace, yet one which they could keep up all day if necessary. As they trotted on through the moist, enervating heat of Venus, he shook his head, puzzled. Why had those natives been on their trail? It could hardly be a personal matter. Were natives killing all traders coming in? Strand wiped his forehead again, suddenly feeling a bit chilly. If this was a general uprising, natives against Earthmen, he and Westy didn't have a chance to get out alive. But it might be only local trouble; Strand hoped so. The two traders, out after the Venusian herbs, were headed for the headwaters of the Greater Ogra. If the natives on the upper part of the river were quiet, they'd be safe. They'd slip back to Lebonelle somehow, given half a chance, once they had their packs full of valuable native herbs and fruits.

Jogging down the trail, the two traders made a strange pair. Strand was a veteran trader; huge and muscled; bronzed and toughened by his nomad's life. His bush uniform was of faded khaki, well-worn. Westy was only a kid, not yet filled out; lanky, knobby, white-skinned; with a brand-new uniform that hung awkwardly on his bony frame. Fate had thrown them together strangely; Strand found Westy, broke, discouraged, and hungry, on the streets of Lebonelle. He'd heard Venus was the land of opportunity and he'd spent almost his last cent on rocket fare to the American space-port. Strand sympathized—he'd been broke himself in strange corners of the System—and took the youngster along as helper on the trip he was making inside. With full packs, they were headed now for the rich trading country near the headwaters of the Greater Ogra, somewhere in the uplands which stood defiantly in front of Lebonelle.

The sun had long since given place to the magnificent bloody afterglow of Venus

when Strand called a halt for the night. They built no fire, for the sake of caution, but wolfed their concentrated emergency rations and guzzled long drinks of brackish water from their canteens.

"Take the first watch, kid," Strand yawned as darkness softened across the jungle. "Wake me in a couple of hours." They both rolled into tough plastic sleeping bags—necessary safeguard against the bloodthirsty insects of the night—and Strand flopped down in a clear spot ten feet or so off the trail. Westy propped himself against a tree and took up his watch.

STRAND was weary to the bones, and was asleep the instant he relaxed. No sooner had he dropped off, it seemed, than he felt a hand on his shoulder. A light sleeper of necessity, he came awake in an instant, to find Westy Peters holding his shoulder with one hand while he voiced a long sibilant warning to silence. "Look at the trail, Jack," he hissed urgently. He took his hand from Strand's shoulder and pointed.

Barely visible in the palest starglow, a long line of men passed down the trail, noiseless as ghosts.

Strand sat up with a grunt of amazement, and hurriedly loosened the drawstrings on his sleeping bag. He kicked it off as quietly as he could, and crawled ahead a bit for a better view of the strange procession. Westy rolled over beside him.

"How long've I been asleep?" Strand whispered, his lips close to the boy's ear.

"Little bit less than two hours," Westy hissed back. "That parade's been going by for about five minutes now."

"They're natives," observed Strand, who had been straining his eyes. "Tell by their chest development." He wriggled even closer to the trail. Westy lay where he was, watching the shadowy line of natives slip by under the stars. Strand was counting them, and timing himself with the luminous dial of a chronometer strapped to his wrist; trying to estimate their number. He kinked his brow, trying to figure out what this was all about.

Suddenly Westy Peters, behind him, caught his breath convulsively and sneezed, with a sound like a house falling down.

Strand stiffened in horror as the sneeze crashed out, abnormally loud in the sibilant quiet. Sensing that the line of natives had paused in their march, he held his breath, and cursed the luck which had made Westy sneeze just then. A brilliant flashlight someone was carrying snapped on from the black of the trail and swept across Strand and Westy where they lay, only a couple of steps away. Strand heard an order barked in Venusian, and, knowing he was discovered, jumped to his feet, clawing for the pistol at his hip.

A pair of burly Venusians leaped from their place in the line. One of them threw his arms about the trader, knocking the ray gun from his frantically clutching hand; the other fell on Westy.

The big native had grabbed him around the waist, leaving his hands free, and Strand smashed a wicked short-arm punch to the fellow's face. It was a crushing blow, but the hold on his waist held. The trader snapped his knee into the native's belly and twisted his body frantically, trying to break the hold. It only grew tighter. Strand's breathing became labored. He brought up his knee again, and a third time, hard as he could, but the native only tightened his hold.

The arms around his waist crushed his ribs until Strand felt sure they'd crack under the strain. Desperately he crashed another punch home to the native's face, without effect, and then tried to rabbit-punch; but another native, who had broken from the line, caught his arm. The pressure on Strand's chest became unbearable. With a "whoosh!" all the air went out of his lungs. He couldn't get his

breath again. The black background of the jungle seemed to explode into a million colored rockets, and Strand collapsed.

When he came to, he was lying in the trail, his limbs tied with some tough native vine. The Spre pistol was gone from his holster and his expensive watch from his wrist. The brilliant light, held by someone standing in the dark, was trained full on him, so that he could see nothing but its blinding glare.

There was a slight move beside him. "Jack! Are you all right?" came Westy's voice.

"They got you too, eh, kid?" growled Strand, rolling his head to see Westy lying aside of him, bound as he was. "I'm O. K. How about you?"

"I'm roughed up a little," admitted Westy.

Strand looked up as a man dressed in a bush uniform like his own stepped out from behind the searchlight.

"You're from Earth!" the trader cried accusingly. "What's all this rough stuff mean?"

THE strange Earthman smiled sardonically. "You don't know what this is?" he purred. "Well, well." He stood in the trail looking down at the two traders.

Slowly his face hardened.

"Come off it, detective!" he rasped, his face twisting in fury. "You're not fooling me!" His eyes bored into Strand's.

"We're not detectives, fellah," Strand growled back, his eyes never flinching. "And we still don't know what this is all about."

The stranger grinned mirthlessly. "I've had bands of natives wiping out every trader within a hundred miles for a week. Now don't tell me that you slipped through by accident." His teeth showed again. "And don't tell me you've never heard of Roger Clinton."

"Clinton the space-pirate?" gasped Westy, his eyes widening with unwilling recognition. "Is that who you are?"

"That's right," replied the stranger in his soft, menacing voice. He bowed mockingly. "Anything I can do for you?"

Westy only stared at him. Clinton shifted his attention back to Strand. "I suppose you know what an *olua* is, trader?" he continued, maliciously emphasizing the last word.

"Native religious dance," Strand answered mechanically, his mind whirling with the implication that the stranger's identity opened up. Clinton was a notorious pirate with a fleet of speedy spacecraft and a whole army of renegade Earthmen and Martians under him. More interplanetary shipments were lost to him than to accident. He was credited with dozens of murders. More than once his space fleet had gutted rich merchantmen under the nose of a convoy of ships-of-the-line groaning under their heavy proton-blast artillery. And he always escaped unhurt; he had the uncanny power of striking at exactly the right moment. Dead or alive, the governments of Earth offered rewards totaling fifty thousand dollars American for him. Strand couldn't imagine why he should be regimenting the low-intelligence, blood-thirsty Venusian natives, but the scheme was probably immense and certainly ominous enough. "Sure," Strand repeated, "an *olua* is a native religious dance. Why?"

Clinton grinned wickedly. "I'm glad you know," he murmured softly.

"Because that's what you and your pal are going to die of."

"What?" cried Strand.

"That's what I said," the smooth dark man in the bush uniform repeated. "You know an *olua's* no good unless there's a sacrifice or two. This one's going to have two. My natives will like that."

Strand twisted himself around, and looked straight up at the calm executioner standing there in the trail. "But why?"

he demanded hoarsely. "We're not detectives! I swear it!"

"I don't believe you, G-man," said Clinton negligently; he half-turned and barked an order that brought a couple of natives shuffling out from behind the searchlight. "It doesn't matter anyhow," he added inconsquentially over his shoulder. "You've seen too much." He stepped on out of the circle of light the hand torch threw; Strand heard him shout to some native to bring the traders' packs.

The two natives stepped forward; one of them shouldered Strand and the other picked up Westy. The searchlight snapped off and the thousands of natives, who must have been waiting quietly in the trail, took up their interrupted march again in almost perfect silence.

THE Venusian's shoulder was broad and bony. Strand was thrown across it carelessly, with his head hanging down across the native's back and his legs dangling in front; he was kept from tumbling off by an arm which the Venusian curled about his legs. Every swift, silent step the native took emphasized the discomfort of Strand's cramped position; the bony shoulder dug into his belly, his arms were tightly bound behind him, and the blood began to sing wildly in his head. The native jounced along unconcernedly, seemingly not at all troubled by Strand's weight, but the trader felt sure that he'd be cut in two by the sharp shoulder soon. Adding to his discomfort were the insects, which settled on him in droves. Strand could fairly feel the bites swell.

For a while he struggled with the vines on his wrists as the silent horde whispered along the jungle path. He twisted his wrists, he tugged, he cursed silently and sweated, but he got nowhere. He was bound with one of the high tensile-strength Venus-vines which neither tear nor stretch. Strand finally gave up and stopped trying to loosen himself. He was condemned to die, and he didn't want to die. But he could do nothing about it at present.

Strand would have sworn that he was jounced along that trail for days, with the blood pounding in his ears and his arms painfully strapped behind him. He kept himself oriented fairly well at first, since the natives were on a trail which he knew well; but after a couple of junctions he lost track of where he was going, since the silent mass of Venusians took to raw new trails unknown to him. They had been tramping for nearly an hour down a trail so narrow that dripping ferns brushed Strand's face on both sides, when the file of Venusians finally reached a clearing. The first Strand saw of it was the light from a fire, shreds of golden light high-lighting the path. The swinging legs of the native carrying him shut off the rest of the view.

Then the Venusian turned into the open space and threw the trader down roughly at the edge of the little clearing.

Strand blinked and looked around himself, surprised.

The clearing was only medium sized, not over a couple of hundred yards in diameter, and roughly circular. It was entirely free from bushes and trees. The queer way in which loose stones had been fused seemed to show that it had been carved out of the forest by the exhaust of a rocket ship. This conclusion was strengthened by the way the jungle frowned on it; the huge Venus-trees and fronded bushes marched defiantly up to the very edge of the cleared space; and on the edge of the clearing they were seared, as though by terrific heat.

In the very center of the clearing a great fire flung smoky black arms high into the air. The fire cast a rich ruddy glow over the whole clearing, and the circling trees were thrown into high orange relief against the purplish black of the sky.

THE clearing was half-filled now with gabbling natives, no longer silent, and more were filing in every minute. It seemed that something was due to happen. Strand cursed in amazement as he saw the cutlasses. Thousands of them, there must have been; one was swinging at each native's side. Cutlasses like those carried by the natives who'd been trailing them the afternoon before. Scattered here and there about the clearing were Earthmen in bush uniform, each with a deadly Spre pistol at his hip.

Westy had been carried in and thrown down beside Strand; now another native came with their packs, which he dropped carelessly nearby. The long line of natives, which Strand had imagined nearly exhausted, seemed to have no end; the Venusians continued to pour into the clearing until it was nearly filled with them. They knotted so close around the fire, as more and more crowded in, that it seemed strange none of them were burned. Strand watched as they began the dance which would work them up to a murderous frenzy. They stamped their paddle feet and clapped their hands in rhythm. A low, growling murmur, like a huge machine beginning to turn over, filtered out of the blackly silhouetted knot. Occasionally one of them whooped shrilly.

One of the whites drifted over close to them; Clinton, Strand saw by the leaping fire. He lounged carelessly against a tree and smiled darkly. "You fellows should take an especial interest in the proceedings," he remarked. "This is your funeral."

"The *olua?*" Strand asked calmly.

"That's right," nodded Clinton, patting back a yawn. "A bore, but rudimentary intelligences must always pound the tom-tom and scream to work their courage up before a fight."

"A fight?" Strand repeated. "Who are they going to fight?"

Clinton smiled sardonically. "You might as well know, I guess," he said patronizingly. "You'll be dead before you can use the knowledge. I'm going to attack Lebonelle."

"Lebonelle!" Strand cried. "But you can't take Lebonelle with natives and cutlasses! It's the best-fortified port on Venus! There's a radiomate wall around it. and it's death to as much as touch it. They've got proton artillery and Ollin dehydraters that'd wipe out this whole miserable army of yours in the flick of an eyelash. Why, Lebonelle is the perfectly fortified city! You can't get away with it, Clinton!"

"No?" purred Clinton malevolently. "You don't know me. That town is going to be taken—taken by surprise. The Venusians'll hide their swords and go in to 'trade'. When enough get inside the walls, they'll sabre everyone in sight. Disorganize resistance. I should worry how many get killed. After they've done their bit, I'll drop down with a few cruisers and mop up what's left of the Earthmen. I can't lose!" He smiled hungrily. "What a chance for loot! The monthly transport for Earth is ready to leave, loaded to the gunnels with treasure; and I think that I can use that radiomate wall and that artillery for a little defense of my own."

Strand began to feel uncomfortably sure that Clinton could do what he said. The project sounded crazy, but the dark little pirate had the knack of making impossible things happen. His men worked together with the precision of a fine machine, and luck seemed always on their side. No one else could succeed with a plot like this, but Strand felt sure Clinton would make it a bloody success.

"MY LORD, Clinton," he protested, "you can't do this! You can't give those savages weapons and turn them loose on helpless Earthpeople. You can't! You're an Earthman yourself, no matter what you've been up to. You can't let

these yellow devils butcher your own kind!"

Clinton was smiling fiendishly. "Listen, detective—"

"I'm not a detective," interrupted Strand wearily.

"Well, listen anyway. And don't think you can soften me up with any sob-sister stuff about Earth-people. I hate 'em all! Your precious Earth-people stuck me in jail for years! Your precious Earth-people wouldn't give me a chance to go straight when I got out! And right now your precious Earth-people have a price on my head! Don't think I'm going to mourn for them. I'll gloat while they die!" He breathed hard for a moment; then, obviously making an attempt to control his feelings, he laughed shakily and drifted away, toward one of his lieutenants. The natives swaying around the fire began a terrifying ululation.

"We can't let him do it!" Westy's voice was frantic. "We can't!"

"How're we going to stop him?" Strand asked bitterly. "I've scraped all the skin off my wrists trying to break these damned vines. And we're due to be roasted alive—" he cast an appraising glance at the knot of natives swaying rhythmically and howling like wolves, "—in about two hours, I'd say."

Terror crept into Westy's voice. "There must be some way out!" he cried. "Think, Jack—it's not only for ourselves, but for those thousands of people back in Lebonelle." He closed his eyes, and a little shiver twisted his body. "Can't we get back to back, so I can get my hands on the rope you're tied with?"

"It's not rope, kid; it's vine," Strand answered wryly. "You could work all night with your hands tied like that, and get nowhere." Suddenly his eyes flamed in the ruddy firelight. "But, by God! Maybe we can . . ." The rest was muffled as he rolled over and over, away from Westy.

Westy rolled over too, following him. "What is it, Jack?" he asked anxiously. "What're you doing?"

"Our packs," answered Strand, somewhat inadequately, and stopped rolling, his face toward the youngster. "They brought them along, the fools!"

"What about them, Jack?" Westy begged. "What can you do?"

Strand groped around behind himself with his bound hands. "I stuck that dead Venusian's cutlass under the strap of my pack," he explained. "Now if they left it . . . Aha! Here it is! Best Japanese steel, too." He grunted triumphantly.

Strand had his hands on the hilt of the sword, and he began trying to drag it from under the pack strap where it was firmly wedged. His bound hands were a handicap, and the pack was not firmly anchored, but by means of quick jerks Strand got the cutlass most of the way out. Holding the pack with his shoulder, he inched the blade the rest of the way, so it fell off the

pack, free. Eyes burning, he jammed the blade edgewise into the soft Venusian ground until it stood firmly on edge, half buried, with the sharp edge up. Awkwardly he patted the soil tight against the blade so it would not turn over; then he hunched himself over on it, bound hands beneath him. He pressed the Venus-vine on his wrist tight against the blade, and sawed back and forth. The vine was tough as wire, and Strand scraped it against the blade's edge till his arms ached before he felt it loosen on his wrists. He gave a last hard pull and the vine parted; his wrists scraped across the sharp edge of the cutlass. The blade sliced a long shallow cut in one of them, and the trader bit his lip at the sting of the gash. But the pain was forgotten in the fierce exultation that went through him. With a quick glance to see that none of the howling natives were looking his way, Strand sat up and slashed the vine on his ankles. He lay down instantly, with another look to see if anyone had noticed him. The natives only continued their swaying and weird howling.

"PUT your back to me, Westy," ordered Strand gruffly, "so I can get at those vines on your arms." He edged himself closer to the youngster, and carefully sawed at the vines on his wrists. In a moment they, and those on his ankles, were parted. The two lay there apprehensively, waiting for the pounding of their hearts to stop.

It was a tight spot.

"Back into the woods, Westy," Strand commanded when at last his breathing became more normal. "Stick to me and don't make any noise. They may not miss us for a while."

Cautiously, the two hitched themselves backwards until they were in the shadow of the trees bordering the clearing. "Quick!" Strand whispered and they jumped to their feet and backed into the jungle as quietly as they could. When they had retreated ten feet or so from the clearing, Strand grunted "Come on"; they turned and crashed their way into the black wall of ferns and bushes. After them drifted the fierce howling of the natives, growing fainter as they hurried away from the clearing.

"Jack," muttered Westy as they broke through the undergrowth, "those natives can outrun us back to Lebonelle. We can't warn the whites."

"We'll think of ourselves first," answered Strand laconically. "Keep going." They crashed on through the underbrush, making enough noise for an army. Brushing the ferns aside with both hands, they waded through; the hardy growths sprang back to place behind them, hiding their trail.

They were on the very edge of another clearing, a very tiny one this time, before Strand, in the lead, saw what lay there. He stopped and warned Westy with an

outflung arm; together they stood, looking at the clearing and what it held.

Bulking huge in the starlight, a trim space cruiser stood tall and proud on her stern rocket vents.

"Clinton's?" Westy whispered.

Strand didn't bother to answer; he was too busy thinking. Here was the perfect instrument to get them away from the death which would soon be stalking them through the jungle. With this ship they could easily get to Lebonelle and warn the colony of Clinton's plot; without the element of surprise, Clinton's Venusians and their puny cutlasses would be useless. Strand leaned against a tree and hefted the heavy blade which he still carried. There'd be a sentry or watchman of some sort inside the ship, of course; the spacelock couldn't be opened readily from outside. They'd have to get him outside and capture him, so they could get in through the door which he'd have to leave open. Once inside the ship they'd be safe, and the warning they'd bring to Lebonelle would pull the teeth out of Clinton's plot in a hurry.

But they had to get the sentry outside!

Strand wrinkled his brow, considering possibilities. They could start a rumpus, hoping he'd come out to investigate; they could pretend to be fellow-pirates, hoping he'd open up for them . . . But in either case the sentry'd just throw a searchlight down to see without coming out. Perhaps they'd have to crawl into one of the rocket vents and set the jet so it'd blow the ship over. It'd be dangerous, but would be most likely to succeed.

THEN Strand heard someone else crashing through the jungle behind them, with reckless speed. Strand gripped Westy's shoulder, and they eased themselves back a bit into the shadows and crouched down behind a heavy clump of bushes. A bright hand torch suddenly rayed between the trees, along a little path which Strand and Westy, in the darkness, had missed. It bobbed in time to the man's running. The fellow burst into the clearing not three paces from their bushy clump, and, panting, stopped. He flashed his light up at the control station of the ship with its glass ports and waved it in small agitated circles. "Frazee!" he bellowed. "Frazee! Open the spacelock and let me in."

A blinding blue-white searchlight pricked out from the nose of vessel, high in the air, and swept down to center on the man in the clearing. Clinton.

A round glass port swung open, high in the fore part of the ship, and a tousled-haired fellow stuck his head out. He looked at Clinton for a moment. "What d'ye want, boss?" he asked complacently.

Clinton burst into a blistering stream of profanity. "Get the hell down here and open the spacelock door!" he shouted. "A couple of dicks got away from us. We've got to catch them." He cursed again for a moment. "Shut off that searchlight, you thick-witted dough-head!" he screamed wrathfully. "You won't have enough juice left in the condensers to kick over the rockets!"

The head in the port disappeared hastily and the light snapped off.

"And hurry!" bellowed Clinton to the empty porthole. "We may spot them from the air!" He stamped this way and that, cursing viciously to himself, his hand-torch bobbing emphatic exclamation points.

Strand had caught his breath. The spacelock door was going to be opened, and only two pirates to guard it!

He poked Westy hard. "I'm going to rush them with the cutlass when that port opens. It's a small clearing. I may get there. Stay here. Try to get to some spaceport if I don't make it." He tensed as Clinton turned toward the vessel.

The spacelock door grated as the inside bolts were drawn; then it swung open, a black hole three feet or so above Clinton's

head. Strand broke through the clump of ferns as the port opened and ran silently as he could across the spongy ground, a good ten paces. Clinton didn't hear him coming; his flashlight kept shining against the hull of the cruiser, the reflected light outlining his form perfectly. He barked to the sentry to get a ladder. And then Strand was on him.

Strand had dashed to within two paces of the pirate before he swung his cutlass back for the blow. Another step, and he swung the cutlass for the pirate's neck with all the weight of his body.

The razor-like blade licked through flesh and bone as if it were air.

THE pirate, neatly decapitated by the murderous swing, leaped convulsively and fell, flopping about like a headless chicken; his severed neck spouted blood. The head bounced to the ground and rolled a little way; then it stopped, the sightless eyes staring straight up into the black sky.

Clinton's hand torch had fallen to the ground. Strand leaped for it and threw its beam on the spacelock door. The sentry, white-faced, blinked in its glare and tried to see the danger. Strand grasped his cutlass by its bloody blade, swept it back over his shoulder, and, with a prayer for accuracy, hurled it straight for that white face. Hilt-first, it struck the pirate full in the forehead. A smear of blood slashed across it, and the face disappeared as the pirate sprawled backwards to the steel spacelock floor.

Agile as a cat, Strand leaped and grabbed the edge of the metal wall in which the lock doorway was set. A grunt, a heave, and a quick wriggle; he was up, one knee on the sill. Arms wide, he flung himself on Frazee, just sitting up, and, seizing the man by the shoulders, battered his head against the metal bulkhead, once; twice; again. At the second crushing impact the man went limp again.

Strand grabbed the unresisting body under the arms and dragged it to the portway. He tumbled it out the door, not caring whether he broke its neck or not. "Westy!" he shouted. "Hurry up!"

The youngster broke through the bushes while Strand caught up the electric torch, and stumbled across the shadowy clearing. "You know how to fly a cruiser, Jack?" he asked uncertainly when he stood beside the hull looking up.

"Sure," Strand replied confidently. "I took a cadet's training with Interplanetary Transport. We're as good as in Lebonelle right now." He flashed the light down on the kid's white, upturned face. "Say!" he ejaculated. "Toss *that* up here!" He flicked the torch about the clearing until the beam touched Clinton's head, smeared with blood, twigs, and dirt.

"That *head?*" asked Westy, shuddering a bit. Strand nodded.

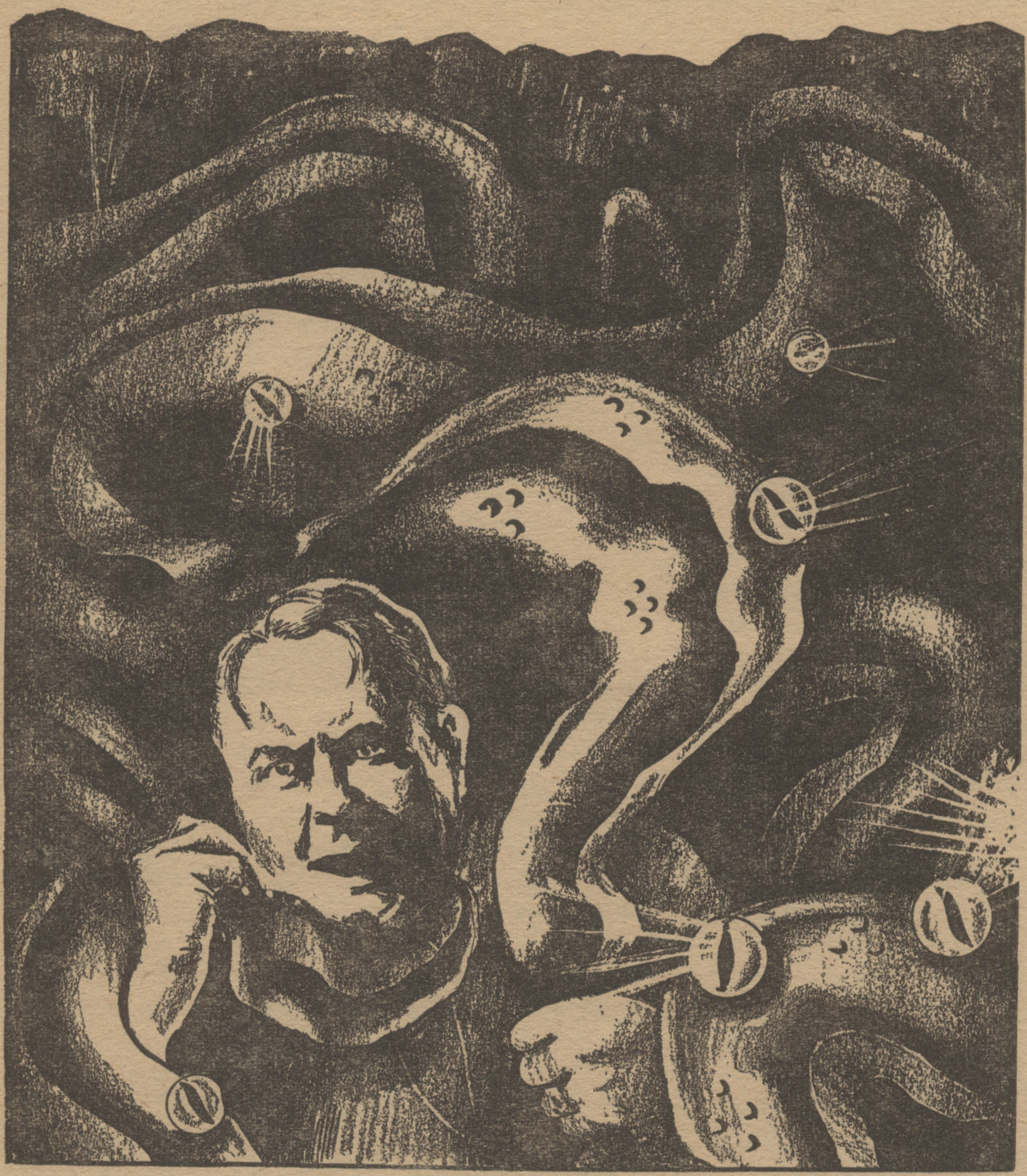
Reluctantly, Westy picked it up and handed it to Strand. The trader laid it on the deck without ceremony and gave Westy a hand up.

"What d'you want *that* for, Jack?" Westy asked while Strand bolted the space-door by the light of his torch.

Strand shot the last bar into position, and swung around. "You haven't forgotten the reward on that chap, have you?" he asked, flicking the bloody head with his torch beam. "Fifty thousand bucks American." He bent over, chuckling happily, and twisted his fingers in the blood-clotted hair of the gruesome trophy. Straightening up, he led the way up the port ladder toward the control cabin, the horrible thing swaying from his hand. "I tell you, kid," he called over his shoulder to Westy, who was staring horrified at the dripping head, "This sure is the most profitable trading expedition I've ever been on." He disappeared through the hatchway at the top of the ladder, still chuckling gleefully to himself.

THE END

TROUBLE SHOOTER



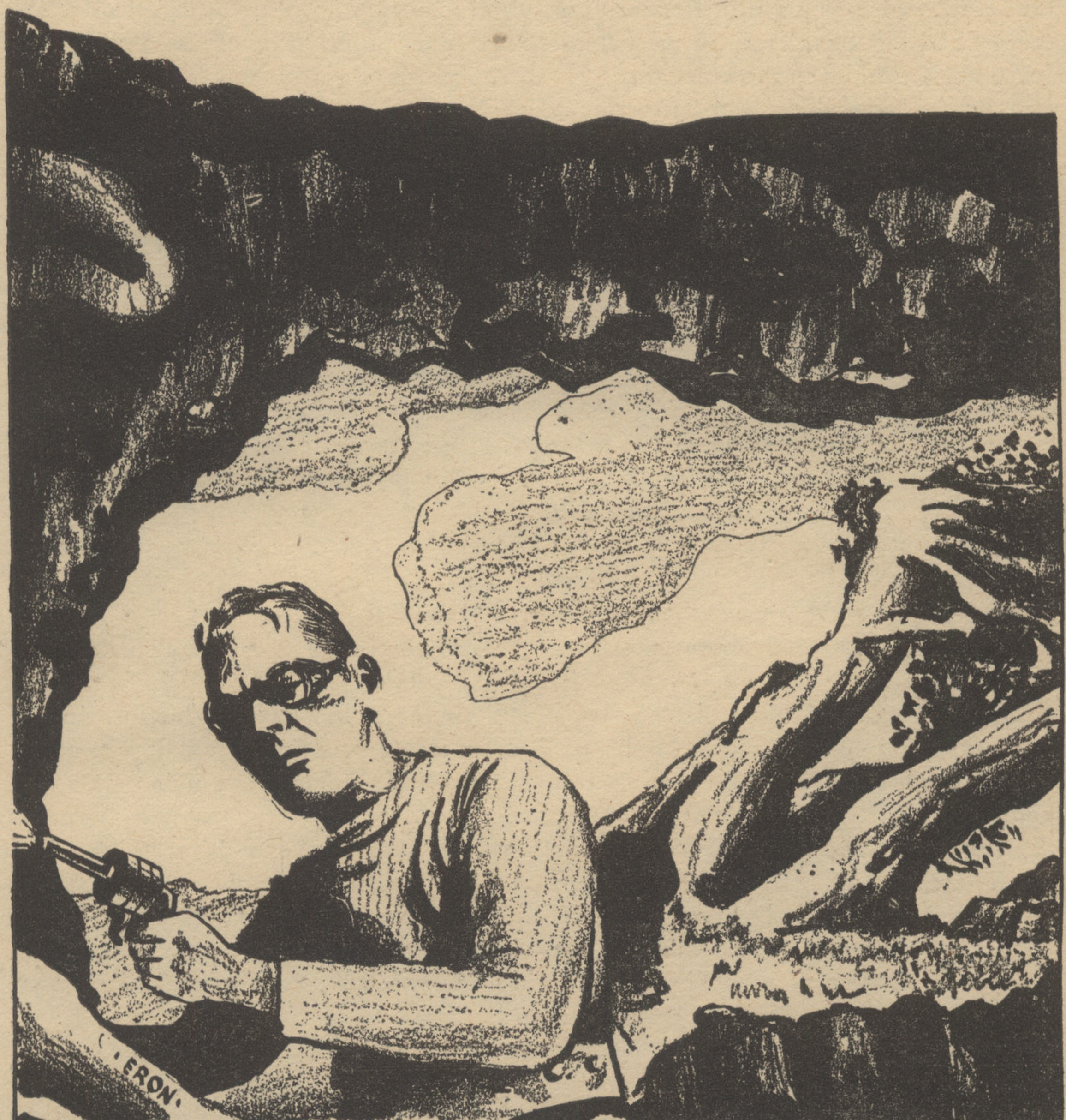
CHAPTER ONE

Taffy Blonde

THE bar in the Engineers Lounge at Ceres Base was hardly what you'd call crowded. Only three booths were occupied. Draped over the far-end of the bar itself, were two stunted Venusian spacemen, drinking *dak* and talking their soft gibberish. At the cash register end, big Fritz Keenan stood sipping Martian *chulco* and occasionally cracking wise to Mike the bartender.

But Fritz's mind was not on his own or Mike's quips. He was busy getting an eyeful of the taffy blonde in the booth with the husky chap who might have been a football hero. Ten years ago, he might. The blonde was a honey. Her skin was ivory and her eyes brown. You don't see

Trouble is what you make it. It doesn't have to be a blown rocket-jet or a bit of sabotaged machinery—it can be *human* trouble. And, whatever the trouble is, it's a trouble shooter's job to fix it!



By HARL VINCENT

so many blondes with brown eyes like that. You hardly ever see any blondes at all at Ceres Base. This one had flashed those brown eyes at Fritz a couple of times, then covered them demurely with their long lashes. But she knew what he was thinking, all right. And she didn't care. Cripes, they'd flirt with you right before their husbands. Or their boy friends.

In the main shipyard of Triplanetary Lines, back on earth, the name of Fritz Keenan was a byword. So it was in the skylanes. His square frame and swagger-

ing stride, his jovial pockmarked countenance, his big booming voice, marked him as physically different. But it was his be-damned-to-you attitude toward authority and his uncanny sixth mechanical sense that kept him in the limelight. Fritz was head above all as the best trouble shooter Triplanetary ever had on its payroll.

Seeing the blonde, he was glad they'd sent him to Ceres Base as a relief for old Cranston, the master mechanic, who was on vacation.

A page boy soft-footed in from the main lounge. "Telephone for you, Mr. Keenan," he told him, eyes impudently appraising. "In booth nineteen."

Fritz slipped the boy a coin and ambled out, noting from the corner of one eye that the blonde was watching.

CASS GALVIN'S voice shrilled at him over the wire. Galvin was the Base Superintendent.

"Keenan? Good! Now, listen: here's a special job. A leased ship—the TL-61. North American Metals. Prospecting, you know. A gravity generator on the bum, or something. Major Dennison must be taken care of and quickly. Can you go aboard right away? She's in cradle 13."

"Lucky number," grinned Fritz. "Sure I can go aboard right away. That all?"

"That's all," said Galvin. "Except for one thing. Watch your foot. Dennison's a Jonah. There's always some sort of trouble following him, from all reports."

"Trouble? That's my middle name." Keenan chuckled and hung up.

It was true; Fritz seemed to thrive on trouble. It wasn't enough that he was always putting something over on the experts with his eery abilities at diagnosing and remedying mechanical ills. And that without ever having seen the inside of a college. But he had the same jocular facility in solving human difficulties. Particularly his own. Fritz loved trouble and was forever in it. And, for all of his unlovely scarred countenance and rough ways, somehow a woman was usually involved. Rich or poor, attached or unattached, beautiful or otherwise, the femmes all seemed to go for him.

Which was not particularly distasteful to Fritz. He now wandered back to the bar, hoping the taffy blonde was still there. She wasn't.

Vaguely disappointed, he drifted to the machine shop, where he picked up Stubby Sharpe, an A-1 mechanic he knew he could rely on to do as he was told. They went to cradle 13 with all the tools and test instruments they could carry.

A long-faced engineman in greasy dungarees lolled at the port of the TL-61.

"What's wrong, buddy?" Fritz asked him breezily. "Feeling sorry for yourself?"

"Yeah," the dour one replied. "And for you, if you're going to work on this tub. She's jinxed."

"Jinxed?" Fritz swung his instrument cases inside the port. "How do you mean jinxed? She landed here, didn't she?"

"Yeah, but wait till you see the mess below. It's been one damn thing after another ever since we blew off planetoid 1147."

Keenan dug a playful, thick thumb in the fellow's ribs. "Cheer up," he advised him. "Maybe we'll blow her up and you won't have to worry about her any more."

They went inside and they didn't find half the mess Fritz had expected. He'd seen lots worse. The dour engineer sniffed when he showed him the gravity generator.

"It's an antique, anyway," he declared. "Ought to be scrapped."

The trouble shooter bristled. "What do you mean, antique? This baby's only four years out of the shop. I tested it myself. Hell, man, this CR model's better'n some of the later ones. What happened to it anyway?"

The engineer—Crabbe, his name was, and he looked it—didn't seem to know. All he knew was it started vibrating heavy a half hour before they came in to Ceres, threw oil all over the engine room and had to be shut down. They had to strap themselves to the stanchions the rest of the way. Crabbe opened his shirt and made a wry face over the red welt that showed across his skinny chest.

Fritz winked at Stubby Sharpe. "That's terrible," he told Crabbe solemnly. "Were you here when it happened?"

"No. Funny thing. The major was here himself. Carothers had me up in the control cabin."

Keenan was setting up his truth indicator where the turbine shaft came through the housing on the generator end of the unit. "Who's Carothers?" he asked.

"The major's assistant. A ge—geo—fiz—you know."

"Geophysicist?" Fritz was wondering how Crabbe ever got his AE ticket for a job like this. No wonder the TL-61 was a jinx. He was on his knees, inspecting the safety stop of the turbine. It had been jammed open with a broken pocketknife blade! "Who else is on board besides you and the major and Carothers?" he rasped.

"Only Mrs. Dennison."

Fritz pursed his lips to whistle. Then he remembered. Vaguely. The major's wife was supposed to be an expert mineralogist, too. Or something. He'd read about it. "Fire up the boiler," he told Crabbe.

THIS was a diphenyl-oxide vapor turbine-driven rig. Sweet jobs, most of them, but ticklish to balance. 30,000 RPM, and with the long slim rotors this called for. Fritz heard the atomic flame sputter and then howl raucously astern. He cracked the throttle of the turbine and was glad Crabbe didn't return. He suspected the gloomy walking skeleton was afraid. The turbine sang musically its rising crescendo as it started coming up to speed.

Then it hit the first critical and the rotors nearly jumped out of their bearings. Oil squirted out of number two bearing housing and made a sight of Stubby, who began swearing. Fritz closed the throttle. "Open her up," he told the A-1 mechanic.

He started for a tour of the ship as Stubby got busy on the flange bolts. Something was screwy about this setup. The ship was okay and so was all the equipment, that was sure. It was more than just plain mechanical trouble with that gravity generator. Somebody'd tinkered with it.

Fritz knew the layout of these "60" series ships like a book. He didn't need to explore the TL-61 to know where everything was. He was looking only for its regular occupants or any signs of potential further trouble. He encountered no one and he found nothing amiss from the driving motors astern to the control cabin topside forward. He did find a dozen neatly labeled boxes of ore samples in the small cargo hold. Which looked as if pickings had been good so far.

Returning to the engine room, he saw that Stubby had the cylinder cover off the turbine. From a quick inspection, it appeared that the blading and interstage packing was in perfect condition. The shaft showed the bright line of a rub at the oil ring of number two bearing. Fritz opened a feeler gauge and poked around with the bearing shim seats.

"Stubby," he growled, his head down over the work, "there's a shim been slipped part way out underneath here. Ten thousandths. What happened, it worked loose and—"

The A-1 mechanic was coughing his head off. Unnaturally. Fritz looked up with a grin and a sarcastic remark about to leave his lips. He wiped off the grin and swallowed the unspoken words. For he was gazing straight into the somnolent brown eyes of the taffy blonde.

He snapped erect and inspected her from dizzily ringleted hair to bewitching silken ankles. His infectious grin let loose. "Hello, babe," he chuckled. "Fancy meeting you here."

Stubby Sharpe gasped. But that didn't matter. The girl was all one approving smile. Dazzling. Full-blooded lips arched over the pearliest set of teeth Fritz had ever seen revealed.

"Hello, double-trouble," she silver-throated.

Evidently she'd been inquiring about him. But that wouldn't have made any difference. They were always this way with Fritz Keenan.

CHAPTER TWO

Sabotage?

"MYRA DENNISON," said Crabbe distastefully as Fritz watched the twinkling rhythm of shapely calves out of sight up the companionway. "I think *she's* the jinx on this tub."

"You shoot off your mouth too damn much," Fritz told him. Then, jerking a thumb toward the dismantled turbine: "How come you didn't fix this yourself? Nothing to it—new oil ring and realigning is all."

"The major wouldn't let me touch it," the man whined. "He thought something was queer about it. Wanted a Triplan man to look it over."

Fritz eyed the man keenly and remarked: "I'll say something is queer. Let me take your pocket knife, will you?"

Crabbe handed him a regular Boy Scout tool kit. It had everything but a hatchet. All of its blades were intact. Keenan opened a small one and nonchalantly pared a horny black-rimmed nail. "Thanks," he said, returning the half pound of tricks. "What's all the other grief you're moaning about? The jinx?"

"First off, nitrogen iodide got in the atomic fuel. The major found it in time or it'd been curtains for him. That was on 1147 just before takeoff. We—"

"Where were the rest of you?" Fritz interrupted.

"Outside," said Crabbe in his sepulchral voice. "Carothers called Mrs. Dennison and I out for something or other. And then, we'd no more'n got away from 1147 when a control cable shorted, burning the major bad."

"That all?" inquired the trouble shooter.

"No-o." Crabbe lowered his voice, giving a first class imitation of an undertaker. "There was a snake in the major's stateroom. A big hooded one. He killed it just in time."

"Hm-m," said Fritz. "They must be collecting for a circus instead of for North Am-Met. Looks like the major was the jinx."

"Sh!" warned the engineer. "Here he comes."

Two men came in through the entrance lock. Tall men, both of them. You could tell the major by his blue and gold Venusian War stripe. And by the partly crippled right arm he'd got in the same battle in which he won his title. The other one was the gridiron lad Fritz had seen with the taffy blonde in the bar. So *that* was Carothers. Monkey business.

Dennison was affable, Carothers supercilious. "What did you find?" the major asked pleasantly, seeing Stubby at work on the open unit.

"Nothing serious," Fritz boomed. "Bearing dropped out of line and caused a rub. Cinch to fix. You must have shut it down pronto."

Carothers was moving toward the companionway. Keenan saw a frown crinkle between the major's fine eyes. "I did," he admitted solemnly. "The automatic stop was stuck and I grabbed the throttle just in time. Ten seconds more and I'd have been spattered all over here."

"Right." Fritz looked away. It was no time to voice his suspicions. "Well," he said lamely, "It'll be okay in another hour." He liked Major Dennison instinctively and somehow felt sorry for him.

"Want a complete inspection before you hop off?" he inquired.

The major's gray eyes regarded him levelly. "Might be a good idea," he agreed.

"I'll arrange for it," said Fritz and went out into the pit looking for the super. Nitrogen iodide in a neutron stream, short circuits, a cobra aboard, a loose shim and a wedged auto-stop! And always when the major was around—alone. None of it made sense.

AN HOUR later Fritz was again in the bar, waiting for word from the inspection department and from Stubby, who ought to have that gravity outfit running by now. Myra Dennison breezed in and walked directly to where he stood with one size twelve teetering on the rail.

"Buy me a *chulco* fizz?" she asked, smiling brightly.

"Sure, babe. Anything your little heart desires. Want to squat?" The trouble shooter warmed under the glow of those twin brown lamps.

"Yes, let's sit," said Myra Dennison.

Fritz tipped Mike the bartender a wink, ordered, and then followed the taffy blonde to a booth. He didn't miss the panther-like swing of the girl's smooth hips.

"Well?" he said, settling on the bench across from her.

She smiled provocatively. "You're going on a trial trip with us, Mr. Double-trouble," she said.

"Who, me? Not on your life."

The girl dipped a pair of straws into the creamy concoction Mike set before her. "Oh, yes, you are. I've already talked to Mr. Galvin."

Fritz stared. "And he approved?" But then, with those eyes, Myra ought to be able to get anything she wanted to out of any man living.

"He did. And so did Arthur." The girl seemed elated.

"Arthur?"

"The major. My husband."

"Oh." Perhaps it was just as well Galvin had okayed the trip; he'd like to know more about this blonde. "Where to, this trip?" he asked.

"Planetoid 2782. It's coming into conjunction with Ceres and will be only a few hours away. Why? Afraid of being kidnapped?"

Mike dropped a spoon back of the bar as Fritz's laugh boomed out.

"By you, babe? Nothing I'd like better," he cried.

Myra Dennison had the grace to blush. But she didn't seem to mind his familiarity. None of them did. "You know," she whispered softly into her fizz, "I rather like you, Fritz."

"That makes us even. But say: aren't you sorta taking the major for a ride, kid?"

For the first time he saw the brown eyes serious. They looked at him fixedly, but through him. Their shapely owner shrugged. "Arthur?" she sniffed. "He hasn't any time for me. He doesn't care."

This didn't make sense. Fritz decided on a gentle—for him—insult. "Just another misunderstood wife, eh?"

Fire smouldered in the brown eyes. But the girl's lips were smiling. "Not at all. I merely like to be entertained."

"Especially by Carothers?" Keenan was shooting trouble now and he knew it.

The fire under the long lashes almost leaped into flame. Myra Dennison's voice was hard, suddenly impersonal. She rose to go. "Just because I said I liked you doesn't make you my father confessor," she said, moving off.

Fritz didn't say anything.

After a few steps, the girl turned back. She was smiling again and held out an unbelievably white hand. The trouble shooter took it in his big paw. "Don't forget," said Myra Dennison. "Be on board within an hour."

Her lips were parted invitingly as the hamlike fist drew her near. Suddenly Fritz had her in his arms and was crushing her close, bruising that cupid's bow of a mouth against his own. His senses reeled as she responded. Then he had let her go.

Mike went into an ancient hornpipe back of the bar as she scurried away.

"I'm a sap," Fritz muttered disgustedly as he ordered another drink. "And you keep your trap shut, Mike, or I'll sew it shut. With wire."

Mike's grin froze. "This one's on the house," he proclaimed.

THE Triplan inspectors reported the TL-61 fit from stem to stern. Fritz was aboard at the appointed time. He found Crabbe in the port pump gallery, gloomily regarding the inoffensive humidity chart.

"Think we'll have rain?" he chortled, passing through to the catwalk.

The engineer favored him with a sour look, saying nothing.

Fritz clumped the length of the catwalk and mounted to the control cabin, where he found the major. Alone. Moving the parallels over the chart. He greeted the trouble shooter with a friendly smile.

"Glad you'll be with us, Keenan," he said. "This is a Triplan ship after all. And I want to be sure nothing that's been wrong was my fault. I'll feel safer."

"Thanks, Major. Everybody aboard?"

"Yes, we take off in five minutes. You a pilot?"

"Sure. Have to be, in my racket."

The major seemed relieved for some reason. "Yes, I suppose you do. You have to get into everything, don't you?"

"And then some," laughed Fritz. He observed that Dennison had a considerable amount of trouble with that right arm. Like the upper arm muscles didn't work at all. He couldn't get the hand below the level of his elbow and had to lean over way too far if he wanted to pick something up with that hand.

Still it wasn't really very much of a handicap.

Carothers' voice came up the well from below. "Anyone up there with you, Major?" he called.

"Yes, Keenan."

"Did they test out the radio?"

"I—I'm not sure. But I'll test it now, before we take off."

"Okay. I'm going aft with Crabbe."

Somehow Fritz thought there had been a peculiar breathless quality to Carothers' speech. Excited. But perhaps he was always that way.

Dennison pulled the switch that started the motor generator of the radio. There

was nothing to that. It was only a five thousand watt outfit. But the trouble shooter felt his spine crawl as he heard the induction motor coming up to speed. It sounded all right, but that sixth sense of his was telegraphing a warning. Foolish. The brushes snapped out of contact but the note of the little high speed outfit continued to rise. Fritz flung himself on the major and hurled him to the floor behind the control pedestal, where he crouched with him.

The whine of the m. g. set keened on up the scale toward the limit of audibility. Then it exploded into crashing sound. Like a young hand grenade. Snarling chunks of metal thudded into the pedestal and the control cabin bulkheads. Then everything was silent.

The major was white when they rose up unsteadily. "Thanks, Keenan," he muttered, looking at a section of the steel shaft that was embedded a full inch in the cast iron pedestal.

Fritz regarded him curiously, noting the grim set of his jaw as footsteps hammered up the companionway. It was Carothers.

"You all right?" panted the geophysicist.

"Perfectly," Dennison said calmly. "And there's a spare motor-generator, so we can continue with the trial."

Examining the wreckage, Fritz saw that no trouble shooter in the universe could learn the cause of the failure. By the very violence of the disruption, the evidence was destroyed. But you could have your own ideas. And you could wait.

CHAPTER THREE

Alarm!

FRITZ remained at the controls with the major while he maneuvered them expertly through the great airlock that led from the fueling pit to the airless outer surface of Ceres. It was good even to get away for a short while from the life underground at the Base. Good to see the sun's flaming corona, diminished greatly by the distance, but reassuringly there. Good to look into the star-dusted black velvet of the void.

Accelerating smoothly, Dennison pulled away from the weak gravity of the four hundred and eighty mile diameter asteroid. Swiftily it resolved itself into the backdrop of the heavens and was lost among the myriad other brilliant light-flecks.

"What's this 2782 we're jumping for?" Fritz asked him.

"A small one of the asteroids, about thirty miles diameter. I've never prospected it but Carothers has. He says its rich in beryllium and iridium. Radium ore, too."

"Carothers says." Keenan thought he saw a flicker of understanding in the gaze the major turned on him at this remark. Dennison had been doing some thinking on his own account, maybe.

"Anyway, we're only landing for a short while to take a look and to stake it off for North Am-Met if it's what he says it is."

"Then back to Ceres?"

"Back to Ceres." The major grinned engagingly. "Have to take you home, old man."

Thinking of Myra, Fritz felt guilty. He decided to go below and look around a little. The major's calm gray eyes unsteadied him.

"Guess everything's all right up here now," he rumbled. "I'll take a look-see aft."

"Make yourself at home." One nice guy, the major.

Carothers was in the small smoking salon, reading the Met outfit's house organ. He favored Fritz with a superior sort of a business of raising his eyebrows. Fritz aped him with his own bushy black ones.

"Taking it easy, old thing?" he grinned.

Carothers flushed hotly and made as if to rise but, looking over the square frame of the husky trouble shooter, he seemed to think better of it. He made no reply and Fritz passed on.

He found Myra Dennison in the galley, busy with what looked like the makings of a top-notch salad.

"You look swell in an apron," he told her.

The girl dropped a mock curtsey and flashed him her best smile. She was an expert at the game, all right. "Want to help?" she asked.

"Sure, sweetheart. What doing?"

He was handed a knife and playfully shoved toward the steel drum of terrestrial potatoes. He tingled at the touch of her cool hand. One thing he wouldn't do, though; he wouldn't make a pass at her here. Not in the same ship with this decent hubby of hers. Resentment against his own impulses surged through him. He told her about the explosion of the motor generator, watching her narrowly as he hacked the spuds down to half size.

She was very solemn when he had finished. "There's so many queer things have happened," she murmured. "I'm sort of afraid, know it?"

The girl was obviously sincere. She couldn't be in on any dirty work, Fritz decided. "Ever stop to think," he asked her, "that every time something goes wrong nobody's there but your hubby?"

Brown eyes widened and rich color drained away to leave the cheeks of purest ivory hue. "You—you think—"

It was then the CO_2 alarm rang, echoing through the ship. The girl dropped a cup, which crashed with a hideous clatter. Fritz dived through the door.

SPRINTING along the catwalk, he almost bowled over the morose Crabbe, who was wringing his hands like an old dowager at her Chow's funeral.

"Where is it?" Fritz demanded.

"I don't know," moaned Crabbe. "It's the jinx again."

"Go soak your head," the trouble shooter advised him, thudding up toward the control cabin. "In phenol."

Of course the trouble would be where the major was. Fritz found the door to the cabin closed. You always kept them closed when sight navigating—on account of the lights in the well. But this door was locked or jammed. Keenan heaved his vast bulk against it, yelling for Carothers, Crabbe and Myra Dennison. The door refused to yield.

Myra arrived first, dry-eyed, silent. She added her insignificant weight to Keenan's. Crabbe was a little more help when he came. The door crashed inward.

"Stand back!" bellowed the trouble shooter. Taking a deep breath and holding it, he rushed inside.

The major sat slumped in his pilot's seat, swaying weakly. With a single sweep of his huge arm, Fritz scooped him up and heaved him out into the fresh air of the corridor, kicking the door shut behind him.

"Get below and close the offtake," he yelped to Crabbe, who thereupon clattered down the companionway with more energy than Keenan would have believed possible. The saddened engineman nearly knocked Carothers off the stair on his way down.

"Took your time getting here," growled Fritz as the Greek-god head of the geophysicist bent over beside his own and Myra's. Dennison was coming around all right; he had not fully lost consciousness.

Finally the major's eyes lost their glazed look and he smiled weakly.

"Myra, dear," he said, as if surprised she was there. "You should have stayed below. There's danger."

"Not now, there isn't," Fritz Keenan said gruffly. "Carothers, you get out an oxygen helmet and get in there at the con-

trols. Myra and I'll take care of the major."

Wrath blazed into Carothers' voice and

mien. He snapped erect and squared off. "You damned greasy mechanic!" he roared. "What right have you—"

Fritz could move his huge body with the speed of a tiger's charge. He moved it fast now and jabbed a knobby fist up

within an inch of the classic nose of the lad who might once have been a fullback. "By this right," he boomed. "Get going, pretty boy, or I'll crack down on you so hard you'll think a stern blast hit you right between the eyes."

Carothers got going. So did Fritz. He carried Dennison down to his own bunk and left him there with Myra, in whose dry-eyed gaze was a strangely preoccupied look. Then the trouble shooter went down to the air conditioners to console the mournful Crabbe. And to see what he could see.

The engineer had already found it. A closed duct slide shutting off the fresh air to the control cabin. And, behind it, pushed through a couple of roughly punched holes in the sheet metal, a length of four inch hose that diverted the entire carbon dioxide offtake of the vessel into the same cubicle. This couldn't have been here when the Triplan inspectors were on the job. No one could have done it but Carothers.

And how could you prove it? He'd probably blame Crabbe, who was quite obviously innocent.

"I told you this tub was jinxed," he gloomed.

"Nuts!" growled Fritz. "That's the work of human hands."

"Myra Dennison's."

"Oh, shut up and get it straightened out, Old Calamity. And keep those lips buttoned. I'm going forward."

IN THE door to Dennison's stateroom, he paused in dismay. Myra was there. And in Carothers' arms! Grimly, Fritz watched and listened. He was thinking of the look he had seen in the major's eyes when the glaze first left them. And where was the major?

"Oh, Alvin, don't ask me now. My mind's all of a muddle. I'm afraid. Honestly."

This was encouraging. Score at least one point for the girl, whatever the pigskin hero was putting up to her. Fritz cheered up a little. He was still wondering about the major.

"But, darling." Carothers was speaking in a whisper you could hardly make out. "We can be so happy together. You know—you said—"

The trouble shooter couldn't get the rest of it. He didn't want to hear it anyway. Myra Dennison was pushing against her lover's chest.

And that was more than enough for Fritz Keenan.

"Pretty picture!" he snorted. "Where's the major?"

Carothers jumped three feet. His face purpled. The girl covered hers with her hands.

"You sneaking spy!" croaked the geophysicist. "Get out of here!"

"Yeah?" Fritz strode inside and reached for the fellow's nose. He tweaked it mightily between thumb and forefinger that were like the jaws of a vise.

Carothers howled. "Where's the major?" Keenan repeated. "You rat!"

"He went back to the controls," the rat faltered. "Soon as he was on his feet."

"With a helmet?" The trouble shooter's lip curled as he observed the trembling of his victim's hands. The big mug was a coward.

"Go. Oh, go out and leave me alone. Both of you," the girl was sobbing.

"Come on, Mug." Fritz clamped fingers of steel on Carothers' arm and dragged him into the corridor. "Now, listen," he hissed, when he had him outside. "One more trick like that hose and it's curtains for you. I'm wise to you."

"I don't know what you're talking about."

"Not much you don't." Keenan drew back his arm to let one fly at that inviting jaw. But he thought better of it and left Carothers a quaking statue in the corridor as he started forward.

CHAPTER FOUR

The Green Things

"YOU all right now?" he asked the major anxiously when he reached the control cabin.

"Sure." Dennison turned to him and smiled only a little wanly.

Fritz didn't know just how to broach what was on his mind. If he only knew the major better and liked him less, it would be easy. "You know what happened to the air supply?" he asked mildly.

"Yes. Another one of those unexplainable accidents. Carothers said there was a closed duct slide."

"There was. And a length of hose."

"Hose?" Dennison's gray eyes showed his surprise. "How do you mean?"

Fritz decided to blurt it out. "Did you ever stop to think you might have a crook on board trying to do you in?"

The gray eyes hardened. "Crabbe? He's harmless, though a fool."

"No, not Crabbe."

Major Dennison turned slowly to face the trouble shooter. A hurt look had replaced the hardness in his gaze. "You mean—" he began. Then he froze up solid. "I'd rather not talk about it, Keenan," he said with weary decision.

What could you do with a guy like that? Fritz gave it up and left the cabin. It looked as if the major knew about Myra and Carothers and had just as lief be bumped off.

FRITZ mapped out a regular beat after that. He patrolled the TL-61 steadily from stem to stern. Myra Dennison had shut herself in her own stateroom. Carothers, lounging in the smoking saloon with a book, took care to avoid his eyes whenever he passed through.

And nothing further happened on board. The ship finally bumped to an uneventful landing.

The major was immediately the eager scientist. "You'll land with us of course, Keenan?" he asked Fritz genially.

"Sure. I'd like to see what 2782 looks like." He hadn't even been up in the control cabin, where were the only viewing ports. And he intended to be very much around wherever the major was to be in the company of Carothers.

There was a polished anthracite gleam in the geophysicist's eyes as they went to the space suit locker room. Fritz watched his every move. And when Dennison chose a suit, helmet, and oxygen aparatus, he made certain nothing had been tampered with by Carothers. Myra joined them and in her eyes, when she flashed them on Fritz, was a mute appeal for understanding and for silence. The trouble shooter grinned reassuringly at her and was amply rewarded by her grateful smile. The major was too excited to pay her any attention.

Carothers, before he clamped the flexglass helmet to his suit, put on a queer, dark-lensed pair of goggles.

"Why are you wearing those?" asked Myra.

"Weak eyes. We'll be on the sunny side and there's plenty of ultra-violet."

"Should I wear my sun glasses?"

"Wouldn't do any harm."

Keenan noticed that the glasses she took from her locker were in no way like those worn by the hulking assistant. Fritz wasn't missing anything. He clamped on his own helmet, switched on its radio and the compressed air. His suit bellied out with a slight hiss. He moved over to the major, who was ready and gathering together his instruments.

"Radio and everything all right?" he asked him.

"Yes," Dennison grinned through his helmet.

Carothers had an infra-red projector stuck in his belt. "How about weapons?" Fritz asked the major.

"Don't need any. Nothing alive out here."

"Pretty boy's got one," whispered the trouble shooter.

Dennison's head jerked up and you could see the narrowing of his eyes through the flexglass. He tossed a heat gun to Fritz and stuck one in his own belt. Nice, peaceable prospecting party.

Carothers and the major were loaded down with magnetometers, torsion balances, radiometers and the other instruments of the geophysicist. Myra snatched at Fritz's sleeve as they clumped through the airlock.

"Stay close by me," she whispered.

Fritz knew that whispers carried only a few feet from these helmet radios. "You bet I will, baby," he breathed. Myra's smile sent a ripple down his spine.

When the outer seal opened, he caught a glimpse of the gray, honeycombed surface of 2782. Just like a dozen other planetoids he'd seen. Out here in the asteroid belt the sunlight wasn't very brilliant. Of course there was no atmosphere to filter out the ultra-violet, but the flexglass of the helmets made a pretty good job of that. He wondered about those trick goggles Carothers wore. Myra hadn't even used hers.

There was no noticeable gravity. Fritz drifted down to the surface like a feather, then switched the current to his gravity soles and clamped down with his normal weight-sense. He helped the girl down and hung to her arm as they picked their way along after the two prospectors.

THE footing was bad. The surface of gray rock was jagged and a network of deep seams and crevasses made it dangerous to traverse. You could just hear the rumble of voices ahead. Snatches of conversation.

"—set up right here—no reason—here before—" came the major's words.

And Carothers: "—a little way—hummock last." Fritz saw that the assistant was continually turning his head to scan the near horizon and frequently looking back at them.

The men with the instruments mounted a huge mound and Dennison began setting up a tripod hastily. Fritz and Myra came up with them. The major was so occupied he didn't notice their arrival. But Carothers did. He drew away and sidled up to the girl.

"Magnetometer needle dips strongly here," he told her.

At that instant the major let out a whoop that rang in Fritz's ear pads. "Radioactive, Al! Strong. Come here."

There was a confused impression of something happening suddenly then. Something that lifted Dennison from his feet and set him down hard in the tumbled rocks. His tripod teetered but stayed erect. The hair rose on the trouble shooter's head. There was nothing you could see, but his sixth sense warned him that something, some force, perhaps, had taken a fall out of the major. He leaped to his side, helped him up.

"What happened?" he demanded.

The gray eyes were owlish behind the flexglass. "Hanged if I know, Keenan. It was like being knocked down by a heavy wind. But there couldn't be any wind where there isn't any air. Funny."

For some reason, Fritz thought of those goggles. He looked around at Carothers and the girl. They were laughing together as they came up. What they could find to amuse them, wasn't clear.

The major's excitement had returned. "Look here, Al," he called to his assistant. "The strongest indication I've ever seen. Must be an enormous deposit right here."

Carothers lumbered over and looked at the radiometer. Fritz saw that its needle pointed directly into a deep, sharply shadowed crevasse at the base of the mound.

"I'm going down there," said Dennison.

Fritz looked at Carothers, saw him looking at the girl. Saw her smile. Rage welled up in him. "I'm going with you," he told the major.

"I'll stay here with Myra and the instruments," Carothers spouted.

He would! The major had already slid down the far side of the mound and was dangling into the crevasse. Fritz swooped down after him. The last he saw of Myra and Carothers was as two sunlit, bloated gray rubber and flexglass figures outlined against the black immensity of space. Very near together and very still.

Looking down, Fritz saw the beam of an atomic torch. The major had dropped to a sloping ledge in the crevasse and was moving down it.

"Coming!" yelped the trouble shooter, and dropped.

His eery sensation of the proximity of some inimical thing returned. His own torch added to the light sprayed ahead by the major's. The crevasse was perhaps fifty feet across and the ledge on which they stood projected some ten feet from its side over a yawning abyss. The wall beside them was honeycombed with lateral tunnels, some no larger than a man could wriggle into, some high enough and broad enough to drive in a *Venusaurian*. As if human miners had already been here.

Dennison gleefully pointed out a deep seam of black that sloped down parallel to the ledge. "The richest radioactive ore in the universe," he gloated. "Look! Turn off your light."

Both torches flicked off. In the resultant Stygian blackness the vein stood out as a pale green streak of luminescence. Fritz's eyes followed it far down the ledge. And then he saw the thing.

Like a huge octopus, it was, of the same pallidly luminous green as the vein of ore. Its body was spherical, probably three feet in diameter, and it swayed on squirmy tentacles that raised it to the height of a man from the ledge. Dennison was perhaps ten feet ahead of him when Fritz let loose with his ray gun. He saw one of those tentacle legs puff away. The rest of the squirmy things withdrew swiftly, leaving the creature as a ghastly glowing ball. Simultaneously, the major's torch flashed on.

There was absolutely nothing where Fritz had seen the creature.

"Did you see it?" he shrieked at Dennison.

"See what? I didn't—"

An indescribable feeling smote the trouble shooter. An explosive puff of some swiftly approaching force. A crawling of his skin and a shortening of his breath. Before he could cry out, the major flung up his arms, seeming to rise in the air as if propelled by a charging bull. He described an arm-and-leg flailing arc and disappeared into the black depths of the crevasse with one despairing cry.

There was no sound of his body striking bottom. There could be no sound here save by way of the radio. All was ominously still. And again in darkness. Fritz saw the swiftly rolling ball just in time. He ducked into one of the lateral tunnels and dropped prone.

The undulating, glowing green monstrosity was at the mouth of his refuge, trying to wedge itself in. His heat ray flashed again and again at the nauseating horror.

CHAPTER FIVE

Attack!

IT COLLAPSED into a quivering mass. But Keenan's hair still tried to rise from his scalp. Another of the ghoulish things was behind him in the tunnel. Flickering black circles that might have been eyes loomed close as the thing's sucker-lined arms curled toward him. His heat ray stabbed out the black circles one at a time. Sickened by the squirming

death convulsions of the monster he dashed out over the squashy remains of the first one onto the ledge.

His torch flicked on. Nothing at all was visible in its rays. Hastily he flashed it off and was again in darkness. This was a jam to be in! The monsters were invisible in white light, though easily seen in darkness. He'd have to remain in darkness to know of their approach. He knew now what had blundered into the major outside, too.

And that explained Carothers' goggles. Of course. Their lenses were special ones, coated or impregnated with a fluorescent substance which enabled him to see the creatures even in sunlight. He'd been here before; he'd known of their existence. And he'd deliberately figured on leading Dennison to his death by their unseen attacks. Failing in his previous efforts to free Myra for himself, he'd figured this couldn't fail. And who could say that he had planned it? Being able to see the things himself, he could protect Myra and himself. And she would never know what it was all about if he started blasting away at apparently bare rocks with his heat ray.

Quite likely his nefarious scheme had already succeeded. If that abyss was as deep as Fritz suspected, the major was already done in. Perhaps the sloping ledge led to its bottom. None of the radiant monsters was visible, so Fritz flashed on his torch for an instant to get his bearings. Then, feeling along the crevasse wall, he started down the ledge.

The way was interminable. And the going rough. Time and again, he stumbled and fell to his knees, or, lumbering along blindly, banged against a sharp projecting rock. Fearing that his suit had been punctured. But the air pressure held. He saw no more of the monsters and flashed his torch more frequently. And the deeper the ledge carried him into the bowels of the treacherous asteroid, the less was his hope of finding the major in one piece.

After what seemed an age, he came to the end of the ledge. A quick, sweeping flare of his light showed him he was at the bottom of the fault. He started back along the almost level floor. High overhead, he could see the steady light of a few stars. He loped along cautiously but with fair speed. At one point the crevasse narrowed down and then he came to a bend. A dozen yards ahead, he made out the faint, eery glow of two of the monsters. They were together, their curling arms or legs mauling a shapless bundle that lay between them. The major! Keenan's ray spattered hot red against their bulbous bodies as he stumbled forward. One of them collapsed where it was but the other balled up swiftly and rolled toward him.

Twice it flared red as his rays spat out. And then his weapon refused to work. Its charge was exhausted. He dodged the onrushing ball and dived for the crumpled form of Dennison. The major's projector would be fully charged.

THE ghastly green-shimmering sphere rolled back speedily. He plunked oozily into the dead monster, falling across Dennison's heaped immobility. But the live octopus thing was upon him. Its radiations slowed his movements as their paralyzing effects shot him through. His neuro-muscular co-ordination was all out of kilter. Fumbling slowly as the creature wrapped around him in rubbery folds, he found the major's belt. And the heat that was generated by his rays as they bored into the monster penetrated even his helmet. He felt blisters rise on his neck and his lips swell. And then the thing was dead, a jelly-like nightmare that plastered him down. He fought free of the gooey mass and turned his attention to the major.

His suit was still inflated, so he had air. Through the flexglass helmet, Fritz saw a trickle of blood draining off from

his lips, bright scarlet in the atomic light of his torch. He couldn't tell whether the major was breathing or not. Anyway, he'd have to get him to the surface. He flashed his light upward and judged it to be about seventy feet Dennison had fallen. If he survived that without broken bones or internal injuries he was a superman.

Suddenly Fritz remembered the monsters and flicked off his light. There were at least twenty of them pouring toward them from the direction of the base of the ledge. There was no going back that way.

In desperation, the trouble shooter bent to swing the major's body into his arms. He nearly fell over backward. Dennison was practically weightless! And he had expected to heave a hundred and seventy pounds of dead weight. Of course! The major had been smart enough to shut off his gravity current on the way down. Maybe he hadn't hit so hard after all. And this was the way out.

Fritz switched off his own current and leaped with the major in his arms. He soared upward as if propelled by a rocket just as the monsters closed in below. He managed to get Dennison draped over one shoulder and his torch lighted. They cleared the ledge by fifteen feet. All of Fritz's past life raced through his thoughts as he executed a back flip in midair and landed safely on his feet. Just over the edge. But he was on firm ground. Inching the gravity rheostat over to give him some weight, enough to hold him down, he began running.

Evidently every monster in the crevasse had been aroused. They were coming out of the lateral passages, balling up and rolling swiftly after him. He put everything he had into the race for the outside.

Made it. The sky was overhead. And only a ten foot leap to the surface. He made that and started yelling to Myra and Carothers, who were arm in arm atop the mound. Carothers stared incredulously through his goggles.

"Beat it!" shouted Fritz. "For the ship. They're coming!"

His tone, and the sight of his burden, evidently frightened Myra. She started to run. But Carothers stood still, rooted to the spot. Keenan ploughed toward him and let loose with his free arm, catching him with a mighty wallop that drove the flexglass of his helmet hard against his jaw. Carothers sat down suddenly and the goggles slipped down to dangle ludicrously underneath his chin. He began howling. He couldn't see the monsters any more and could do nothing about it. His hands, in their bulky covering, clawed frantically at his helmet.

But Fritz paid him no heed. He was sprinting toward the TL-61 in long strides made possible by the low gravity setting of his rheostat. He overtook Myra and dragged her along. Then they were in the airlock

"Carothers!" he bellowed, seeing that the man had not risen. "Make it snappy or—" His words froze on his lips. Carothers was a flopping, deflated thing in the grip of an invisible attacker. His space suit was ripped to shreds, his helmet torn away. He was already a corpse.

Fritz closed the outer seal, Myra's gasping sobs cutting into him.

"TROUBLE?" Fritz Keenan laughed later in Dennison's stateroom. "I didn't mind. I'm always in it. Not usually this kind, but trouble. We're lucky it was no worse."

Myra Dennison was sitting on the edge of her husband's bunk, her sculptured features grave, her eyes pleading with Fritz. The major, thanks to his presence of mind in shutting off his gravity, was not much hurt. In a few minutes he'd be up and yelling for action if Keenan judged him right.

"Too bad about Carothers," remarked Dennison.

"Too bad!" Fritz echoed blankly. "The

skunk got just what was coming to him. You know damn well he'd made a number of attempts on your life, Major. And this was his final effort. He fell down on it and he got his. That's all."

"I know," sighed the major. "But it might have been better—"

"Shut up!" roared the trouble shooter. "I'm fed up with you and I'm fed up with Myra. And, dammit, I'm going to talk turkey to you both."

The girl's brown eyes were wide with terror. Dennison raised himself to one elbow. "Keenan, you can't talk that—"

"I can and will," Fritz interrupted him. "Now, you listen to me, Major. You, too, Myra. You're a pair of idiots. Major, you're nuts about this wife of yours and you know it. She's nuts about you. But what do you let happen? This guy Carothers comes along and makes hot love to Myra and you think she falls for it. She almost thinks so herself. Why?—because you've been so dog-gone wrapped up in your instruments and stones and junk you never even kiss her hardly. So naturally she likes for somebody to be nice to her. And Carothers is the white-haired boy that fills the bill—for a while. She didn't know he was trying to get you out of his way. She damn near died when she found out. She thought she was keeping him from you on 2782.

"Get wise to yourself, Major. Take a gander at yourself in the glass some time. You're a good-looking guy. And Myra's a dream. I wish she was mine. And you, you nitwit, you've been throwing her at anyone who wants to make time with her. Myra's not only a peach, she's healthy and she's human. Remember there's such a thing as biology in love as well as romance."

Fritz stopped for breath and looked at Myra, who was blushing to a beautiful rose hue. And at the major, whose gray eyes were showing new glints and who didn't look mad at all.

Fritz chuckled. Dennison lunged to his feet and stuck out a hand. The trouble shooter gripped it mightily. Then he put a finger under Myra's chin and lifted her face until he could see into those brown eyes. What he saw there satisfied him. He bent down and planted a brotherly kiss on her forehead.

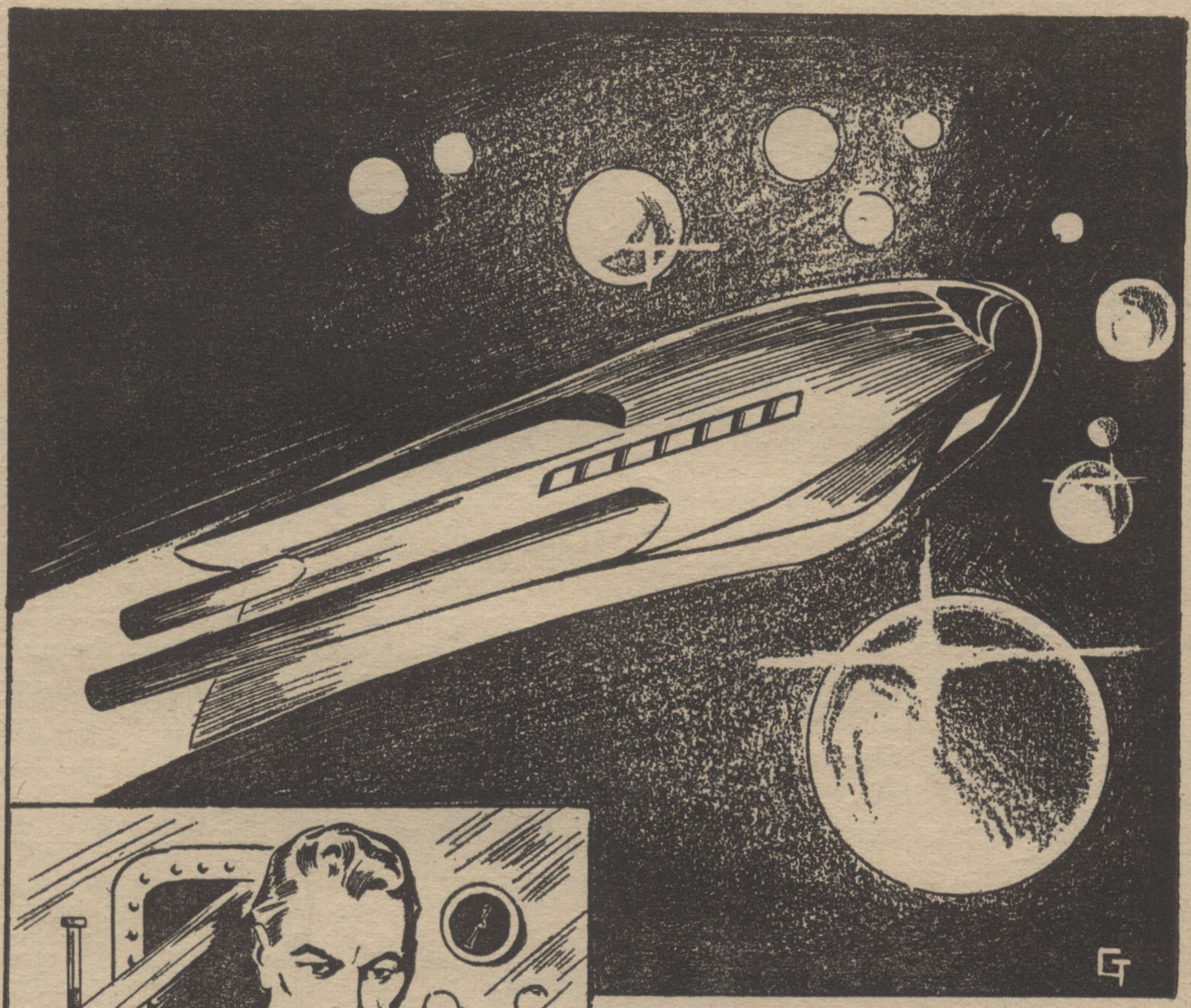
"And now, you two," he boomed. "Get things patched up in time so Myra can get some supper. I'm damn hungry."

They were in a heart-stirring clinch when Fritz quick-kicked into the corridor. Regretfully he wandered aft to mourn with Crabbe. If things had been a little different, he might have followed up his own play. Taffy blondes with brown eyes were something.

THE END

SIGMA LYRA PASSES

Those vast, silvery globes could kill, could even transmute the living flesh to lifeless minerals. But the voice from nowhere said, *"Do not despair, Earthman. We would not harm your little Earth."*



DURING the thousand years following its discovery in 1953 A. D., the Nebula of Sigma Lyra left indelible imprints in the history of the world. The astronomers announced that it was approaching the Solar System at the incredible velocity of 1170 miles per second, and would envelop Earth and her sister planets in a little less than a thousand years. In 1990 a new religious cult sprang up, whose prophets claimed that the nebula was the just wrath of God, descending upon the shoulders of sinning Man. In 2430 Lin Rooth, who "saw the coming doom," harangued some of his followers to suicide. 2876 saw Theor Khan, the "Second Noah," march his "select few" into his Space Ark, and vanish in the di-

By OLIVER E. SAARI

rection of Alpha Centauri, to seek refuge from the avenging cloud.

In 2918. . . .

Darl Fumal peered up into a cylinder of fluttering shapes, visible through the glass dome of the hangar. The sky immediately above the field was clear of planes, but on all sides hundreds of thousands of helicopters hung expectantly in the air, or darted about, seeking positions of better visibility. Countless propellers sliced at the air, filled it with a deep thunder of sound. Still more planes had landed on the outskirts of the spaceport, as near as they were allowed to approach. Their occupants had clambered out and gathered in a tight circle around the field, craning their necks with intense interest. They would have had a better view on their television screens, but it was far more thrilling to be present in person.

To Aline's comment, Darl added reflectively, "All their lives they have watched the Nebula grow brighter, ever nearer. And now, in less than three years the System will be immersed in it. Of course they are interested."

"Could there be any—ill effects?" faltered the girl.

"Very unlikely, my dear," Dr. Clark explained. "The central star will miss the System by many billions of miles, and the inner, inhabited planets will not be much disturbed. And the nebular substance itself has long been known to be far more tenuous than the best vacuum we have been able to produce by mechanical means. Probably no one will even be aware that the Earth is passing through it."

Just then a gong reechoed in the great building.

"That's the starting call," said Darl. "The *Vegan* is ready."

Dr. Clark put his arm around his daughter's shoulders. "Take care of yourself," he said, "and don't try flying that little runabout of yours to Mars like you did the last time I was away!"

Darl touched his hand to his forehead and nodded to the girl in the conventional gesture of farewell. Again he felt that strange regret. Before, he hadn't had a single reason to want to remain on Earth. But now the prospect of a five months' absence from that planet seemed bleak indeed. . . .

A lithe, space tanned young man came running toward them. Darl recognized Alan Dorn, his co-pilot on the *Vegan*.

"Finally done with all my farewells," grinned the newcomer, "but there's one I didn't want to forget!"

Aline blushed and smiled a gay acknowledgement to Alan's flowing gesture. But, looking at her, Darl sensed a sobriety behind her gay expression. Dorn, lucky fellow, had known her just three days longer than he.

The crew of the *Vegan*, twelve men in all, filed into the ship through the main airlock, and the thick metal plug swung ponderously shut behind them. Darl was chief pilot of the expedition. He seated himself before the controls, while Dorn and Patton, the co-pilots, took seats beside him.

The ship was wheeled outside on the trucks, and the sunlight glinted brilliantly from her polished sides. A tremendous cheer burst out from the watchful multitudes.

Suddenly her golden repulsor plates gleamed sharply, and the grass was flattened to the ground as the beams dug in. The front of the ship left the ground. With a his-s-s-s of tortured air the accelerating sliver of silver moved up the cylinder of whirling aircars, to disappear into the blue faster than the sound of the cheer that followed it.

THE *Vegan* did not need all of her crew in the ordinary process of space-flying. During the long weeks of the trip there was no need for the unaccustomed and less hardy scientific staff. Therefore they were

put "under the acceleration drug," sleeping in shock-proof hammocks. The drug, automatically administered every three days, strengthened their bodies against the constant pressure of acceleration, and produced a dreamless coma that did away with many hours of maddening boredom.

The three pilots, who were trained to withstand the strain of acceleration, took the controls in six-hour shifts, each having a sleeping period of twelve hours. Captain Andrews, commander of the *Vegan,* also had a waking shift, during which he checked the position of the ship and gave whatever orders he thought necessary.

Earth dwindled rapidly into a tiny blue-green dot in the infinite blackness. Faster and faster the *Vegan* went, her nose pointed directly toward the magnificent blue star that outshone everything else in the heavens, outside of the sun. The vast nebula surrounded it in a blue-white halo. Already it measured six degrees from edge to edge, and was rapidly increasing in apparent size.

For hours at a time the pilots sat before the controls, enduring a pull of more than two Earth gravities; then they crawled back to their hammocks for the brief respite of a drug-induced sleep.

Twenty-seven days after the journey had begun, the *Vegan* was turned through 180 degrees, so that the propulsive force that had been increasing her speed now decreased it. It would take an equal time to bring her to a standstill, and two days more to set her traveling toward the Solar System at the same speed as the Nebula.

Much of the time during his piloting shifts, Darl found himself staring moodily at the growing vastness of the Nebula. Curiously it seemed to have the shape of a hand, reaching out of infinity toward those tiny flecks of dust that were the abode of Man. Darl tried to imagine what the effect would be when Earth was immersed in those fiery folds, but his imagination failed him. But soon they would be able to analyse the nebular substance, and then Man would know whether those age-old prophets of doom had seen aright. . . .

DARL FUMAL groped his way out of a darkness. He felt neither pain nor vertigo, merely a slow return to consciousness. Memory leaped into his mind. The last he remembered, he had gone under the acceleration drug after a strenuous shift of piloting. That had been the *last shift!* By now the *Vegan* would be at her destination! The acceleration had stopped; Darl felt himself float weightlessly.

It was the work of a moment to unfasten the safety straps which bound him to the hammock. He gulped two of the concentrated nourishment capsules and took a long draught of water. After an icy, stinging shower at the wash panel he felt better, in spite of the fact that his feet refused to stay on the floor and he had to move by pulling on the hand rails.

Suddenly the penetrating notes of a buzzer assailed his ears. That was the signal for the application of artificial gravity to the contents of the ship. Darl quickly swung his feet to the floor, and it was well that he did so, for suddenly all his weight came back to him.

He walked up the ship's central corridor toward the control cabin. A buzz of excitement filled the room. Five men were there; the others were still coming.

Darl's eyes strayed instinctively toward the main vision screen and the picture mirrored there. In the lower right hand corner was a mass of blinding blue light, no longer the star, Sigma Lyra, but a great sun of its own right. Around it, space was no longer black. The nebula was near now. It covered the entire vision screen, overlapping it indefinitely. It was like a bluish mist, but somehow it did not seem like a gas. Rather, it looked like millions upon millions of dust motes floating in space.

Lacy, the astronomer, was adjusting the telescope with hurried fingers. He gave a grunt, and suddenly a highly magnified portion of the nebula flashed upon the screen. For a moment the silence was deathly as everyone stared. Then somebody sighed.

For on the screen were mirrored countless numbers of tiny silver balls! They spread before the ship in an immense cloud that, in its densest portions, completely obscured the background of the universe. Perfect, brightly reflective spheres, they were not packed close together; rather they were scattered far and wide in the space around the star, thousands of miles separating them.

"This certainly wrecks all notions we've had of 'gaseous nebulae,'" breathed the astronomer in awed tones.

"Bring us nearer to it, Captain," urged Dr. Clark.

"Eventually," said Captain Andrews. "First we must make a few observations."

Patton was seated at the controls, while Darl, Alan, and the Captain obtained readings on all the instruments. Everything was in order. One propulsion plate was slightly off adjustment, applying two dynes more power than the others, but that was the only sign of wear produced by eight weeks' constant running.

"At present we are traveling toward the Solar System at a slightly slower speed than the Nebula," reported the Captain, "about five million miles from the outskirts of the cloud."

Some of the control cabin's floorspace was taken up by rows of upholstered chairs, which made lesser accelerations bearable without the use of hammocks. In these the men seated themselves. Captain Andrews gave Pilot Patton the order, and the ship moved forward, toward the Nebula.

"Have you unearthed anything startling yet?" asked Darl of Dr. Clark, who was seated beside him.

"Quite," said the physicist dryly. "I can't understand it at all. Either the nebular substance has no mass at all or my precious instruments aren't worth their bulk in scrap. They fail to show the slightest gravitational influence emanating from those solid looking silver balls!"

"But how could that be possible? Billions of miles covered by the things, and no weight!"

Dr. Clark shrugged. "We'll see, soon enough."

THE *Vegan* was now approaching the outer fringes of the nebula. Several of the silver spheres flashed by before the pilot could make adjustments on the speed.

They were a strange sight! They were forty feet in diameter, on an average, and they were spheres in utter perfection. The ship approached one more closely and the scientists stared at it with baffled expressions. The only thing visible on that surface was a clear image of the *Vegan's* nose!

The pilot, being confronted by something utterly strange to him, merely held the ship poised before the queer object and waited for orders. Captain Andrews, equally nonplussed, gave no orders. The physicist leaped out of his chair and fell to work with his instruments. After awhile he looked up, deep bafflement showing on his face.

"That sphere outside defies all the laws of the universe," he said. "Matter does not exist without mass, and with mass there is always a gravitational field. But look," he pointed to a dial, "this meter would register the mass of a one pound meteoroid a thousand miles away; yet the needle doesn't even quiver when I focus the instrument on that sphere outside."

Other observations, speedily but carefully taken, failed to net enlightening results. The strange sphere had an albedo that had been considered impossible—it reflected all the rays of light that struck

it 100%. X-rays were bent back as easily as the light waves—even cosmics failed to make an impression, but bounced back in their full power! No other radiations came from the body, besides those it reflected. It radiated no heat; therefore its temperature—theoretically—was at absolute zero!

"Perhaps we could land on this body and examine it at closer range," suggested the Captain.

"An excellent idea," said the Chief Physicist, "but I should advise caution. We haven't the slightest idea what we're up against."

Following the Captain's orders, Pilot Patton edged the *Vegan* nearer to the silvery surface. He swung the gravity-grapplers on the sphere, but nothing happened. The plates had no power against the object outside.

Never before had the pilot attempted a landing on an object that defied the laws of gravitation, and he was excusably nervous. Finally he turned to the main propulsion plates as a means of bringing the ship nearer the sphere. The control moved the slightest bit too far.

If the sphere had been an ordinary body, there would have been little danger in the collision, which occurred at low speeds. But it was not ordinary. The ship's nose jerked toward its own image on the brilliant surface, met it. . . .

THERE was no impact, no sensation save that of sight. From his seat in the back of the room, Darl saw the vision screen go blank. An instant later the forward part of the control room disappeared from view, hidden by an absolutely opaque, perfectly reflective surface that had flashed in between. For a moment it stayed there; then it receded as suddenly as it had come.

Only one thing had changed. The three men who had been seated in the front of the room—Captain Andrews, Lacy, and Pilot Patton—slumped limply in their seats. Their open eyes were blank, expressionless.

Darl ripped off his safety belt and dashed forward.

"They're dead!" he gasped.

Marsh, the medical officer, was bending over the limp body of the Captain.

"They are dead," he affirmed in an awed tone, "but—such symptoms I have never seen."

"They passed through a portion of the silver sphere, and died," mused Dr. Clark. "But *why?*"

Marsh procured his kit and continued his diagnosis. The others waited breathlessly as he worked. Then he faced them, and his face was ashen.

"I can find no evident cause of death," he announced gravely. "However, I should say offhand that not only the hearts of the victims have ceased functioning, but that the very substance of their bodies has been changed from protoplasm to lifeless mineral matter! See, already the skin cells are breaking down, collapsing upon themselves."

Horror swept the room. The faces of the dead men had turned grey and sere, far more than the pallor of death would allow. They were not only dead, but they even failed to present the aspects of the once-living!

Darl suddenly awoke to his responsibilities. At the death of Captain Andrews, he had succeeded to the position of the *Vegan's* commander. His first duty was to remove the ship from danger. If it collided again with one of those spheres, the men would never know what hit them.

He lifted the inert Patton from the pilot's seat and took the controls. The ship was moving straight into the tremendous swarm of deadly silver spheres. Darl turned her around, headed her for the friendly vista of star-studded space.

Finally, about five million miles from the outskirts of the cloud, he stopped the

engines. Now the expedition could begin in earnest to seek a solution to all the mysteries that confronted it.

THE *Vegan* remained near the nebula for six Earth days. The scientists approached the problem from every possible angle, but they encountered little success. The bodies of the dead men offered the only clue. They had died more completely than anyone had ever died before. Marsh, the medical officer, had a theory.

"Ever since the all-permeating cosmic rays were first discovered," he explained, "biologists have been trying to discover their relation to living things. All the lesser radiations play their part in the maintenance of life on the planets, and it has long been suspected that the cosmics, too, have some connection.

"Three hundred years ago a scientist by the name of Hurley expounded a very reasonable, if unproven, theory. Life, he explained, is a sort of fire kindled in matter by the action of the cosmic ray. He attempted to show that living protoplasm is constantly utilizing energy quanta from these rays, and that if this energy were removed, life would cease to exist.

"He failed to prove his theories because he could find no way to exclude all cosmic rays from a living body. They penetrated every barrier he could set up.

"But the mysterious spheres of this nebula reflect *all* radiations. That means that no waves are present within them; even the cosmic rays are excluded. And this, I believe, has proven the truth of Hurley's theory. Our companions were killed by a momentary absence of the cosmic ray!"

Everyone felt that Marsh's theory was the correct one, but it was by no means a comforting explanation.

"And these things are heading for Earth!" whispered Dr. Clark. "All life in their path will crumble to dust. Nothing will stop them, nothing. . . ."

The others were silent. A vision had risen before them, of a vast cloud of silver bubbles settling upon a green planet, silently—and then the grey death over all. And Dr. Clark's words were a pronouncement of doom. "Nothing will stop them. . . ."

PERHAPS the tidings the *Vegan* carried would have been better left unheard. For, when it returned with its message, panic swept the Earth. A strange sort of panic, which quickly evaporated, leaving only the calm of a strange wonderment. But there was little hope.

Where could they go? What could be done? Underground, in the air, in space, everywhere in the Solar System it would be the same; the immensity of the nebula would enfold them all.

The scientists of the world attacked the problem with all the resources at hand. They had over two years' grace—two years, into which they had to crowd a lifetime of work! Extensive laboratories devoted solely to research on this one subject sprang up all over the world. But it was in the great government laboratories at Solapolis that the members of the Nebular Expedition worked with the world's greatest scientists, seeking the knowledge that would decide the fate of the planets. Month after month passed by, and still they reported no favorable results. And still the white dust of the nebula grew in the heavens. It no longer seemed beautiful, for to the eyes that watched it was a shroud of silent, terrible menace.

Eight months of unending toil brought the first sign of hope. The scientists had created an "ether strain," the properties of which were almost identical with those of the nebular spheres!

"'What man can create, man can destroy,'" Dr. Clark said to Darl during a rest period just after the discovery. "We have created a condition similar to the spheres. Perhaps we can also find a way to destroy them."

The physicist looked tired, bent with weariness. Darl himself, in handling the physical details of the experiments, had begun to feel the strain, but he knew it was nothing compared to what the scientist was going through. Every waking moment filled with a chaos of surging forces, the crackling of mighty energies. Wandering through deep, meaningless equations that led always into blind alleys of despair—

"Then there is a chance?" Darl asked.

"Yes. We've found that the spheres are not composed of matter at all. They are what one might call 'holes in space,' areas in which no light conducting medium exists. That is the reason they reflect all rays—because the same force that maintains the 'ether strain' repulses all the etheric vibrations. Since the spheres aren't actual matter, there should be some way to break them down, destroy them utterly."

"If we could do that," Darl said, "the future might look a little more encouraging."

The scientist had again sunk into deep thought. That was the way he would spend every rest period, unless Aline came to relax him with her smile. Darl, too, found himself looking forward to each visit. He tried not to think too much of her, for just now his work transcended everything else, but he hadn't been able to control his dreams. Sometime—if there was a sometime—when the menace of the nebula had passed. . . .

He sat back and waited. Soon the girl stepped gaily from the gravity lift, her arm locked tightly in Alan Dorn's!

DARL FUMAL stood on the balcony of the laboratory's residential building and looked long at silver gleam of the *Vegan*. Shining palely in the moonlight, she lay on her launching tracks outside the hangar where she had been built and equipped. The ship was ready for her all-important mission. For months they had labored on her, installing the complex machine that was Earth's only chance of salvation.

The outer fringes of the nebula were but five months away. Five months before the deadly ether strains wiped out all life in the solar system—unless the *Vegan* were successful in her mission!

The scientists had finally discovered a force that would destroy the spheres. It was a wave approaching infinite frequency, a ray that was so far beyond cosmics that it could scarcely be called a ray at all. It was an uncontrollable force that had destroyed the first machine to create it, and also the man who had made the machine. But others had studied his notes, installed a larger form of his apparatus into the *Vegan*.

The plan was to bring the ship into the part of the nebula through which the Earth was to pass, and then loose the wave that would destroy the spheres. The scientists estimated that a path at least two hundred million miles across would be made in the nebula, through which the Earth and the inner planets could pass unharmed.

The ship herself would be the projector of these rays. Throughout her length was installed a machine that would give her a vibratory rate, a vibration whose swing was infinitesimal, the frequency immense. Then an automatic switch would liberate all the energy of the ship's fuel in one tremendous burst. In an instant she would be an expanding, incandescent gas, at a temperature of some two million degrees—and still vibrating. Her terrific output of radiation would be stepped up and up, to that infinite frequency that was death to the spheres.

The *Vegan* would have two pilots on her last journey. Darl smiled grimly. He knew who would volunteer—and who would be chosen.

A door slid softly into its recess, allow-

ing the rays of a lighted room to flood the balcony. Darl peered into the grave eyes of Aline Clark.

"Oh—hello, Darl," she greeted.

The moonbeams wove a halo around her hair. Her eyes reflected the stars. Darl thought she was beautiful.

"I was just thinking of you," he smiled.

She looked past him at the *Vegan,* and Darl sensed a haunting fear in her eyes.

She said, "Darl, who is going to pilot the *Vegan* tomorrow? I know there are to be two volunteers—"

Darl knew well enough what she wanted to say. The two who flew the *Vegan* would never return. But for whom was Aline fearing?

"Darl, have you seen Alan?" she asked suddenly.

He had almost expected the question. "I met him at the *Vegan's* lock an hour ago and haven't seen him since," Darl said. "He said he was going to see your father."

She answered with a shake of her head. "Father has not seen him. He is resting now—you know the great strain he has been working under."

Darl smiled at her reassuringly. "Don't worry about—tomorrow, Aline. Your father will not go; his work is done. And I am sure the two who volunteer will go willingly—"

FOR a while she stood there on the balcony, her eyes raised to the magnificent shape of the nebula almost directly overhead. Then, with an involuntary shudder, she turned away from it. Darl could have kissed her then, but he let her go with but a little nod. And he knew that that was the last time he would see Aline Clark.

He looked once more at the waiting ship. The ship was completely equipped and fueled, ready to start on the morrow. The only thing remaining was the choice of the pilots. Darl knew that he would be one—and somehow he knew that Alan would volunteer to be the other! And that was what Aline feared.

Darl had known for some time that he didn't have a chance.

Darl knew he couldn't keep Alan from volunteering. It would be useless to try. But it seemed such a needless destruction of Aline's happiness, when Darl knew he could pilot the *Vegan* on her last expedition as well—alone. The ship really needed but one pilot to fly her; the other was to be along merely to cope with emergencies.

The decision had not been sudden; Darl had thought of it for weeks, had prepared everything.

Quickly he climbed over the rail and dropped to the soft, rug-like grass of the spaceport. The entire field was well guarded from the over-enthusiastic populace, but Darl was well within the guarded circle and encountered no sentinels. In a few moments he was at the *Vegan's* lock.

The outer door was already open, and the inner one revolved quickly inward as he touched the lever. He walked up a narrow corridor, toward the control room. Lights flashed on automatically as he entered. Darl had no fear that they would be noticed from outside, for the porthole covers were closed.

He cast a practiced eye over the meters and dials on the instrument panel. Fuel-feeders full—gravity plates coordinated—atmosphere correct—

Over to one side was a new set of controls, colored a warning red. Darl knew what they were for. They were the controls he had helped install, the ones that would set loose the forces of the machine upon the nebula.

Finally Darl strapped himself to the pilot's seat, pressed a button that automatically sealed all the locks, and turned on the repulsors.

ALINE CLARK walked slowly out on the flat expanse of the spaceport. She had not found Alan. Of the few people she

had asked, none knew the whereabouts of the young mechanician. She wanted to tell him not to volunteer tomorrow, when the *Vegan's* pilots would be chosen.

Before the looming shadow of the hangar her eyes caught the metallic glint of the *Vegan*. Perhaps Alan would be there, making a last check on the machines. Aline found herself treading softly toward the ship.

Suddenly the *Vegan* seemed to stir. Was that a light at its tail? Aline's breath caught. She wanted to run. Somehow she knew that Alan was on board that ship, and that he was going.

A tremor passed through the silver hull. The ship lifted from the ground like a wind-blown feather, the ionization flow of her repulsors glowing weirdly. For a moment it was outlined against the white mist of the nebula. Then it diminished into a black dot, disappeared, it seemed, into the depths of that cosmic cloud.

Aline paid no attention to the excited, shouting guards who were racing toward the spot where the ship had been. Somehow it had not occurred to her that Darl might be piloting the ship. It was Alan who was steering it toward certain death, Alan who had not been able to wait for tomorrow. The world would be saved, but somehow it no longer seemed worth saving. . . .

WHEN finally Darl let his tired eyes stray from the vision screen, the *Vegan* was far out of the ecliptic plane, about thirty million miles from Earth, and still accelerating. He had aimed directly for the spot that was marked on the charts in red. He could rest now. But before he could get any sleep, he would have to lessen the crushing acceleration that was holding him down. Being the lone pilot and occupant of the ship, he dared not take the acceleration drug.

At his normal weight Darl felt much better. He was reaching for his food tablets when a metallic voice from behind froze him.

"Is that you, Darl?" the voice came from a phone speaker marked *Storage Rooms*. "Let up on the acceleration a little more and give me a chance to come up, will you?"

It was Alan's voice! What was he doing on the ship? Did he know they were heading toward certain death? Darl had thought he was leaving his friend on Earth for Aline, and now—

A twist of the dial shut off all power from the propulsion plates. In another moment a disheveled Alan Dorn pulled his way into the control room and dropped into a seat. Above his temple was a gash from which blood welled.

"Heading for the nebula, aren't we?" he said in an even voice.

"What are you doing here?" Darl demanded. "I thought—"

"I might ask the same question of yourself," retorted Alan, "but I can see we're both here for the same reason. It seemed to me that I was the logical choice for pilot on this expedition. I knew you'd volunteer to be the other, but I didn't see any sense in two going—besides, one of us should have stayed back on Earth to take care of Aline. I know you love her; I've been watching—you've tried not to show it, but—"

"You fool," hissed Darl. "Aline wants no one but you. And now neither of us—but how did you get on board, anyhow?"

"Why—I decided to take her without saying anything. But one of the power relays was off adjustment and I went down to line it up. Then I heard someone in the control room, and the ship lurched suddenly. That's the last I remember. . . . And, Darl—I hope you're right in what you said about Aline. But it's too late now. We won't turn back."

"No, we won't turn back," said Darl softly. "I guess the fates had it in for both of us!"

And so the *Vegan* sped on toward the nebula with two pilots at her controls, just as it had been originally planned. The two took turns, one sleeping while the other kept watch. Often they found time to talk of the nebula, of Earth, of life, of little things—but they never mentioned Aline Clark.

The two found themselves merging into a friendship such as they had never known. The very nature of their mission seemed to have wiped out all human frailties. Each saw in the other only the finest qualities of manhood. They were plunging on toward certain death. Slowly the tiresome days dragged by, while their nerves became frazzled from sheer inaction, but neither weakened. Earth was a forgotten memory. To each man the presence of the other was the only reality—other things were infinitely remote.

The sun dwindled behind, and the blue central star of Sigma Lyra grew brighter. Like a vast stellar octopus the nebula seemed to stretch its tentacles farther and farther into space. One by one the constellations were obscured by the spreading luminosity.

DARL had so often seen it in his mind's eye, that the scene mirrored in the vision screen seemed quite familiar. The *Vegan* was now very near the nebula and the mysterious silver spheres were glittering in the void ahead.

Darl was at the controls. He let the ship float slowly past the first of the spheres. It was not difficult to keep at a distance from the deadly things, and he steered her easily deeper and deeper into the cloud.

The spheres were motionless. They seemed to have no movement relative to their central sun, and therefore it had not been difficult to determine the exact spot on the nebula through which the Earth would pass. It was toward the center of this portion that Darl was steering the *Vegan*. If the machine worked, she would sweep a clean path for the planet to follow.

Finally, when the stellar bearings and all the dials checked, the ship was in a position to perform her all-important duty. The engines were still, acceleration nil. Darl switched on the artificial gravity.

Then he nodded toward the red controls.

"Here we are," said Darl. "Will you pull it—or shall I?"

Alan shrugged his shoulders. "Go ahead."

Darl strode across to the fatal lever. He would pull that, and the long machine in the center of the ship would become magnetized, vibrating the ship with an oscillating field. When the vibrations reached a certain pitch, automatic switches would close, and all the energy in the ship's fuel would be liberated as heat. Somewhere in the process the two pilots would be reduced to scattered molecules, but they would not be needed once the machines were set in operation.

Darl slipped the safety catch, cast a glance at the two large dials above the red lever, and curled his fingers around the handle.

"Pull it, quick—and it will be all over!" the impulse flashed from Darl's brain to the muscles of his arm. But those muscles failed to obey!

He cursed himself for a coward and bent all his efforts toward moving that lever, but still he could not do it.

The vision screen showed one of the spheres, enlarging at an alarming rate. In another moment it would engulf them. Darl had to pull the lever before it was too late—the fate of all life on Earth depended upon it!

Darl's vision fogged. His body was numb; his brain could not control it. Vaguely he knew that Alan was rushing forward, while the deadly sphere grew huge in the vision screen.

Then a voice seemed to say, *"It would*

be of no use; you can destroy only yourself. The spheres cannot be destroyed!"

At first Darl thought that Alan had spoken, but Dorn was standing before him with a look of dazed surprise. In a dazed way he knew that the silver sphere had disappeared from the screen.

But Darl still had not pulled the lever.

"I can't do it," he panted, stepping aside. "I wouldn't have thought that—"

"Do not despise yourself, Earthman. There is no need of it!"

This time the message was clear, unmistakable, and—unspoken. Darl looked at Alan, only to meet the other's wondering stare halfway.

"You do not need to save your little Earth. We would not harm it."

It was the hallucination of a brain gone mad with fear, Darl told himself. But it was stronger than the voice of conscience and responsibility, which strove against it.

Suddenly his mind received the strangest impression. The silver spheres—they were alive! That thought thundered down upon him, while he strove to retain what seemed his last grasp on sanity. Yet—as he looked at the vision screen his eyes opened wide. For the spheres were moving! Slowly, majestically they were drifting toward the ship, gathering around it in a vast shell of reflected radiance. But they did not so much as touch the *Vegan's* hull.

SLOWLY the strange new ideas flowed into Darl's brain. His mind enlarged mightily to grasp them, but he knew he had caught only the bare essentials of that amazing thought.

The spheres were alive, but not as Man knew life. They were "organisms" made up of ether-strains instead of matter, and their life's blood was pure energy in the form of high-quanta radiations, which flowed through tenuous but impenetrable channels within them. Wasteless, eternal, they were the ultimate perfection of the living machine. They moved by simple thought alone, for nothing could resist their motion.

All their living energy was obtained from the central sun. It was some peculiar quality in the blue star's rays that enabled them to live. Suns of this sort were rare, and the ether-beings clustered around each of them in great clouds. They could not exist for long in interstellar space, nor near any other type of star.

Darl seemed to realize very faintly that these beings were the ultimate perfection of life, which every intelligent creature in the universe strives for and, by its science, sometimes attains. . . . That Man, too, in the dim and distant future, would cast loose the shackles of material existence and become as these beings. . . . . But there were many things he could not understand.

Darl's brain was spinning as the barrage of thought ceased momentarily.

"Did you think what I thought?" he whispered to Alan.

"I don't know, but I thought something pretty wild. Those things out there are alive!"

Darl had no time to answer, for his mind was again seized in a strange grip. New thoughts were entering.

Now he knew why the ether-beings had not prevented that accident on the *Vegan's* first expedition. Their viewpoint of the universe was on so high a scale that it took a special effort to notice smaller things. They had learned of the ship's proximity too late. But they would not touch the planets of the Solar system; all the creatures on these worlds would be spared. The spheres would move aside and let the planets move through unharmed.

But they required one specimen of the highest form of Earth life for further study, from which they could get a perspective of all the stages through which that life had evolved. Either of the two men in the *Vegan* would serve. Whichever chose to go should throw himself into

one of the spheres. His body would be retained, and his mental being would merge with that of the sphere.

Darl shook his head to clear it of a stifling mist. He seemed to float down in a vast void, from which finally emerged the vision screen and banks of controls, strangely unreal. Alan was leaning on one of the chairs, his face a mask of amazement.

Darl no longer doubted. Somehow he knew they had both heard the same message, a mental voice from a being that was beyond imagination.

"I'll go," he said suddenly. "You will take the *Vegan* back to Earth."

"No, that wouldn't be fair—it's just as much my duty—"

"All right, we'll both go," said Darl briefly.

Alan had pulled a flat case from his pocket, and had opened it to reveal a stereophoto of Aline Clark. Darl took one quick look at it, then turned and stepped softly into a corridor.

Quickly he made his way to the ship's surgery. Here were racks lined with medicines, anaesthetics. . . . Darl espied a small cylinder and took it down.

In another moment he was at the airlock, opening the space-suit lockers. Alan was still in the control room and Darl breathed a sigh of relief. He took out one of the suits and removed the oxygen tank from its back. It was exactly the same size and shape as the cylinder of anaesthetic he held in his hand. Darl made the exchange quickly but barely in time, for he heard Alan's footsteps coming down the corridor.

Alan saw him and smiled grimly. "Weren't trying to slip out on me, were you?" he demanded.

Darl shrugged. "I unpacked the suits," he said easily. "I'd rather die the—other way, than from lack of breath."

He handed Alan a suit and took another for himself. Dorn cast a quick glance at him, took the suit, and climbed into it. Darl felt a mental smile of understanding. Somehow the ether-beings had understood his actions and were helping him!

FROM the corner of his eye Darl watched his friend's hand reach for the oxygen valve of the suit. At the first hiss of gas Alan jerked his hand to the screw that loosened the helmet. He staggered against the wall, but the helmet swung open!

His eyes bored into Darl's.

Darl stepped forward and swung a lightning fist to the other's jaw. Expression faded from Alan's eyes and he slumped to the floor.

Darl penned a few hasty lines on his writing pad, which he then thrust between the unconscious man's fingers.

To put on a space suit was the work of a minute. To pass through the airlock took another.

Before him Darl saw a smooth, seemingly impenetrable silver surface, saw his space-suited figure mirrored there.

After all, he mused, this was not death. His consciousness would rise to a higher form, merge with a mind that was god-like, eternal.

On the wings of that last thought he leaped.

THE END

THE SCIENCE FICTIONEER

THIS issue of *The Science Fictioneer* won't start with the usual "pep-talk." For, since the appearance of the previous number,—

The membership of *The Science Fictioneers* is now 200.

Five new branches have been chartered —including one in Canada and one in Australia.

And the flood of letters containing advice, criticism, and suggestions for the expansion and improvement of the club have indicated with perfect clarity that the fan world is backing the new organization with heart and soul!

And there's nothing that needs to be added to that!

News from Our Branches

The Los Angeles club, Branch No. 1, has adopted a three-month program of activity, including such features as a week-end trip to San Diego, one-day field trips to the La Brea tar pits, the Los Angeles and Southwest Museums, visits to the locations of the science fiction motion pictures "She" and "Flash Gordon," evening trips to the Griffith Park Planetarium and the Mount Wilson Observatory, etc. They have also planned a Science Fiction Costume Party for the evening of May 30th, to which all local fans will come dressed either as their favorite stf character, or as an interpretation of some thing or person connected with fantasy. And they are making arrangements for a Science Fiction Banquet, time and place yet undecided, of which further details will be given in our next issue. Every Los Angeles science fiction fan will want to be in on this mammoth campaign of activity, so all are requested to write to Walter J. Daugherty, Director, at 1039 West 39th Street, Los Angeles, California, for full information on the subject.

The Solaroid Club, Branch No. 4 of *The Science Fictioneers,* has brought out the first issue of its club paper, *Sun Spots,* an entertaining hektographed affair. It has also had individual membership cards printed, conferring honorary membership in the club on Frederik Pohl, Executive Secretary of *The Science Fictioneers.* At its meeting of March 22nd, a new presidential election was held, with Gereaux de la Ree, Jr., winning the Presidential post and Roderick Gaetz becoming Vice-President. *The Solaroid Club* meets twice a week at 9 Bogert Place, Westwood, New Jersey.

A second branch of *The Science Fictioneers* has been chartered in Chicago, under the guidance of Mark Reinsberg. The members are Mark Reinsberg, Richard I. Meyer, Erle Korshak, and George Tullis. The address is 3156 Cambridge Avenue, Chicago, Illinois. The

new club becomes Branch No. Five of *The Science Fictioneers.*

The Philadelphia Science Fiction Society has been chartered as Branch No. Six of *The Science Fictioneers.* This club, led by Robert A. Madle, *Science Fictioneers* Advisor, meets once a month at President Madle's home, and, among other activities, issues the entertaining bulletin of fan activity, *PSFS News.* Madle's address is 333 East Belgrade Street, Philadelphia, Pennsylvania.

Branch Number Seven is *The Toronto Science Fictioneers,* the principal activity of which, at the moment, is the recruiting of new members. Starting with a membership of three, Director E. R. "Ted" White says, "It is surprising the number of fans there are around, and my letter in the last issue certainly brought a lot of them to light. I hope, by the end of next month, to have a roll of twenty-five!" Member White's address is 73 Taunton Road, Toronto, Ontario, Canada.

The Baltimore Science Fiction Society is Branch No. Eight of *The Science Fictioneers.* Meeting monthly, it has, according to its proud Director, "The finest collection of science fictionists ever gathered under one roof" in its membership. Certainly it has one of the most attractive club-rooms a science fiction organization ever possessed. The Director is Frederic Arnold Kummer, Jr., and his address is 224 West Lafayette Avenue, Baltimore, Maryland.

Branch No. Nine, the first extra-continental branch of the organization, is *The Futurian Society of Sydney,* led by William D. Veney, of 19 Newland Street, Bondi Junction, Sydney, N. S. W., Australia. This club is well-known for its publication of the lively journal of Australian science fiction doings, *Ultra.*

John W. Olsen, of 2525 Court Street, Baker, Oregon, would like to form a branch of *The Science Fictioneers* in that region.

Paul H. Klingbiel, of 627 South 7th Avenue, West Bend, Wisconsin, and Donn Brazier are attempting to organize a society to "conduct a nation-wide search for material in science and philosophy which extends across the border of the known." There are no dues in this organization, which is tentatively called *The Frontier Society.*

The following members of *The Science Fictioneers* are anxious to form branches in their areas. All fans interested will please write them.

Milton A. Rothman, 2020 F NW, Washington, D. C.; Roy Cameron, Jr., 1021 Chestnut Street, Hamilton, Ohio; J. F. Gaillart, 731 Keith Avenue, Anniston, Alabama; Harry Warner, Jr., 303 South Bryan Place, Hagerstown, Maryland; Olon F. Wiggins, 3214 Champa Street, Denver, Colorado; and J. J. Fortier, 1836 39th Avenue, Oakland, California.

THE SCIENCE FICTIONEERS
APPLICATION FOR MEMBERSHIP

The Science Fictioneers
210 East 43rd Street
New York City.

Sirs:

I am a regular reader of science fiction and would like to join *The Science Fictioneers.* I enclose a stamped, self-addressed envelope for my membership card.

Name _____

Address _____

City & State _____

Occupation _____ When Born _____

_____Please reserve a *Science Fictioneers* pin in my name. (Check if desired.)

With the Science Fictioneers

Here's something new in professional magazines; a column devoted exclusively

to you, the members of *The Science Fictioneers*. In this, and in future columns, news and gossip of the various members of our organization will be presented to you. It is suggested that members submit short items of information concerning themselves for publication in this column. Address: 333 E. Belgrade St., Phila., Penna.

Arthur L. Widner, Box 122, Bryantville, Mass., is conducting a poll in order to discover just who are the favorite fantasy writers. If you haven't done so, why not jot down your ten personal favorites (living or dead) and send them on to Art? . . . Harry Warner, Jr., a comparatively new fan, gets our vote for being one of fantasy's most ardent supporters. Besides publishing an excellent amateur magazine, *Spaceways,* Harry is exceedingly well known for the many fan articles he composes. He turns them out by the dozens, and the surprising thing about it all is that they're invariably well written, always touching on pertinent and interesting ideas. . . . Leonard Gipson, thirty-eight year-old newly-active fan of Santa Anna, Texas, has certainly lived an exciting life. He's served in the World War, was later in the Army Air Corps, almost made the grade as an outfielder with the Houston team of the Texas League, barely missed making the United States Olympic team in 1924, etc.

How many members of *The Science Fictioneers* play musical instruments? Jack Agnew (Philadelphia) is a saxaphonist, and clarinet player; Harry Warner (Hagerstown, Md.) plays a second oboe in a symphony orchestra; Milton (Lee Gregor) Rothman (Washington, D. C.) pounds out the classics on a piano; John V. Baltadonis (Philadelphia) is an experienced violinist; and there are probably many others. Perhaps we can have an all-fan orchestra play at the World Science Fiction Convention in Chicago this coming September.

Fred W. Fischer (Knoxville, Tenn.) undoubtedly has one of the best stf collections extant. He's now thirty years old and has been collecting for almost twenty years. Fred writes scripts for radio presentation and hopes to convince a few of his buyers that fantasy is what they should sometimes use. Fred recently entered the fan field and is already recognized as one of the top-notch fan authors. . . . Don't forget the convention in Chicago this year!

—ROBERT A. MADLE.

New Members

Len Hall, 703 Shrader Street, San Francisco, California; Alex Laskevitch, 26 Vernon Street, New Haven, Connecticut; John Hersman, 224 2nd Street, Spenser, West Virginia; Norman C. Egan, 3049 North Spaulding Avenue, Chicago, Illinois; David Kronemer, 3674 East 149th Street, Cleveland, Ohio; Melvin Friedman, 225 Snedikier Avenue, Brooklyn, New York; Herbert E. Goudket, 707 Jackson Avenue, New York, New York; Larry Jackmin, 385 Audubon Avenue, New York, N. Y.; Jack Agnew, 2308 East Belgrade Street, Philadelphia, Pennsylvania; and John V. Baltadonis, 1700 Frankford Avenue, Philadelphia, Pa.

Charles H. Bert, 545 North 5th Street, Philadelphia, Pa.; Oswald Train, 3507 North Sydenham Street, Philadelphia, Pa.; Philip Young, Radnor, Pa.; Helen Cloukey, 313 North Maple Avenue, Lansdowne, Pa.; Bernhard Larsen, 238 Maypole Road, Upper Darby, Pa.; Alexander M. Philips, 2523 South 17th Street, Philadelphia, Pa.; Russell W. Eddy, 4401 Market Street, Philadelphia, Pa.; Thomas Whiteside, 1958 Elkhart Street, Philadelphia, Pa.; John Newton, 2667 Orianna Street, Philadelphia, Pa.; and Michael Levanios, 6904 Rodney Street, Philadelphia, Pa.

Jack Gillespie, 89 Wadsworth Terrace, Bronx, New York; (Mrs.) Loretta Beasley, Lyndon, Kansas; William Ramell, 500 Cedar Avenue, Pittsburgh, Pa.; James J. Carney, 5328 Kingsessing Avenue, Philadelphia, Pa.; James Griffith, Box 26, Big Run, Pa.; Sully Roberds, 922 West Division, Normal, Illinois; Sylvester Brown, Jr., 7 Arlington Street, Cambridge. Massachusetts; Joe Rosenberger, 538 South Washington Street, Du Quoin, Illinois; Donn Brazier, 3031 North 36th Street, Milwaukee, Wisconsin; and Robert Booth, Box 41, Erie, Illinois.

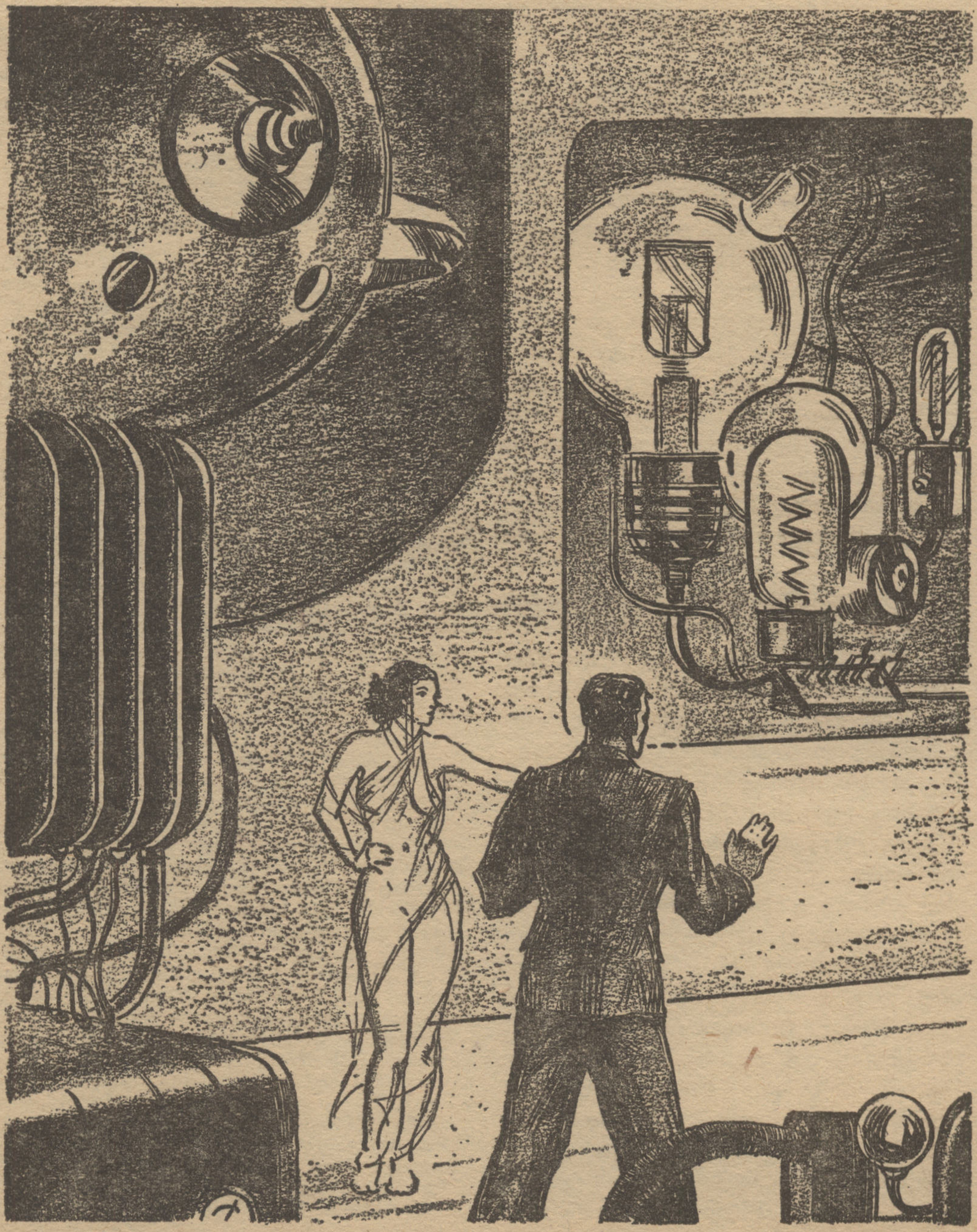
John O'Donnell, 161 4th Street, Hoboken, New Jersey; John Bels, 1914 Kings Highway, Brooklyn, New York; William Smith, 39-31 24th Street, Long Island City, New York; Stanley Mason, P. O. Box 278, Wyckoff, New

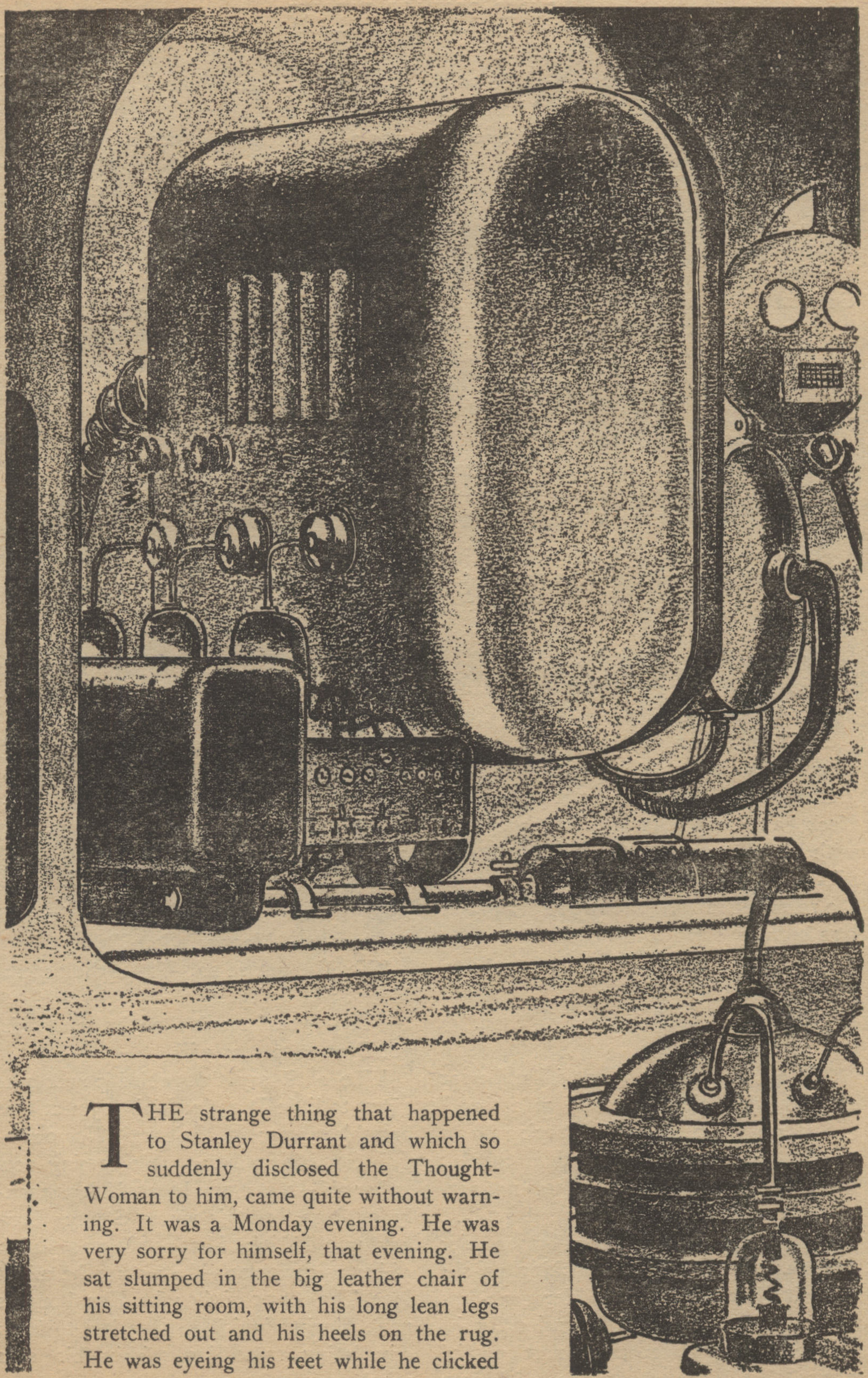
(Continued on page 116)

THE THOUGHT-WOMAN

This is the story of Stanley Durrant, inventor, who wandered into the Realm of the Unthought Things to find the answer to a problem that had sorely perplexed him. But the answer he found wasn't the one he had sought. . . .

By RAY CUMMINGS





THE strange thing that happened to Stanley Durrant and which so suddenly disclosed the Thought-Woman to him, came quite without warning. It was a Monday evening. He was very sorry for himself, that evening. He sat slumped in the big leather chair of his sitting room, with his long lean legs stretched out and his heels on the rug. He was eyeing his feet while he clicked

his shoes together savagely. Life was treating him unfairly; balking him. And now at last, at the age of twenty-one, he had come to the point of rebellion.

The girl from next door sat in another chair, quietly rocking. A bit of needlework was in her hand; and she was busily sewing it with colored threads. For a time there was only the sound of the rebellious young man's clicking shoes; and the ticking of the little clock on the mantle—a hurried tick, a breathless little heartbeat.

"But Stan," the girl said suddenly, "you mustn't let yourself get discouraged. You want things to come too easily—"

"Easily!" He sat up with a jerk, like a spring suddenly unleashed. "Haven't I put every bit of brains I've got on the thing for nearly a year? Haven't I slaved—"

"Is a year very long, Stan?"

"Yes, it is. My great invention! Hah! That's beginning to be a joke."

His laugh was mirthless. He was a very handsome young fellow, this Stanley Durrant—boyish with his rumpled, wavy black hair. His features were thoughtful with the promise of a manhood of accomplishment. But he was flushed now with the rebellious impatience of youth; and he was horribly sorry for himself.

"My great invention!" he repeated sardonically.

"But you're making progress, Stan."

"Am I?"

"Of course you are. The trial and error method, you said. One step at a time."

She was earnest; gentle; trying to be helpful. She was younger than Stanley Durrant. As he saw her, she was not particularly pretty; a little brown dove. . . . She had a tousled mop of nut-brown hair; she was quietly domestic-looking as she sat with her embroidery. Her gaze was on her shifting needle; but occasionally she shot her companion an almost wistful glance. He did not see it. He had known this girl from next door back through all the years that he could remember. She was a little woman now; but he did not think of that. To him she was an accepted part of life, like the furniture of this house in which he had been born.

"THE trial and error method." He was echoing her bitterly. "Did I say that, Dot? Well, I was a fool."

She forced herself back to what he was saying. "Trial and error? I know it means work, Stan."

"It means you try a thousand things," he said savagely, "an' nine hundred an' ninety-nine of 'em are wrong. Don't you see how it tortures me? If I could just think of the right things—just dig the right thoughts out of my brain—even for five minutes, I'd have that damned invention all solved."

She regarded him briefly; then her brown-eyed gaze fell again to her embroidery. "I don't believe that life is meant to work out like that," she said.

"It is—or it ought to be. Don't you see, Dot, I can't afford to take years and years. I want to get rich and famous. Then I'll find a girl and get married—"

"Married?" she murmured. Her breast suddenly rose and stayed high as she held her breath. "Married, Stan?"

"Yes, I suppose so. That's the general idea of life, isn't it?"

"You—you haven't thought of the girl you'll want to marry?"

Who shall say that weird power was given to little Dorothy Livingston at that breathless moment. Science? Necromancy? Something unnameable coming now to her aid—something born of her womanly longings that this young Stanley Durrant would think of her as she was—think of her as a woman—the woman he might love. The power of thought. Her thoughts now, flowing invisibly from her to him; stimulating something within his own mind.

Rational science, some day to be wholly understood by everyone? Perhaps it was. Sir William Crookes, at the turn of the century, declared that he believed there is a very real basis for the postulate that thought is in itself a tangible vibration. Of the ether perhaps? A vibration of something beyond our ken—vibration infinitely rapid, infinitely tiny, traveling possibly with a speed far exceeding that of light. Would this perchance, give the scientific basis for telepathy? One mind at a distance, attuned to another—to be a receiving station for the reception and translation of those mysterious waves?

Little Dorothy Livingston, of course, knew nothing of such mysterious scientific possibilities.

"You—you never do seem to think of the woman you'll want to marry?" she repeated tremulously.

"No." He looked at her and grinned, just as he would have looked at his mother, or at the housekeeper who had been with the family ever since he was born. "I haven't thought of anything much but my invention," he added. "I was talking with your father about it this afternoon. He gave me a lot of swell quotations. One about creative thought—he called it the 'incessant care and labor of the mind.'"

"Oh," she said. She laughed. "My goodness—is that all he said?"

"No—he gave me lots of helpful things like that. And then he said, 'The power of thought is the magic of the mind.'"

"Magic!" Her smile was suddenly whimsical. "I used to believe in magic. Maybe I do yet. Dreaming dreams. Hoping they'll come true—and then maybe they will, if you think hard enough about them—"

HER voice trailed off. She was gazing out through the barrier walls of the little lamplit living room—gazing as though out there she could see wide horizons of magic things where your dreams hovered, waiting for you to think them into reality. Dreams of love and passion. Of having a man think of your body, because of its beauty. . . .

"You're a funny kid," he said.

Her gaze came back to him. "Am I, Stan? Well, I guess maybe I am."

"Anyway, what's it got to do with us—with me?" he demanded. "My invention's my problem. Work some magic on me while you're at it."

"All right, I'll try," she said suddenly. She was still smiling, but her eyes were queerly serious. "I was thinking about the Realm of Unthought Things, Stan. You never happened to think about that, did you? The place where all things are staying, just waiting to be thought of." She was breathless with eagerness to make him understand. "You know, like Maeterlinck's Realm of Unborn Children—where you wait until it comes your turn to be born. The Realm of Unthought Things must be like that. Your invention's there, Stan. It has to be, don't you see? It has to wait there until your thoughts of it bring it out into reality. And the girl you're going to want—she's there too. Your invention—and your woman."

The Realm of Unthought Things! Little Dot Livingston called it magic, because she had no scientific knowledge which would enable her to think of it in any other way. But who shall say that such a conception is only magic? If thought itself is a tangible, ponderable vibration—must there not be, somewhere, an existing storehouse of thought? Another realm—another dimension if you will—co-existing with ours? A place where all human knowledge is waiting. . . . Reaching out to us, striving for contact.

How often we say: "Why, that thought just popped into my head." From whence did it come? Perchance from that other realm, across the border, and yet always so very close to us? A sudden, chance contact.

And then there are times when we delve deeply, wrestling in our minds to drag something out. To create something. And at last we make the contact, and our creation comes.

Creation? How fatuous, how conceited an idea! We create nothing. All that has been done for us, by the Great Creator. Surely thoughts must be like that. A vast storehouse of them, created and waiting for us, always so near. . . .

For a moment he was blankly staring at her. "I say, that's a queer idea for a fact," he murmured. "Realm of Unthought Things, with my invention there waiting for me to get it out."

"Your invention and—and other things." Her smile was wistful.

"I'll tell you what," he said. "You get me into that Realm of Unthought Things—any hocus pocus you like. Then I'll find my invention, stick it under my arm and bring it back."

But she wouldn't smile. "I'll try, Stan. I really will."

"Swell," he said. "I'm rooting for you."

"Because," she murmured almost to herself, "I guess there's been something I've been wanting for years and years. I'm going to concentrate on it really hard now."

He stretched out his long lean arm, and his hand patted her shoulder. "Spoken like a little magician," he said. "We couldn't miss it, Dot, with you working that hard on it."

THE little onyx clock on the mantle suddenly hurried to strike eight. Dot stood up, with her embroidery under her arm.

"Guess I ought to be going, Stan," she said awkwardly. "Father said he'd be in about eight."

"See you later," he said.

At the door she stood gazing at him. "I saw Rodney Drake today," she said suddenly.

"Did you?" He didn't like Rodney Drake, who was a tall, debonaire, handsome fellow. To Stan's way of thinking he was slippery—not on the level, particularly with women.

"He wants me to go out with him next week." She was breathless, gazing at him from beneath lowered lids.

"You better let him alone," he said. "He's no good, Dot."

She nodded. "Well, see you later."

The door closed upon her, and he flung himself back into the easy chair. Dear little Dot. Nice kid. What a queer idea, that Realm of Unthought Things. But it would be swell to go there, for a fact. . . .

Certainly it was natural enough now for Stanley Durrant deeply to ponder these things about which he and Dot Livingston had been so earnestly talking. . . . The power of thought is the magic of the mind. . . . Was there something now given to Stanley Durrant and Dot Livingston—something just a little beyond our ordinary ken. . . ?

Stretched at his ease with his eyes closed, he forced his thoughts to wander off; groping, reaching out into the Unknown. . . . What an interesting place that Realm of the Unthought Things must be. A gigantic place, of course. . . . He was so absorbed already with it that the ticking of the little clock seemed to fade away, engulfed by his flowing thoughts. . . .

"Stanley Durrant . . . Stanley Durrant . . . Stanley Durrant. . . ."

He had believed that in the quiet of the living room there was only the ticking of the clock and the vague blended sound of the village street outside. But now he was aware that his name was being called. It was like a tiny intoning page—a very faint little voice, so faint that he could barely hear it.

"Stanley Durrant . . . Stanley Durrant. . . ."

It was an insistent reiteration—rhythmic, with a patience that seemed to suggest that it would go on calling him forever

if necessary. And somehow, though he had only just become aware of it, he seemed to know that the little voice had been paging him for a very long time; for months; maybe for years. Only now it was louder. Or was that just because it was coming closer? It seemed still at a fearfully remote distance, patiently, persistently trying to bridge some vast gulf.

"Stanley Durrant. . . ."

He was sitting tensely upright in his chair now, listening, puzzled. There was nothing unusual to see, here in the lamplit living room. But that wasn't surprising; somehow the little voice didn't sound as though it would have anything attached to it that one could see.

"I'M Stanley Durrant," he said suddenly. The sound of his own voice momentarily astonished him, for though he spoke quietly, by contrast with the aerial little whisper his words were a robust bellow.

"I'm glad that I could get through to you—at last," the little voice said. It seemed much louder now, much less ethereal so that he could hear that it was quivering.

Young Stanley Durrant had heard of materializing bodies. A ghost was like that—a thing invisible, and then gradually you could see it. Here was a materializing voice—at first inaudible, but with its every word now it was taking audible form. Overtones were coming to it, giving it timbre, almost a personality, so that it seemed to Stanley Durrant that distinctly it was a feminine voice; the sort of voice which assuredly ought to belong to someone—or something—very beautiful.

He leaned further forward in his chair. He was smiling as he peered searchingly at the yellow lamplight and the shadows of the room. Decidedly, this was interesting.

"Well," he said, "here I am. Who are you? And it might be nice for you to let me see you. Wouldn't it?"

"There's nothing of me to see," the little voice said. "Not just now anyway. I'm not very important to you."

It wasn't exactly sad; just wistful and humble. And suddenly it added, "I'm from the Realm of Unthought Things. I had a chance to come to you and find out if you would like to go there." The little voice sounded breathless.

"The Realm of Unthought Things," he echoed. "I've heard about that. Matter of fact, I was just thinking about it when you came."

"It's a very interesting place," the little voice said hopefully. "Would you—"

"Of course I would." He stood up, but it seemed that the journey already must be beginning because the floor felt a little unsteady under him and the lamplight and all the shadows swayed so that he would have sat down again except that something seemed to be steadying him.

"What do we do?" he asked. "I'm all right now—just felt a little queer."

"I'm right here beside you."

"Yes. I know it."

He knew that he was walking; but it was really more as though the shadowed living room were widening out into darkness ahead of him, with its familiar outlines silently flowing backward to the sides. Anyone may stare through the enclosing walls of a room to envisage the horizons which in his thoughts are stretching outside. He found it very easy, only now the back-flowing darkness was steadily accelerating. Soon it was a great rush of movement, with only darkness everywhere—darkness opening up ahead and passing to the sides and closing in behind, as though forever like this his vision could plunge ahead.

"You're quite all right?" the little voice abruptly asked anxiously.

"Well, I guess so." And then after a nameless time, with the darkness flowing

faster than ever, he added, "I think this is liable to be quite a journey."

"Oh you mustn't think that," his companion said. "No, no—don't think that. It really isn't very far."

It was certainly very comforting to have a companion on the journey. He thought for a minute that he could almost feel something beside him. But it was only his thought, because when he turned to look, there was nothing that he could see; and when he put out his hand, there was nothing that he could touch.

"You know what I think?" he said presently. "When I first heard your voice I thought you would be a little elf—well, maybe a few inches high."

"And what—what do you think now?" The little voice was suddenly anxious, as though momentous things were here within his answer.

"I think you're much bigger," he said. "Maybe you're as big as up to my shoulder. Why won't you let me see you?"

COULD he see her now? For an instant there seemed almost the outline of a girl beside him; but then it faded.

"We're almost where we're going," his companion said. "See the beginnings of it off there?"

He could see that the great distant darkness was not quite empty now. A little grey sheen was visible ahead—a sort of luminous point of emptiness. At first he had the idea that it was small and fairly close; and then he realized that it must be a very tremendous sheen and infinitely remote. But all the intervening emptiness was shrinking, so that the sheen now was rapidly expanding. Already it was a blob, spreading swiftly into a great grey patch, extending up and down, widening to the sides until, far off on each side and underneath and overhead, it was surging backward and closing in behind.

The darkness was gone now. All the scene was illumined into a great grey twilight—an infinite void of twilight with distant patches of light and shade that almost were making shadowy contours.

Suddenly it occured to Stanley Durrant that now in the comparative light he ought to be able to see his companion. He stood still, bracing himself against all the sweep of movement as he turned sharply to look beside him. But there was nothing. Or was there? Was that her cloak? Was it a girl, enveloped in a cloak, standing now close beside him? He seemed almost to see the oval of her face, with the luminous sheen of the abyss on it.

He reached to touch her; but there was nothing.

"There are so many other things to see," his companion said, "you probably won't be interested in me. We're here, you know."

He stood, with her beside him, gazing. At first it seemed that the limitless immensity was gone, and that he was standing on the shadowy floor of a great cavern, with huge but finite enclosing walls and a great spread of shadowy ceiling far overhead. Like a vast, but very finite amphitheatre, there were tiers upon tiers of great circular galleries, piled one upon the other up to the ceiling—galleries that shaded back from the twilight into a blur of darkness that hid their depths. But he could see the front of them clearly—galleries with other little subdividing balconies, with niches where a vast multiplicity of shadowy things were standing.

It had seemed a finite cavern, but now he saw that it was not so. One of the lower galleries was quite close beside him, and his line of vision went back into its shadowy darkness which seemed opening into another vista of great branching corridors, all of them crowded with an orderly array of misty things. And the corridors ramified back, opening into new great distances where yet other vague things were ranged, quiescent.

"What are they all?" he whispered.

"I can only tell you about some of the things which are gone," the voice of his companion said gently. "All these things that are here—nobody knows about them, because you see, they're here waiting to be thought of."

He and the girl were moving now in the shadows of just one of the galleries—in a corridor of just one of the tiers. The blurred things were all about them now—things of every size and shape—gigantic and tiny things by trillions. He stopped suddenly before a huge niche where a great grey thing was standing. It could have been an intricate machine. Yet queerly it was formless. It had seemed, when quickly he first glanced at it, that there were vague contours and almost details here; but when he regarded it steadily, they eluded him.

"What's this?" he demanded.

The girl beside him seemed smiling. "Nobody knows, yet. How could they? The person who will think of that may not have been born yet."

Realm of Unthought Things. He moved along; peering; staring, with awe because now he felt very small, humble and unimportant indeed. What a vast array, this potential product of the creative thought and patient labor of all mankind! A million million things—and yet other billions on each of the myriad tiers—all here quiescent, waiting their appointed time to emerge into the world which man was lifting from empty simple savagery into the crowdedness of intricate civilization! It was all here—just waiting.

And now he could see that some of the shadowy things were leprous with parts of them wrested away. One, he saw, had almost been thought of—but not quite. Its niche was huge; but here now was just one tiny thing of formless shadow. It looked very forlorn. Perhaps it was the vital part of the whole which had been here. Perhaps he who had struggled to wrest it from the shadows had died with this tasks unfinished. Or perhaps he had been discouraged—or inadequate.

FROM one great crowded shadowy corridor to another, young Stanley Durrant and his companion roamed on and on. . . . And now he saw niches that were empty. Not many, in comparison with the others; but a countless myriad nevertheless. And these his companion could explain; and often he could picture of his own knowledge what once had been here. A commentary upon the whole groping upward struggle of mankind, these empty niches—the darkness seeming to outline them like a matrix, to give the shape and details of what once had filled them. Here was where once had reposed the crudely fashioned stones that primitive man had fastened into sticks and called a weapon, with which he might kill, to feed himself and his family. Here had been the first crude wheel. And here, the first simple lever. And here, the clumsy catapult.

Then he and the girl climbed to another tier, past another million million things which no one had thought of yet; and past other niches where things were gone. . . . Here was where, centuries ago, the first crude oar had waited for man to bring it out, to help with his conquest of the sea . . .

And now he came to places where things had stood until quite recently. This big shadowed, empty recess, only a little over a hundred years ago had held Stevenson's "Rocket"—forerunner of the great modern locomotives. . . . Over there, Fulton's little steamboat had stood, with a pedestal beside it which had held Stevens' screw propellor. The Wrights' little airplanes had stood just down this other corridor. And off there to the left, he saw a whole vast array of vacancies. They might still have been filled had it not been for the slow and patient, incessant labors of Morse and Sholes; Bell and Edison and Marconi. . . .

Throughout all the journey in the vast

corridors, he had sometimes seen a shadowy thing in the process of breaking apart—a portion of its vague blurred contours being wrested away while he watched it quiver and waft off to take its place in the solid world of reality. . . .

Then suddenly Stanley Durrant was standing trembling with excitement—standing before a blurred little niche where on a dais something leprous was perched.

"So you recognize it?" the girl beside him said.

"Yes—oh yes."

His invention. He stood breathlessly staring. The parts which were missing identified it—each little vacant area thronging his memory with hours of his struggles. These missing things, each of them so clearly represented his hopes, his fears, discouragements—but always his final triumph. Why, these missing things—here already was a little monument to the achievement of Stanley Durrant.

Then eagerly he was darting forward. The baffling details which yet remained—he would seize them—examine them now. But his eager hands only seemed groping in a grey blur of misty fog; and as closely he stared down at the shadowy blur on the dais, more than ever it was formless, meaningless, enigmatically baffling.

"IT IS just waiting for you to think it out," his companion said gently.

The incessant care and labor of his mind. Disappointed, he turned away. But still, there was his shadowy niche—the monument to the achievement of Stanley Durrant. Some day it would be a greater monument, worthy of its place among these immortals.

"I think you'd better go back now," his companion said.

He squared his shoulders. "All right. Shall we start?"

"You—you'll have to go alone," the girl's little voice said. "Goodbye, Stanley Durrant."

She seemed sorry to leave him. He was sorry too.

"Well," he said, "thank you very much for what you've done for me. You really have to stay here?"

"Yes. You see, I live here. I'm just—one of the Unthought Things."

"Oh—I remember. You told me that." Impulsively his hand reached out. There was nothing to touch; but now it really seemed that he could see her—shadowy and vague as these other things. A girl in a cloak. It seemed that he could see the outlines of her form, beneath the cloak.

"I believe I'm really seeing you now," he said with sudden breathlessness. "I think I—"

"What do you think?" She too was breathless, as though once again an enormity of portentous things were here within his answer.

"I think you've got tousled brown hair, and it just about comes to my shoulder because you're not so very big, are you? But I think that you're beautiful. I can see it. Just a beautiful little woman—"

He was aware that the rushing movement of his return was blurring his excited words. Was she still with him? He couldn't exactly tell. "Who are you?" he insisted.

There was just her wistful, faint little answer: "I'm the girl you could marry, if you ever thought of me for that. You—you might think of me that way, if you were jealous. If—if you realized that Rodney Drake wants me."

Rodney Drake!

Was it the promptings of her words, shaping his thoughts? Was it something—all this strangeness—far beyond what any of us can understand? Whatever it was, to Stanley Durrant came a stab of anguish. The anguish of jealousy. The thought of the woman he loved, in the arms of another man. But it wasn't exactly jealousy either, because he knew she didn't want to be there. He could see

her there, twenty feet away, struggling now in the damnable embrace of Rodney Drake.

HE WAS panting. For that instant he stood confused, trying to gather his thought; and with a faint little cry the shape of her seemed fading.

"Wait," he gasped. "You're not in the Unthought Things—really you're not. I've—almost got you—Oh, I do want you—"

But she was gone. . . . He seemed, for a moment, to have fallen into oblivion. And then all his wild emotion was gone. He knew that he was alone; and he stretched out his legs luxuriously because he was tired. What had happened to him—and he saw it now, of course as though it had all been a vivid dream—was quite clear in his mind. Queer that he had never thought much about the girl he would some day marry. But that's who his little companion had been, of course. . . .

He propped his elbows on the sides of his chair as he pondered it. And he found that his heart was pounding, hurrying with the rhythm of the hurrying little clock on the mantle, here in his quiet, lamplit living room. Strange that he hadn't been able to recognize her for so long. But he knew her now. A small girl, with her nut-brown hair just about at his shoulder. A girl whom he had always thought was just a little brown dove. She would sit and do embroidery and try to buck him up when he got discouraged over his invention. His mind had been on that, not on her. And she had grown to be a woman now. . . .

He sat up at the sound of a step on the verandah. The door opened, and Dot came in from next door. Her nutbrown hair was tousled as always; an apron was around her trim little waist, and a big jar of jam was in her hand.

"Oh, hello Stan," she said. "Did I disturb you? I rang. Dad thought he and I might come over and play bridge, if your mother got back from Mrs. Thompson's. Did she?"

He couldn't answer. He just sat staring, astonished as he noticed that she was really a woman. Her face wasn't the face of a child. It had character—a sweet, wistful sort of beauty. . . .

She was startled because his arm had gone suddenly around her waist and he had pulled her into the chair with him, kissing her so vehemently that at first she tried to stop him; and then her cheeks were furiously red as she went limp in his arms.

"Stan—Oh Stan dear—why good Heavens—" Her arms went around his neck. For a moment she held him; and then she fended him off.

"Stan you—"

"I know you," he said. "Queer, all these years—I never knew you before. Never knew I wanted you—that you and I loved each other—not just like a couple of kids—"

And then a wonderment swept him; awe; a consciousness of the presence of the unknown. "Listen, what you been doing for the last hour?" he demanded.

She looked at him queerly. "Why—nothing, Stan. I was just sitting home, thinking."

"About what?"

With mounting color, she gazed at him with half averted eyes. "I—I won't tell you," she declared. "I just—gave myself up to my thoughts." She was defiant. "A girl has a right to do that. I'm not ashamed of them."

He was holding her again in his embrace; making her put her arms again around his neck. "You told me you were going to think hard about something for me—for us," he said. "It was something just about like this, wasn't it?"

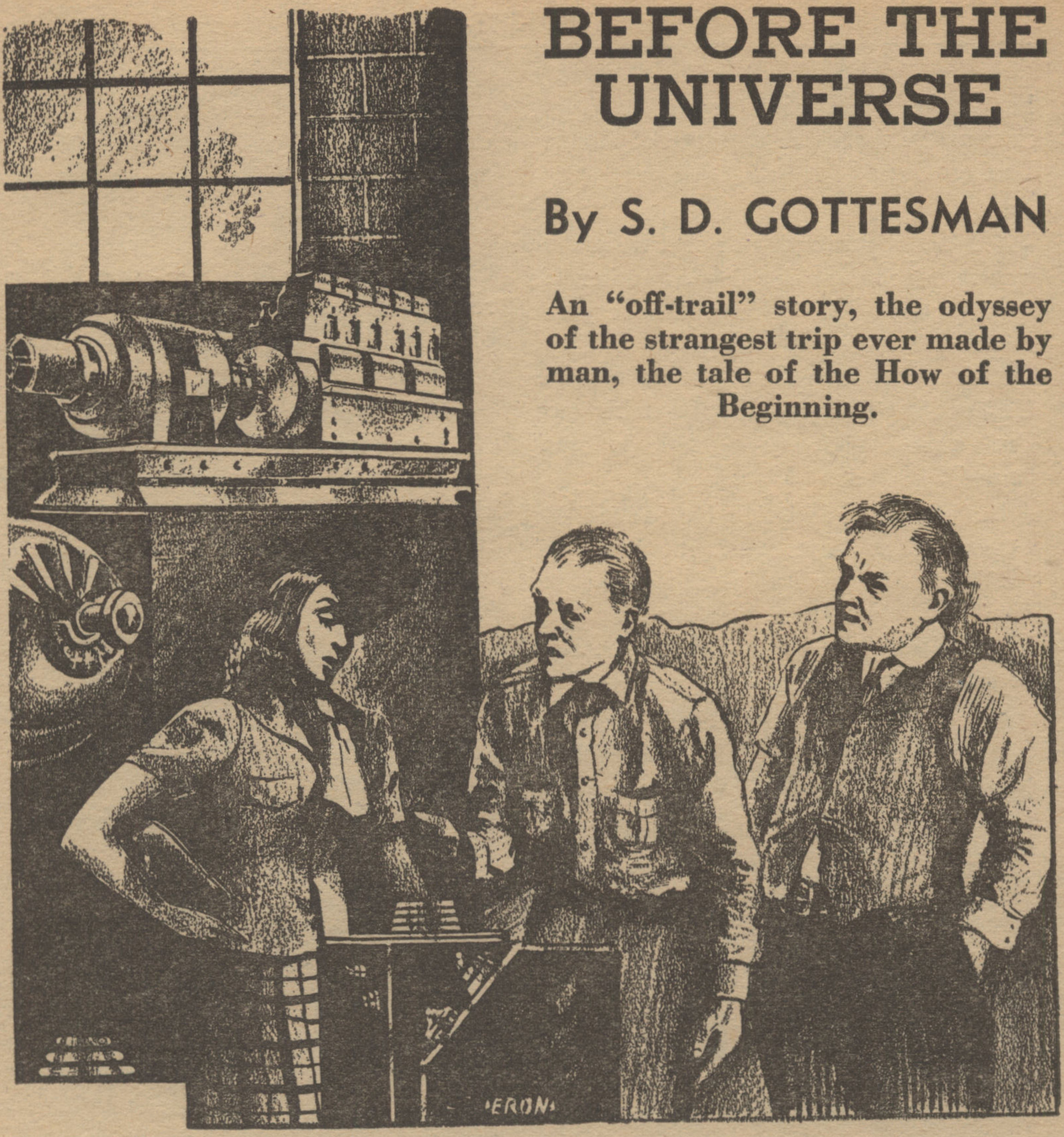
"Yes," she murmured tremulously.

THE END

BEFORE THE UNIVERSE

By S. D. GOTTESMAN

An "off-trail" story, the odyssey of the strangest trip ever made by man, the tale of the How of the Beginning.



CHAPTER ONE

The Nobel Prize Twins

JOCELYN EARLE was listening closely to her employer's instructions. That was one of the things about Jocelyn; she always listened closely, even if she paid no attention to suggestions once she stopped listening and started doing. He was telling her how to get the story he wanted for the *Helio;* he knew she would get the story her own way, but he told her anyway. The important thing was, she would get the story.

"Do you know anything at all about Clair and Gaynor?" he asked.

"No," she said.

"Well, you're the only one in the world who doesn't. Don't you ever read the papers?" She shook her head. He sighed and went on. "They are the Nobel Prize winners for the last half-dozen years. They're the ones who wiped out cancer, made possible the beam-transmission of power, created about fifty new alloys that have revolutionized industry, and originated the molecular-stress theory which is the cornerstone of the new physics.

"Gaynor is the kid of the pair. He's the one that never went to grade school, completed high school in eighteen months, and had a Ph. D. by the time he was fifteen. A child prodigy. Unlike most of those, he never burnt out. He's still going stronger than ever.

"Clair is the older and not quite so bright. He was almost old enough to vote by the time he brought out his thesis on Elementary Arithmetic (Advanced), which is a little bit harder to master than vector analysis. But, as I say, he's older than Gaynor, and he's had a chance to learn a lot more. So I guess you could say that they're about even, mentally.

"Now, this is what I want: the complete and exclusive story of what they're working on now. It won't be easy, because they don't want to give out any informaton. And they're smart enough to be able to keep a secret for a long, long time. That's why I want you to take the job. I wouldn't think of giving it to anybody else on the staff."

Jocelyn smiled. "I'm smart too. Is that what you mean?"

"Sure you're smart. Maybe, even, you're smart enough to get the story . . . . . Oh, one more thing. They're both a little childish in some ways. They have a habit of playing practical jokes on people. Don't let them joke you out of the story."

"I won't," said Jocelyn Earle. "That's all?" she asked, rising.

"That's enough, isn't it?" her employer said. "What are you going to do?"

"I don't know yet. But don't worry about it—I'll try to have the story by deadline tomorrow. Goodbye."

"Goodbye," said her employer, and Jocelyn Earle walked out of the room . . . .

"AND there goes another tube, Art," called Gaynor. "Shot to hell."

Clair walked over to the meter board with a sigh, stripping off his gloves as he came. "The damn things act so funny. They test fine, no flaws, and the math says they ought to work. But you shoot the juice into them, and all that's left when the smoke clears away is a thoroughly ruptured tube. Why do you suppose that is, Paul?"

He got no answer from Gaynor but a strangling gasp. He looked up to find his colleague pointing at the door, his face a mask of horror. There stood a hideous creature, presumably female, apparently Scandinavian. "Ay bane call from de agency," it said.

Gaynor recovered himself first, and asked, "How the hell did you get through seven locked doors, woman? What do you want?"

The creature began to talk rapidly and excitedly, and the two scientists looked at each other. "This is just like the Nobel ceremony," howled Clair over the woman's voice. "What do you suppose she's saying?"

"Haven't the faintest notion. Let's sit down. Let's kill her. Let's do *something* to shut her up. How about a shot of static at her?"

"Should help," agreed Clair. He swung a cumbersome machine on the figure in the door and pressed a button. A feeble but spectacular bolt of electricity shot at the woman with a roar, pinking her neatly. Suddenly her stream of Swedish was shut off. "You brace of heels!" she snapped. "If you don't know how to treat a lady, I'm leaving."

Gaynor sprang for the door and slammed it. "No," he said, "not until you explain—" But she cut him off with a snake-swift clip of the palm to his solar plexus and he folded. Clair swung a switch and the machine roared again, this time louder, and the woman fell beside Gaynor.

Clair knelt and felt his colleague's pulse. "She moves fast, that one," said Gaynor, without opening his eyes. "Did you get her?"

"Sure—with just enough static to put her out for a while. Get some cable and we'll see what kind of scrub-woman can breeze through locked doors."

They tied her securely; then Clair unceremoniously dumped a bucket of water over her. She came to with a sputter and gasp. "Was that thing a death-ray?" she asked with professional interest.

"No. Just high tension. Who are you, and what's your business with us?"

"With a hefty tug you can take off my wig," the woman answered. Gaynor laid hold of a strand of hair and pulled. "My God!" he cried. "Her face comes with it!"

"Mask," she said briefly. "I am a reporter for the *Helio,* name being Earle. I want to congratulate you gentlemen. This get-up fooled Billikin, Zweistein, and Current. You aren't the ordinary brand of scientist."

"Nor are you the ordinary brand of reporter," said Clair raptly studying her cameo-like features. "Gaynor, you ape, untie the lady."

"Not I," said his colleague hastily backing away. "It's your turn to get socked."

"I promise to behave," she said with a smile. Reluctantly the scientist cut the cables that confined her and she rose. "Do you mind if I take off this thing?" she asked, indicating her horrible dress. The men stared; Clair finally said, "Not at all."

She pulled a long slide-fastener somewhere in the garment and it fell away to reveal a modish street-outfit. Gaynor gulped strangely. "Won't you sit down, Miss Oil," he said.

She settled gracefully into a chair. "Earle," she corrected him. Clair was looking fixedly at an out of date periodic table tacked high on the wall, aware that this peculiar woman was studying him. Approvingly? he wondered.

"Now, just what was it that you wanted with us, Miss Earle," he inquired. "Maybe we can work out some arrangement . . . ."

CHAPTER TWO

The *Prototype*

IF JOCELYN hadn't been a pretty girl, the deal would never have been made. But pretty Jocelyn was, and moreover she was smart enough to capitalize on her good looks.

So, it was decided that Jocelyn, in return for a promise of strict secrecy until the experiment was concluded, would be included in the maneuvers of the two scientists, would have every opportunity of finding things out and a promise that no other paper would get a crumb of information. That was a very good bargain, for Jocelyn didn't have to put anything at all up in exchange. She was pretty, and smart. That was enough.

"Maybe I can help you two great minds anyhow," she said. "What're you trying to do?"

The two looked at each other. Finally Gaynor said: "You're not a mathematician, Miss—Jocelyn, that is. I don't know whether we can translate our language into yours. But—Maybe you've heard of protomagnetism?"

"No. What is it?"

"Well, proto—we'll call it proto for short,—is something like ordinary magnetism. Only this: Ordinary magnetism attracts steel and iron, principally, and only to a very slight degree anything else —such as, for instance, copper and cobalt, which respond just the tiniest bit. Proto attracts a bunch of elements a little, but so little that it's never been noticed before. For instance, it attracts radium, niton, uranium, and thorium—the radio-active group—a little. The more radioactive, the greater the attraction. And the thing it attracts most of all is the new artificial Element 99.

"Another difference—magnetism, generally speaking, is a force exerted between two particles of iron or whatever. Proto,

on the other hand, ain't. Radium doesn't attract radium—both particles are attracted by something else."

"Tell her which way they're attracted," interjected Clair.

"I was coming to that," started Gaynor, but Jocelyn interrupted with:

"What am I supposed to gather from all this? According to my boss, you've got some sort of a ship. That's what he sent me here for: to find out what this ship was, and what you're going to do with it."

Clair was startled. "So it's an open secret now," he said to Gaynor.

"Oh, no," said Jocelyn; "but I know there's a ship. I don't know what kind of a ship it is, but I know it's there. That's all we could find out. Now, if you will kindly stop stalling and live up to your end of the bargain . . ."

"I wasn't stalling, though," said Gaynor resentfully. "That's what I was going to tell you, that we've got the *Prototype,* and we're just about ready to use it. And, what's more, you're coming along, because that's *your* part of the bargain. It wasn't before, but it is now, because I just made it so."

"Fine," said Jocelyn, unperturbed. "But where are we going?"

"That's what I was coming to—" ("It's been a long time coming," murmured Jocelyn) "We're going to the place whence comes proto. What Art was driving at a while ago is that proto doesn't pull things upward or downward, or backward or frontward or North-by-East-half-a-point-East, for that matter. It pulls them—out. Into another dimension—or so we think."

"Oh," said Jocelyn. "You mean you've got a time machine. How nice. Well, thanks a lot for letting me see you fellows, and don't worry about my keeping your secret. I won't tell. And I want . . . ."

"What's the matter?" asked Gaynor blankly.

Jocelyn stared at him. "You're trying to trick me, that's all. And you're not going to get away with it. Time machines are impossible. And if you think you've got one—I'm going home."

"But stop, Jocelyn," cried Gaynor. "We know time machines are impossible. We didn't say it was a time machine—you did. As a matter of fact, it probably isn't a time machine."

"As a matter of *fact,*" Clair chimed in sourly, "we don't know *what* it is.

Jocelyn looked up at that. "Sure you're not joking?" They both nodded vehemently. She hesitated, then,

"You know," she said, "I think I'm going to like this."

AN HOUR later, Gaynor was finishing the job of explaining things to Jocelyn while Clair finished hooking up connections in the lab in the next room.

"This tube," Gaynor was saying, "is the keystone of our work. The thing inside that looks like a buckshot is composed of what will be element 99 when the power is turned on. There's a lot of gadgets in here that you wouldn't understand if I explained them to you, but take it from me that I did a fine job in designing this tube. Consider: 99 is artificial, and it's pretty unstable. I had to incorporate the equipment for building it up and sustaining it. 99 is also radioactive, and I had to shield it to keep you, me, and the machine from crumbling into little glowing lumps. Those together ought to mean about five hundred pounds of equipment, but that was around four hundred and ninety-five more than I could get away with, because of the lack of storage space in the *Prototype.* So I condensed it to this." With which effusion he hefted the article in his hand. It fell to the floor with a crunch, its delicate members battered out of shape and its finely fused tubes shattered into bits.

"I see," said Jocelyn. "A neat bit of human interest. Was that the last one?"

"No," said Gaynor somberly. "We have a couple left." He took another from a locker and as they walked from the storeroom cast a glance back at the mess on the floor. "It looked a little defective anyhow," he said.

In the lab, Clair assigned the girl a place at a rheostat. "When the buzzer buzzes," he said, "open it wide and stand back." The tube was inserted, insulated, and tested, and the three took their various places, Clair gave the signal, and the circuits were closed in perfect order. They stared at the tube. It brightened, glowed, and then—smashed wide open without an apparent reason.

Clair opened the master circuit, looked up. "It did it again," he said wearily. "Why?"

"Yeah, why?" echoed Gaynor.

"Why what?" asked Jocelyn. "Why did it break, you mean?"

"Yeah," said Clair dispiritedly.

"Isn't it supposed to do that? When the proto pulls it?"

Gaynor glared at her. "Sure the proto pulls it, and— Hey! That *is* what it's supposed to do!"

Clair sat down heavily. "It sure is," he agreed. "Of all the damfools, Paul, you and I. . . ."

Gaynor was galvanized. "So all we have to do, Art, all we have to do is make the tube strong enough to take the ship with it when it begins pulling!"

"Did I solve something?" asked Jocelyn, a little bewildered. No one paid any attention to her. All of a sudden, they were hard at work.

CHAPTER THREE

Einstein's Extreme

PHYSICISTS generally have swarms of helpers and technicians to do all the rough, tough manual labor required in their work. This is for two reasons: because successful physicists are generally in their nineties and unable to lift anything much heavier than a gavel at an alumni meeting, and because it is considered by the majority demeaning for a mind-worker to use his hands.

That is only one of the many ways in which Gaynor and Clair differed from the Genus Physicist. They were young and strong enough to lift anything within reason and they had cranes for the stuff that was unreasonable and yet had to be lifted.

And they couldn't afford to have anyone but themselves—and Miss Earle—in their lab. If anyone knew then everyone might. An irresponsible writer or reporter would scatter the news broadcast and effectively gum up their immense undertaking.

So Gaynor, Clair, and Jocelyn did every last screw-turn and rivet-spread in the creation of the *Prototype*.

In about two weeks the job was done. Their ship was ready, a squat but very beautiful object in the eyes of its creators. The installation was complete; it was ready for the test.

Jocelyn took final notes. "Three dozen eggs," she read from a list.

"Check," said Clair, passing them to Gaynor who stacked the boxes neatly in the ship's compact refrigeration unit.

"Six pounds of bacon. . . ."

"And that," she said, "is the last of the food. Now, perhaps, you'll tell me why you wanted enough provisions for a month?"

Evasively Clair answered, "You never can tell. We may like it so much out there that we'll decide to stay awhile."

Gaynor descended from the *Prototype's* main port. "Yeah," he said. "The lady's right. I am a physicist, Art, a physicist. Not a porter. And I do not enjoy carrying sacks of sugar and cans of corn. I don't know why I *should* be carrying this junk, anyway. We're not going to be gone long—presumably. If the gadgets work, two days. If not—not."

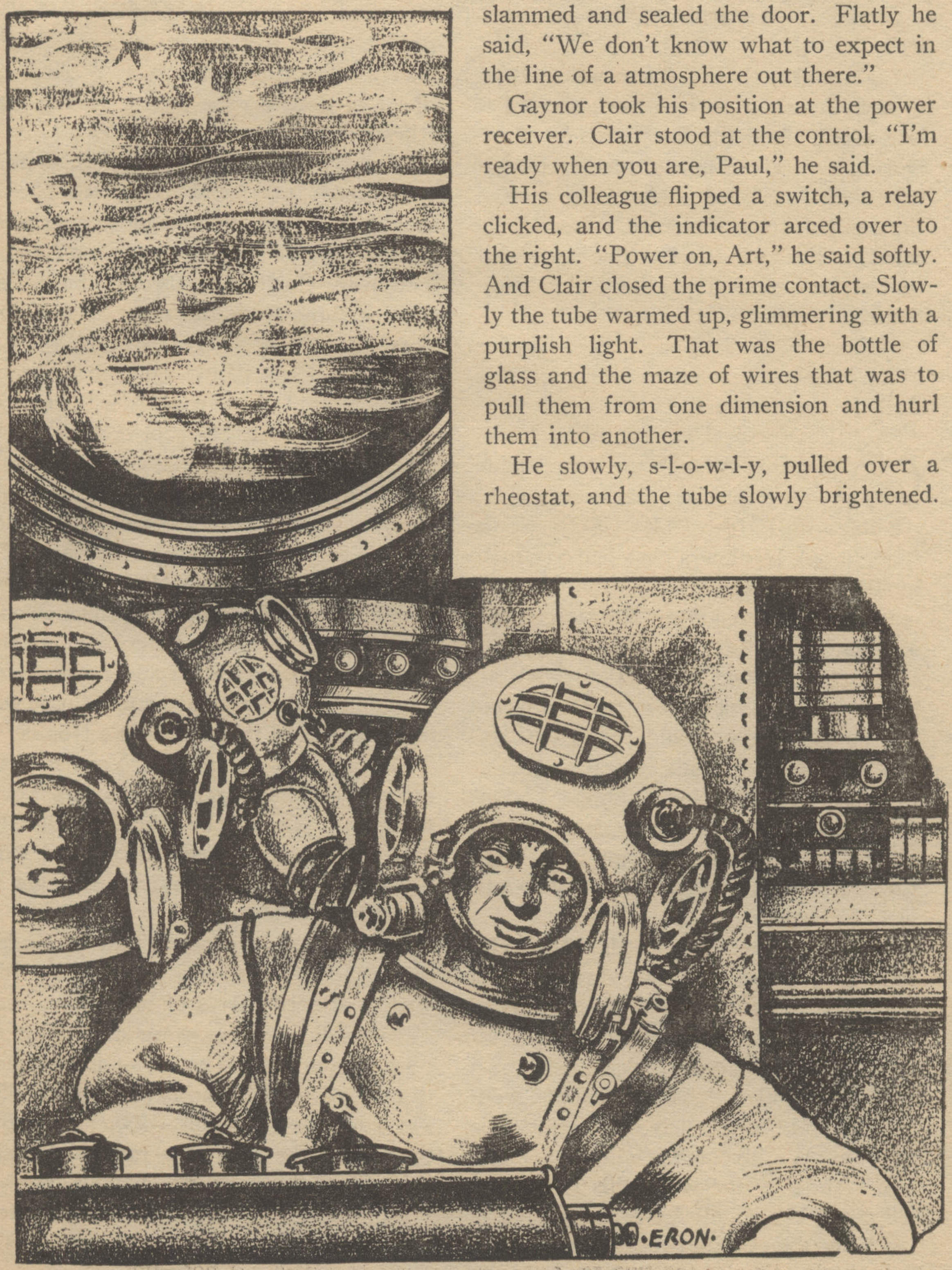
Clair chewed his thumbnail. "You never can tell," he said. "Maybe I can have a hunch myself, once in a while." He stood up and said abruptly, "Get your pencils and paper, Jocelyn. I guess we're leaving—now."

Silently the girl gathered her notebooks up from a table and stepped into the ship. Clair swung home a last switch in the lab and passed through the bulkhead. He slammed and sealed the door. Flatly he said, "We don't know what to expect in the line of a atmosphere out there."

Gaynor took his position at the power receiver. Clair stood at the control. "I'm ready when you are, Paul," he said.

His colleague flipped a switch, a relay clicked, and the indicator arced over to the right. "Power on, Art," he said softly. And Clair closed the prime contact. Slowly the tube warmed up, glimmering with a purplish light. That was the bottle of glass and the maze of wires that was to pull them from one dimension and hurl them into another.

He slowly, s-l-o-w-l-y, pulled over a rheostat, and the tube slowly brightened.



And nothing else happened. That was all. The tube got brighter.

Desperately, angrily, Clair shoved the rheostat all the way over. And nothing, nothing at all, still seemed to have happened.

Gaynor cried sharply, "What's the matter?"

Clair said nothing. There was nothing to say. A half a year of work seemed to be wasted. And the finest chance of exploring ever given mortal men seemed to have been snatched away as a mirage. Suddenly Jocelyn screamed. "Look," she cried. "The window!" The two men turned and gasped at the sight before them.

"That isn't the lab," whispered Gaynor. "Not in a million years. We're outside, Art. *We've done it!*"

CLAIR stared through the quartz plate. The scene that met his eyes was incredible—un-Earthly. It was *new,* he thought. A blankness that had yet to be moulded into a thing more definite. Without shape, dimension or duration, it was —Outside.

"But what place *is* this, Paul? It's not space, not even space in another universe. It's no planet that could ever exist. It's not like anything that's logical at all."

"You're right, God knows. I don't think that I could give a name to this place. I don't think that any man could. Could you even hope to describe it to anyone, Jocelyn?"

"Not if I knew more words than Shakespeare. Paul—if this is nowhere near the lab or even our universe—why is gravitation in the ship normal as far as I can see?"

Gaynor smiled. "Awfully simple, woman," he said. "Obviously we have artificial gravity. We invented it almost a month ago. And—by the way—this is a spaceship too. We installed a gravity-drive.

"Now then, Art, get away from that window and rig up the cameras. Jocelyn, take notes. I'm going to fiddle with a spectroscope."

The girl balanced a pad on her knee, dashing onto paper the random notes and observations of the two men. Minutes later, Clair was trying to develope a photographic plate and let loose some particularly blistering adjectives. "Shall I take *that* down?" she asked, raising her delicate eyebrows.

"Better not," he said. "But this—this —this *lousy* pan won't come out like it should. It doesn't look like much out there, I know, but this crazy plate won't show it anyway. Come here, Pavlik!" he called. Gaynor came from the other end of the ship.

"So Dr. Clair shouts aloud in the middle of a triple spectroanalysis," he said nastily. "So Dr. Gaynor comes running to find out what disaster has endangered our valuable lives. So the spectroanalysis is ruined from beginning to end. What's eating my esteemed colleague?"

Clair held up the plate. "I'm sorry, Pavel," he said, "but this thing won't develope. I thought that since you are the expert of this expedition and I your fumbling but well-intentioned subordinate you might diagnose this little dab's trouble."

Gaynor took the plate. "Your labored sarcasm—" he began. Then his voice trailed off. Tensely he asked, "Is this the first that you've developed or tried to?"

"Yes," said Clair. "What's that got to do with it?"

"Plenty. Did you ever hear of Kodak mining? Probably not. It was like this. In the primitive days of excavation—say 1920—radium mines were driven hit or miss, win or lose. Then some bright chap discovered that if you leave a roll of film in certain spots the film will be ruined and thus mark the spot of a radium deposit. Art, this film is ruined, having been in the presence of richly radioactive matter. Need I say more?"

Clair smote himself on the forehead. "Radioactivity—here!" he cried. "I see it all and apologize for having been a blind imbecile in the face of the facts. Let's not talk about it just yet. Let's have dinner first. Being stuck in the middle of somewhere else puts an edge on your appetite."

"Any excuse for a meal," said Jocelyn, dumping a can of beans into a heating unit. "Just like a man. And when will I be told these dazzlingly obvious facts that you two seized on and curse yourselves for being so long about it?"

"*After* dinner, woman, you will hear all," said Gaynor firmly. They sat down in silence to eat.

THE dish-washing—which consisted of dropping several cans and plates into a sealed container—was accomplished, and the three lit cigarettes. Jocelyn placed herself obtrusively before the two physicists and demanded, "Secret. Now."

Vaguely Clair began, "I don't exactly know. It's just that we have a feeling we're out of time entirely. Indications show that we've been pulled out of our own universe and not just chucked into another one at random, but that we've been slung outside of all the universes that ever were." He examined the tip of his cigarette intently, crossing his eyes.

"Damn it!" cried the girl. "And damn it twice! We have to be *somewhere,* don't we?"

"Obviously, my dear," said Gaynor soothingly. "And so we are. But as nearly as I can see, we aren't in any space-time that's ever been used before. We've got a brand new one all to ourselves. It must sound like boasting, I know, but I think we *created* this huge hunk of nothing."

Jocelyn began to laugh. "Well," she finally gurgled, "we sure made one lousy job of it! Listen, Messrs. Jehovah—why haven't we got a nice spot to land on? This seems to be an awfully big universe for just the *Prototype* and us three."

"Sure; it has to be," answered Clair seriously. "Einstein announced to a breathless world a long time ago: 'The more matter, the less space; the more space the less matter.' We are probably the closest approach that ever has or ever will be made to one of his limiting extremes—a universe of all space and no matter."

"Excuse me," said Jocelyn humbly. "The more I hear from you two enraptured scientists the stupider I feel. But would you mind explaining that no doubt pertinent axiom of Mr. Einstein? It seems very silly. I mean, the more space is displaced by matter, the less space there is, obviously—no. I mean the less space—that is, matter—the less matter in a universe the more room there must be for space!"

The men looked at each other. "'Space displaced by matter.'" said Gaynor pityingly.

"'Room for space,'" Clair richly announced, rolling the phrase over his tongue.

"I'd feel a lot safer in recommending a good book on the subject, but roughly what Einstein implied was this," said Clair. "Space isn't nothing. Or, putting it differently, it *is some*thing. Since you don't know math, I can best describe it as a thin, weary substance partly squamous and partly rugous. Its most striking property is that when it surrounds—or penetrates—or engenders—what is called matter, which is only space, but somewhat thicker and more alert, there is a certain amount of strain.

"So naturally space gives somewhat at the seams. It wrinkles and curves all out of shape—but space, when it is curving keeps right on extending itself, and so it sort of grows crooked. In its extension it keeps on until it meets itself coming back, thereby generating a closed curve.

"Obviously the more matter the bigger a beating space takes and the sharper it curves and the sooner it meets itself. So then the closed curve is smaller and more limiting of itself."

"Thank you," said Jocelyn sweetly. "I'm sorry I asked you in the first place."

"Never mind that cad," said Gaynor indignantly. "When we get back you can tell your friends that not only did you have a whole universe practically to yourself but that yours was at least three billion times bigger than theirs."

"Speaking of getting back," Clair interrupted. "What shall we do now? There isn't anything to see here—want to get home? Or shall we wait here and dope out some way of getting somewhere else where there is something to see?"

"We can't do that, Art. At least I don't want to try. If we start breaking into brand-new frames we may get so lost that we won't even remember we have a home. We'd better just scat. As it is I'm licking my lips over what we're going to tell the honorable academy of science. Hell, we've seen enough here to leave us limp—even though all we've seen is nothing."

Clair nodded, but a bit wistfully. There were lots of things that could be done here—lots of places to be visited from this jumping-off point.

"We're on our way, then," he said. "Position, Paul. Let's tap the broadcast." Jocelyn looked a question, so he explained. "We're using our own system of beam-power. Naturally, we couldn't carry enough."

Gaynor turned the switch on the audio receiver. A second passed as the tubes warmed up; then a faint hum.

"God, Art, but that's dim," he said worriedly.

Clair was equally perturbed. "Yeah—try to tap it now. There's no use stalling. Even if we don't get enough power to just slap us back we might accumulate enough to limp home."

Gaynor shrugged his shoulders and closed another switch. The dial quivered and swung over. Then seconds crawled by, and then the automatic relays in the lab seemed to have reacted, because the power intake needle quivered faintly. It came to rest at a point infinitesimally removed from zero. "Faint is right," said Gaynor.

Clair touched the prime switch. Nothing happened. The tube didn't even glow.

He shoved the rheostat over viciously. At the very peak-end of its arc, when the power flowing through the tube under normal conditions would have been inconceivable, the tractor tube very faintly reddened.

And that was all. With common accord the three voyagers looked out of the window. The scene had not changed an iota. Blackness swirled indescribably before them, on the other side of a meager inch of metal, quartz and plastic.

CHAPTER FOUR

Baby Universe

A FULL minute passed as they stared out of the port. Jocelyn interrupted the dismal silence with, "It looks as if we'll have to plan on being here for a hell of a long time, gentlemen. Apparently I'll never write those feature stories."

"Yeah," said Clair vaguely. "A hell of a long time." He cut off the trickle of power, and the indicator needle ticked back to zero. "Maybe we'd better get some sleep," he said. "We might dream of a solution."

Silently Gaynor swung down the three bunks and drew curtains between them, and they vanished into their improvised compartments.

Clair was nearly asleep when Gaynor hissed at him through the thin barrier. "What do you want now?" he asked drearily.

"It occurs to me," said Gaynor, "that we've made a mistake."

"That's about as obvious an understatement as ever I've heard in a long and aimless career. What do you mean?"

"Listen: the logical train is as follows. We haven't figured a way out because we have no power. And if we have no power we have no proto. And if we have no proto we have no pull. And now, colleague, tell me just what good it would do us if we had any power?"

"Pavlik, I'm too tired for riddles. What have you found?"

"Just this—proto *attracts* 99. It doesn't *repel* it. It can't attract us any closer because we're where the proto comes from in the first place. So even if we build up the 99—what happens then? There wouldn't be any effect!"

"Then that means," said Clair, suddenly tense, "we've reached a perfect impasse. You're right, of course. But it doesn't do us any good. Less than no good at all, in fact, because now we know that we wouldn't know how to get away if we had the power in the first place."

"Then that sums it up," said Gaynor bitterly. "We not only can't get out, but we don't know how we could get out if we could. Funny things happen to logic when you have a universe all to yourself."

Suddenly Jocelyn's sleepy voice rang out. "What," it said, "are you two conspirators muttering about? Are you planning to sacrifice the sacred virgin to the Great God Proto?"

"We've just decided," said Gaynor dolefully, "that we're here almost for good. Or at least that we'll be here until the vapor pressure of our bodies disperses us uniformly through our universe—which, as any chemist will tell you, is a long and longer time."

"Good," she said astonishingly. "Now that you've decided maybe you can get some sleep. Good night, all."

"A very unusual girl," whispered Clair hoarsely. "If it didn't seem sort of silly under the circumstances I'd propose to her."

"And what makes you think," snapped Gaynor nastily, "that she'd have you? In fact, I had some thoughts along that line myself. Do you mind, esteemed colleague?"

"Not at all. Maybe it'll come down to the flip of a coin."

There was a long pause. Then Gaynor said nervously, "Do you suppose, Art, that we'll have to eat one another?"

"What's that?"

"You know. Cannibalism. It's customary."

"No," said Clair thoughtfully. "It would be irrational in this case. Cannibalism is called for only when there is a question of outside influence. Thus, if we were waiting to be saved by a passing space-scow there would be some point to it; that is, one might survive and live a full life at the expense of the others. However in our case while we might eat Miss Earle on running out of food the chance of survival is too small to counterbalance the degradation of human instincts involved.

"I took the precaution of hiding a bottle of Scotch—where *you'll* never find it, esteemed colleague—and we have enough medicine aboard to furnish us with an overdose of any variety we desire. So we simply dump some veronal into goblets, add a few jiggers, touch glasses and say goodbye."

"Thanks, Art," said Gaynor gratefully. "You think of everything. Well—good night."

"Good night."

BREAKFAST was a grim and desultory affair. To raise their spirits they were playing a sort of word game. It circled gruesomely about the adjective, "apodyctic." Jocelyn would ask, "Am I apodyctic?" and the two men would airily answer that she was and so were they

and the ship and breakfast and plumbers' pipe and suspenders. "But," said Gaynor ominously, "A Springfield rifle is *not*."

"Well, then—is the window apodyctic?"

The two physicists looked at each other. "I'm inclined to think that it is," said Gaynor reflectively.

"I don't know," mused Clair, glancing at the little square of quartz. Then—

"My God!" he cried thinly. "Look at that!"

The others spun around and stared. The amorphous, stirless utter black that had been outside the port was there no longer. Instead there was motion and a mad spectrograph of colors which blended into a sort of grey sworl. A congeries of glowing spheres blazed past the window. Great looping ribbons of flame snaked past them and curled around the ship cracking quietly to themselves as they struck.

The darkness was light, and the silence was sound; they stared and saw depth of space beyond vast depth; incredible shapes and sizes and colors stirring and awakening for as far as the eye could see. Vague, glowing areas weirdly collapsed into tense spheres that screamed off in any direction. Vast shapes smashed into each other to explode into far-scattering pellets of blazing green or blue or red.

Huge gouts of flame assailed one another. An incredibly vast rod of light that must have rivalled a solar system for magnitude collided with a great, spinning disc and absorbed it, then swelled and shattered into a million fragments that blazed with all the lights of the stars and shot off in unison to some distant goal.

Globes battled with one another near the ship, lancing out immense spears of gleaming force, smashing at each other in Jovian combat, ravening their might into the incredible void. A nebulous anthropomorphic figure the size of a galaxy strode immensely through the deeps to crumble into vast glowing discs as it neared a mighty ophidian of flame.

The three voyagers stared insanely at the colossal spectacle, nearer to madness than a human being can safely approach. It was Jocelyn who slammed the metal shutter against the port, shutting out the awful view.

"Sit down," she commanded. "You've seen all you can stand of *that*." Limply the two men obeyed.

"I don't think dying would matter much to me now, Art," said Gaynor flatly. "What was happening out there?"

Stupidly, pedantically, Clair said, "Every accepted cosmogony states that at one time the entire universe consisted of a single homogeneous spread of matter-energy permeating all of space. They say that this all-embracing and infinitely tenuous cloud was at absolute rest with neither motion nor the possibility of motion. There was not, there could not have been thesis or antithesis or synthesis.

"Nobody knows what happened to it after that, before it became what it is today, with most of it vacuum and the rest of it densely packed matter and energy."

"I see," said Gaynor. "What's going on —Outside—is the birth of a universe. Or perhaps only its birth-pains. As yet there is no law save that law must struggle to assert itself over the insanity of matter and energy on the loose. Possibly this primitive stress-material has a will of its own—at least that's one explanation of what we saw. Possibly the eternal combat-motif is merely the expression of the ascendancy of law so long outraged by the impossible state of rest that obtained for so long. . . .

"AT ANY rate we have to thank the stress-material for holding out so valiantly against law—otherwise we'd not be here."

"What do you mean by that?" snapped Clair.

"Just this. That the stress-material is *grateful*. You see, we have created this

universe and *waked it into life*. It is this ship that monkey-wrenched the quiescent machinery of the dead cosmos into existance. *What is outside we have done.*

"We are in the storm-center of the storm we have created; if law had its way we would have been the first item to be destroyed by these incredible forces. However, though it may sound insane, the stress-material displays a touching filial affection toward its parent and so forbears.

"Possibly that is madness. I don't know how long we have before the junk outside knuckles under to dialectics and so destroys us. It may be twenty seconds and it may be twenty billion years."

Clair stared at him, fascinated. "You get the damnedest notions, Paul," he breathed. "But you *must* be right. Take notes, Jocelyn.

"Memorandum to the academy of science—it has been definitely established that the uniform stress state will obtain until a foreign body provides the center of gravity which, in an infinity or closed-circle finity, which amounts to the same thing, is lacking. The uniform stress state does not appear to be a product of mutual attraction, for attraction in any direction is counterbalanced by an exactly equal attraction to the particles in any other direction."

"Shall I mail this right away," asked Jocelyn sourly, "or do you want to see the transcript?"

Clair smote his forehead. "Very true," he said. "But I wish I could see Billikin's face when and if he hears of this!" His face changed suddenly. "I'll bet," he said, "he hears of this whether he knows it or not!"

"What does that mean?" asked Gaynor.

"Pavlik, you thick-skulled ape! Did you ever bother to think of *what* universe we're so busy creating? *Our own!*

"Don't you see? We *couldn't* have just stepped outside of space and stayed there for any length of time. We must have been snatched out for just as long as we had the power on, and as soon as it was cut off we slipped back into our own universe—the easy way! That is, the easiest point of entry is at either the beginning or the end, and we happened on the beginning.

"This little chunk of matter—the *Prototype*—slipped down the entropy gradient, slipped right up again, and busted the mechanics of a static system wide open!"

"So," said Gaynor, "this is the beginning and not the end."

"Sure!" cried Clair.

"How do you tell one from another, esteemed collaborator?"

Clair's face fell. "All right," he said—"what if it is the end instead? We've started it going all over again, so what's the difference?"

"None," said Gaynor.

"Excuse me, gentlemen," Jocelyn interrupted demurely. "To my girlish mind you have strayed far from the essential point. That is—getting to hell out of here. The problem is no less acute despite our newly-discovered god-like qualities. There appears to be an entirely new set of data to work on, and I humbly submit that you get to work on them with an eye to slapping us back into something vaguely resembling a happy home."

"My old grandmother told me once," said Gaynor thoughtfully, " 'If you can't drink on a problem, sleep on it. And if you can't sleep on it, eat on it.' She was a crazy old girl. Let's have some lunch. I suggest soup topped with whipped cream, omelette surrounding a heaping platter of fried canned chicken, to be wound up with stewed pineapple and brandied cherries."

"Much as it pains me to contradict you," said Jocelyn firmly, "we're having beans. Hundreds and hundreds of them—not only nourishing but tasty. Not only tasty but economical. Besides, we have to watch our provisions and figures."

THEY also had to watch their stock of tobacco. In fact they split a cigarette three ways after eating and nearly set fire to Clair's soup-strainer lighting the segments.

"Now," said Gaynor, puffing gingerly, "We know we're not where we thought we were. The question before the house is, how do we get where we want to be?"

"We know," said Jocelyn, "that the utterly useless trickle of juice from the lab is now effectively gimmicked by all the static zipping around outside. We have a generator here which is too incredibly feeble for our purposes to be anything but a lawn ornament. The crying need is power."

Clair mused, "It would be nice if we were outside this infant universe, or at least in a middle-aged one."

"Hold it, Art," snapped Gaynor. "You said outside? Maybe there's all the power we need out there beyond the hull!"

"Yeah—but it'll be a million million years before it's in any form that we can use." He snuffed out his stub of cigarette. "Or maybe—what the hell! If we do get power enough how're we going to make proto out of it?"

"Remember that photo plate, Art?" asked Gaynor.

"Yeah. Radioactive." Then he snapped erect and shouted it, *"Radioactive!* Everything in this whole damned universe—we're saved, it seems, Paul. You're right—we don't have to build up 99—*we've got it right outside!*"

CHAPTER FIVE

Pixies

IT HAD taken them a week and a day to lead-sheath a reservoir for the radioactive gasses and to build and sheath a suction pump capable of drawing them in.

"Stand by," said Clair shortly. "Power on."

Gaynor threw the switch of their small, compact generator and Clair focused the electric lens with difficulty on the bulk of the gasses. "Ten seconds," Jocelyn finally announced. "Power off." They had felt nothing. Clair nervously strode to the window. They kept it covered, now. Hesitating a moment he flung the shutter open. The scene had not changed—they were still stranded. "Well, Paul," he asked simply. "Now what—we haven't moved."

"No?" asked Jocelyn sweetly. "Then what do you call *that?*"

They followed her gaze out of the port. She had, it seemed, been referring to a squadron of flying dragons that were winging their way towards the ship in a perfect V formation.

"That," said Clair flinging the drivers into 'full speed ahead', "I call a mistake."

Gaynor moaned gently. "That's no stress-energy. Used to have dreams like this," he gibbered. "Only they weren't quite so big and they didn't breath quite so much flame and they always turned into snakes before they curled up on my chest."

"Planet ahead," said Jocelyn. "It's all alone—hasn't got a sun. What do you make of it?"

"I'm sure I don't know," said Clair wearily. "But I'm going to land there. Being chased by flying dragons—especially flying dragons that can fly in a vacuum—is getting us nowhere."

"It's getting us onto that planet," said Jocelyn, "and I don't like its looks."

"We'll land and see what happens first," said Clair, the dominant male. They were hanging over the surface of the globe about a mile up. Suddenly it gulped at them. A huge mouth, the size of one of the Great Lakes, opened in its surface and gulped at them. "Will we?" asked Jocelyn.

"No," said Clair unhappily. "I suppose not." The ship drove on.

Jocelyn laughed madly. "Pixies off the starboard bow," she said in a flat, hysterical voice:

"Yeah?" said Gaynor skeptically. Then he looked. His eyes bulged and his mouth opened and closed apoplectically. "Where the hell are we!" he screamed. "Fairyland?"

For pixies they were—a gauzy, fluttering band of them!

"Maybe," said Gaynor, "they'll chase off the dragons." But they made no move to do so. Instead they were keeping pace with the ship and rigging up a nasty-looking device with handles and snouts.

"I think," said Jocelyn, "that the Little People plan to do us dirt."

And sundry polychromatic rays shot from the device and struck the ship.

"THAT tears it!" screamed Gaynor. He flung the dynamo into operation and snapped the lens into focus. Abruptly they found themselves back in the nascent universe they knew so well, pyrotechnics and all. Jocelyn closed the shutter.

"Now," she said, "teacher offers a big prize to the bright little boy who can tell her what that ghastly district was and why we got there."

Clair and Gaynor stared at her from the floor. "I'm sure I don't know," said Clair dully. "Wherever it was it was awfully silly."

Gaynor moaned, "Flying dragons! I thought I'd left them behind when I had my twenty-first birthday. And dammit, I'm sore at those pixies. They were untraditional. If they'd been imps with spiked tails it would have been understandable — they're expected to muck things up in general. Now, Clair—where were we, the lady asked. I'll consult our instruments."

He rose painfully and opened a graphbox to refer to the continuous record of flight maintained by the tracing needles on endless scrolls of paper.

"I think," he said, "that I know what happened.

"We must hold in mind the unassailable fact that all atoms are similarly constituted in form and all similarly constituted as regards their dynamics. That is to say, the electrons move all in a certain direction at a certain rate of speed.

"This is true of planets and the atoms that compose them; of the atoms that compose our bodies and our sensory organs in particular.

"*Now*—obviously these sensory organs will perceive only that type of atom which is similar to it in its major characteristics. For example, the eye will not take heed of a substance whose atoms are spinning backwards in relation to the atoms of the eye. But if the atoms of the eye are reversed in their motion they will readily perceive the matter whose electrons are now moving in a similar direction."

Clair said succinctly, "So what?"

"That, esteemed colleague, is what happened to us and the ship. That nasty place we came from is *backwards*—in the larger sense, I mean."

Jocelyn looked baffled. "Then I was turned upside-down and inside-out to see those nasty people? All I can say is that it was hardly worth the trouble!"

"But," puzzled Gaynor, "why should those creatures be the dead spit and image of all our mythological and childhood bogies?"

"I'm sure I wouldn't know. Quite probably, though, those things can slink through, or at least did slink through at one time to scare the hell out of our ancestors back in the ages primitive. Or possibly our inspired spinners of folklore had something a little wrong with their eyes. It may be that a rod or cone in the retina is peculiar and lets through misty shapes that belong actually to the reverse universe."

"You're probably right," said Jocelyn unexpectedly. "And little children that swear they see fairies and goblins—they

must belong in the same class. Sometimes funny things can leak through. We're being frightful iconoclasts this trip—repudiating gravity, cosmogony and etherics in one breath and establishing folk-lore in the next as scientific fact."

"Very true," said Clair. "But this cuts no ice. We made a mistake that time somewhere—will it happen again, Pavlik?"

"I don't see why it should," said Gaynor. "Maybe it works alternately. We can try it."

Automatically he took his place at the power-intake equipment with one hand on the switch that controlled the generator.

"Hold on," said Jocelyn. "If we're getting out of this mess I don't see why we shouldn't celebrate."

THE two men looked at one another. "Incredible girl," said Gaynor. Clair said nothing, but reached into the core of an electromagnet and drew out a gleaming three-liter tube bearing the noble imprint of the House of MacTeague.

"Voici le Scotch," he pronounced with pride. "Get paper cups, Pavlik."

They poured shots of the liquor and touched glasses.

"To the voyage," said Jocelyn.

"To Jocelyn," announced the men in chorus.

They tossed their cups into a refuse container and took their stations. Clair juggled the lens about, adjusting it precisely.

"Power on," he said quietly.

Gaynor threw the switch of the generator, and the power trickled through—perhaps forty thousand volts. There was a dull roaring through the apparatus as Clair swung in the prime switch and moved over the rheostat. Suddenly he was afraid—what if they had been wrong? What if they hadn't moved? Were locked forever within a limitless prison of space?

"Ten seconds," he said licking his lips.

Jocelyn opened the shutter with a gesture that had in it something of defiance. There, twinkling before them were a myriad points of light that cut into their souls like icy knives.

Quietly she said, " 'Thence issuing, we again beheld the stars.' "

CHAPTER SIX

Stars and Men

THE universe they were in was an agreeably middle-aged one, with few giants and a majority of dwarf suns. They didn't know whether it was theirs or one similar, and they didn't much care. They knew that they had only to encounter a reasonably civilized race to provide them with equipment and perhaps some days that were not endless struggle to survive.

What the three voyagers needed was rest. Their chronometer lopped the day into three arbitrary sections which saw always one asleep, one at the lookout plate and one handling the powerful driving engines. They roared along at a speed inconceivable, yet traveling two weeks before the nearest star became apparent as a disc.

Jocelyn was at the port sighting the body with an instrument that would give them its approximate distance, size and character. "About five hours away from a landing," she announced. "Type, red giant."

"Five hours?" asked Gaynor.

"Right. I can't see planets yet, if there are any. I don't know that they're typical of giant stars."

"There may be some," said Gaynor, his fingers feeling the pulse of fluid in a tube. "And they may be inhabited. And the people may be advanced enough to give us what we want. Then it's home for us all—eh? Maybe you'll get your articles printed after all."

Her haggard face curved into a smile.

(Continued on page 117)

EUROPA ENCHANTMENT

A Super Science Brief

By HENRY ANDREW ACKERMANN

THE little space cruiser rose easily from the broad clearing, moving upward and outward at a sharp angle. The *cluna,* she-creature, held a high-speed camera to her eye and cranked the handle on its side. As the ship vanished into the dark azure skies of Europa, the *cluna* waved good-by to it. Rapidly it shrank as it arced away.

Athora, crouching behind the tangled thorngrass that fringed the clearing, watched the departure. Her natural facial markings of bright colored feathers added a touch of the ludicrous to a smile that was otherwise malignant. She was a native of the satellite of Jupiter, from a region deep in the heart of the wild forest region of Europa.

Athora was a creature about seven feet tall, her grey skin was covered by a mass of fine feathers, her head was the head of a terrestrial bird, her face was punctuated in the center by a long, curving beak. Four long, skinny fore-limbs hung from

her narrow shoulders to within two feet of the ground where they ended in bunches of flexible claws. She walked erect, like a man, on two bony, thin legs whose extremities were stubby claws.

The Europan led a small band that had deserted the parent tribe for a wandering existence. Half mischievous, half vicious, they had thrived on petty attempts to annoy the *tecca,* the men-from-the-sky, as they called the earthmen. Now Athora had conceived a more ambitious project.

With the departure of the house-that-flies she saw her dreams fulfilled. For many months she had awaited this moment. Ever since these *tecca* had come to the dry belt, tales had travelled all over the rain-forests; tales of the house-that-flies, the artificial cave which didn't fly but stood higher than the tallest trees and was roomy enough to house an entire tribe, the strange, beautiful things from another world, a world in the sky. Athora had come to watch with envy, and to wait.

Athora took one last look about the clearing. Then with the speed and silence of the forest-born she retraced her steps up the trail.

The man-creature had flown many times from his artificial cave. But always he had left a few others of his tribe. Now he took many cubes of food and all the others but one. He would be away for days.

Now was the time to strike. The *cluna* was alone with the servant. What could the *cluna* do with the leader away? The attack would be nothing . . . and all those shiny things, the little bright suns that could be carried in the claw and which felled even the largest beasts, the cave-taller-than-trees, everything would be Athora's.

They could take even the *cluna*. But of what good was she? She needed servants to prepare her food and protect her. Athora twittered in contempt. On her world the shes were the dominant sex, the rulers and ones who accomplished things. No, they would not want the *cluna.*

He was a fool, that leader, to leave her alone. But these creatures from far away did many foolish things.

Athora reached her caves long before the sun had set. She was greeted and questioned in silence by ten pairs of beady, slit-like eyes.

"The noom have left on a long journey. We will attack tonight. Be ready."

The tribeswomen chattered with excitement, surrounding their tall leader and pestering her with questions. "Tonight" was on every beak.

Then they realized that tonight meant now. It was too sudden to face so dangerous a task. Their nerve began to waver. They wanted to wait and make sure. What about the magic powers of the *tecca?*

"Magic powers!" Athora spat out the words in contempt. "It is the leader who has the magic powers and he is far away."

Shamefacedly they set to work . . . collecting hundreds of the poison powder puffs of the forests to inhale whose spores was to die horribly. These puffs did not burst except at violent contact so the bird-women were careful how they handled them. Next, they dipped the tips of their spears into a deadly slime mould, a few drops of which would kill even the *Ebonard,* the behemoth of the Europan wildernesses.

FULLY equipped, they made their way silently and rapidly through the sable arches of the forests. Soon they were at the clearing. They circled it so as to approach up-wind the cave-taller-than-trees. Almost across the clearing they were met by the din of frantic barking. In spite of their stealth and the favoring breeze, the *teccan* animal had sensed their presence. They stood still and waited.

The *cluna* appeared at the entrance to

the artificial cave. She spoke to the strange, hairy creature with four legs, peered into the darkness, and returned inside. Athora thought, "Fool, she hasn't the sense of a beast."

They advanced slowly, searching for the strange beast. Athora caught glimpses of it as she passed through the circles of white light from the round openings of the cave walls, but the glimpses were too fleeting for certain aim. The creature was aroused and tense. Growling, he sat in front of the cave entrance.

Athora raised the uron in her claws. The distance was only fifty feet. She took careful aim, and the ball of deadly spores sped on its way, silent and merciless.

The four-legged beast sniffed suspiciously and that was his undoing.He got a lungful of the quick-acting spores and leaped into the air with a yelp. He fell back, legs folding under him, and was quiet.

The entrance to the artificial cave was unblocked and the servant appeared. He saw the dead creature, its body already covered with the gray shroud of spores; with a shrill cry he re-blocked the cave entrance and rushed about shuttering the cave openings. Screams sounded from within the cave.

Athora twittered and flapped her limbs in glee. The tecca were babies. She could defeat them alone. With a word to her followers she started toward the dwelling.

But the rest held back. They could not now surprise the big cave. The cave was strong and the little suns would burn them. They recalled the magic powers of the tecca.

Athora scolded them, insulted them for cowards. They should not fear danger. All these wonders were theirs for the taking. But the birdwomen would not budge.

Then she drew herself up, arched her sleek neck feathers into a challenging ruff. "Am I not your leader? Come then."

Without a backward glance she moved forward. Subdued, the rest of the band followed her, their chief.

The noise within the artificial cave suddenly ceased. There were a few minutes of silence. Then the cave openings were unshuttered. And the cave seemed as peaceful as if nothing out of the ordinary had happened. Even the cluna could be seen sitting near one of the round wall openings of the dwelling. Athora stopped and turned to her band.

"You see, they are fools. They do not heed a warning. Come, we have already won."

They stepped confidently forward . . . no hurry, it was too easy for that. Tecca seemed so stupid.

THIRTY feet from the circular cave opening Athora halted. She took her spear, gripped it firmly. It would be a difficult cast. The cluna was in sight, it was true, but two screens had been arranged so that she could be hit only through a narrow opening. A savage exhilaration filled Athora as she drew her arm back; tensed for the kill.

Suddenly she lowered the spear and listened, a startled expression in her eyes. *What was that she had just heard?*

It was the sound of voices, noom voices! The cluna was not alone? But it was not possible. Just a moment ago she had been alone. Athora listened in amazement. The cluna was talking to someone behind the screen. Then came more voices; three noom were arguing. They talked in the strange gibberish of the tecca.

Athora stood unbelieving, yet oddly afraid. Gone now was her bold bravery. She trembled as more and yet more voices joined in on the conversation. By the gods! Where were they all coming from! Every now and then the cluna would laugh and say something herself.

Then the servant noom came back to the cave opening carrying a tray on which

were many glasses . . . so many Athora did not try to count them all. The servant noom served one to the cluna and then crossed behind the screen to serve the others. Athora knew then for sure that there must be noom inside the cave; that the noom were drinking she knew also because once Athora herself had drunk one of the delicious drinks of the outlanders.

Athora felt terror chilling her larynx. With so many glasses and so many voices there must be a whole tribe of the noom in the big cave. It couldn't be, but yet it was. Magic! The cluna also had those strange powers. She, as well as her mate, could produce a tribe from nowhere!

From the entrance to the cave came a deep and ominous growling. The barking creature no longer lay in the patch of light. Athora was stunned with fright. The cluna could even give back life to the dead!

Athora had heard enough. Her band had already deserted. She turned and ran for the shelter of the forest.

THE servant in the shadows of the vestibule stopped his throaty growling as Athora and her band fled. He entered the dining room.

"Madam, they have gone."

"Whew! Am I glad of that! Were they frightened very much?"

"Yes, ma'am. I do not think we have ever to fear them again."

The servant left the room. Mrs. Leopold, wife of the famous planet explorer, sank back in her chair with a sigh of relief.

She thought aloud. "Impressing them may be better than killing them. But it's terribly gruelling."

She got up and crossed the empty room. The flow of raucous dialogue ceased as she turned off the loud-speaker of her short-wave radio.

THE END

(Continued from page 85)

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(Continued from page 111)

"And maybe you'll see the look on Billikin's face when you show him those formulae."

"Maybe. Somehow I don't feel inclined to doubt it."

Their chronometer uttered a sharp warning peal, and Clair was awake at once. "To bed, woman," he said. "The dominant male takes over." She handed him the instrument and the slip of paper on which her calculations had been made, and with a feeble gesture of hope and cheer for both of them disappeared behind her curtain.

"Extraordinary woman," said Clair after a pause.

"Yeah. I don't see how she keeps going."

"I'm damned if I see how any of us keep going!" cried Clair with a sudden burst of temper.

Gaynor looked at him sharply. "Hold on to yourself, Art," he said. "As the lion said, it always gets darker before it gets lighter. How about that sun out there? Take an observation, will you?"

Clair adjusted the minute lenses and mirrors of the device and read off the result from its calibrated scale. "About three hours at our present rate. But its gravity'll take hold and speed us up most helpful. I think I see a planet."

"Look again—I think you're mistaken."

"Right—I am. It's a meteorite headed our way. Deflect to the left a few degrees if you want to stay healthy."

The ship veered sharply and a great, dark body passed them in silence.

"Maybe we'd better dodge that sun entirely, Paul," said Clair. "It might drag us in."

"I have my reasons for taking this course. Look at the fuel tank," said Gaynor shortly.

Clair bent over the panel of dials that was the heart of the ship. He read aloud from an indicator, "Twenty-three liters of driving juice left." There was a long pause. "Pretty bad, isn't it, Paul?"

"Extremely so. When we get near enough that sun I'm going to play its gravity for all its worth. We have to get somewhere fast or we don't get anywhere at all. . . .

"BY THE way," he added, "Jocelyn doesn't know where we stand with the fuel. Suppose we don't let her know until she has to. Right?"

"Check," said Clair. "Maybe she has a right to know, but personally I feel more comfortable in my superior misery." He swallowed a food tablet. They were just starting on them—all the roughage diet had been consumed.

They were nearing the huge red sun, now. "Steady on the course, if you're going to take her through," said Clair. "If not, deflect up about twenty degrees and level out on three degrees of elevation."

"I'm taking her through, all right," said Gaynor grimly. "And us with her!" Reckless of the engines he clamped down an iron hand on the controls and the blunt little vessel shot forward, it speed redoubled.

The glare from the nearby sun lit up the engine-room with a feverish glow; Clair by the port seemed to be watching an Earthly sunset, the gaunt lines of his face picked out sharply by the somber light. The light grew as they swung across the face of the star, and became intolerably bright. Clair abruptly slammed the shutter of the port. "We can't risk blindness just here and now," he said thinly.

They felt the ship leap ahead under their feet; gravity was asserting itself once more as they came into the sway of the monster sun. The eyes of the two men were glued to the speed indicator. It mounted from its already incredible figure, then, as Gaynor abruptly cut off the flow of driving power, quivered down—halted—again began to mount. It rose and

doubled, and the heat rose with it, beating through the thin metal walls of the vessel. Glaring streaks of light streamed through microscopic cracks in the metal shutter against the port. An indicator needle swung crazily on the instrument panel; the air and body of the ship was taking on a dangerously high potential of electricity.

Clair opened the shutter and winced as the stream of radiation hit his face. "We're past it," he said. "How's our speed?"

Gaynor examined the panel. "Constant," he said. "As soon as it lets down we can boost it with a bit of driving." He examined the potential indicator. "Look at that, Art!" he exclaimed. "God help the first meteorite that tries to get near us!"

Jocelyn appeared from behind her curtain. "Congratulations," she said. "That was a neat piece of corner-cutting. Where do we go from here?"

"I'm sure I don't know," said Gaynor wearily as the eight hour bell clanged. "Take over, Miss E." He walked to his bunk, already half asleep.

The girl swallowed a few food tablets and took the controls. "Human interest," she said.

"Sure," said Clair absently. "Great guy, Pavel."

"And what did I hear about the fuel?" she asked suddenly vicious.

"Just that there isn't enough of it," said Clair innocently. "We were worried about you worrying about it."

"I see," said the girl. "Big brother stuff. Don't let that foolish woman know. She'd only make a fuss about it when there's nothing we can do to help it. The female's place is on the farm with the other domesticated stock, huh?" She stuck her chin out belligerently.

"Excuse us," said Clair. "We were misguided by each other. Now that you know, so what? That makes the three of us a happy little family in a happy little hearse squibbing ourselves God knows where until our fuel runs dry. Then we drift. And drift and drift and drift. So what? For a good night's sleep without that goddam bell I'd cut your throat, young lady, and throw you to the wolves."

She laughed happily. "Now *that's* the kind of talk I like to hear," she said. "Good, honest whimsy." Then Clair laughed and started her laughing again. They were sobered somewhat by a great gout of light and a crackling roar that shook the ship from stem to stern.

"What was that?" she asked. "Or is it another one of your secrets?"

"I think we can let you in on it," he said. "Just an inoffensive meteorite that came too near us and got blown to hell for its pains. We picked up a lot of excess juice around that red giant, and we just got our chance to fire it off at something."

"Poor little meteorite!" she gurgled, and they were laughing again.

TWO weeks later no laughter could be heard on the little vessel. Three haggard and gaunt human beings sprawled grotesquely on the floor. The taste of food had not been in their mouths for days, and for them there was no sleep. The stars that had been once a hope and a prayer to them glittered mockingly through their port, oblivious to so small a thing as human want.

Gaynor stirred himself. "Art," he said.

"Yeah?"

"I suppose you recall our little discussion on the ethics of cannibalism back there—Outside?"

"I hope you're not making a concrete proposal, chum. I'd hate to think so."

"No, Art. But you remember what our talk led to? Think hard, you fuzz-brained chimpanzee."

"Insults will get you nowhere at this point," interrupted Jocelyn. "What are the male animals discussing?"

"Ways and means," said Gaynor. "I'll put it this way. If you didn't want to

either eat your best friends or be eaten by them and you know that unless you ceased to exist shortly you would be compelled to eat them or be eaten by them—well, what would you do?"

"I think I understand," said Jocelyn slowly. "I've read about it time and again and shuddered at the thought—but now it's different. I'd hate to eat you, little Pavlik, but if we don't—do something—we'll be thinking about it in silence and then comes the drawing of straws or the flip of a coin and one of us gets brained from behind."

"I'll get the stuff," said Clair wearily dragging himself to his feet. He was heard to smash bottles in the store-room, then returned with the flask of whiskey and a little paper box.

The others took cups and presented them; shakily he poured the liquor, slopping on the floor as much as went into the cups.

"What does the trick?" asked Gaynor curiously.

"Mercury compound," he answered shortly, and tried to open the box. He spilled the tablets on the floor, and they bent agedly to pick theirs up.

"Two apiece is enough," said Clair thinly. They dropped the pellets into the liquid. Gaynor was delighted to see that it bubbled brightly. He inhaled the bouquet of the whiskey.

"No doubt about it in the mind of any gentlemen worth the name," he said. "House of MacTeague is far and away the best that money can buy."

"You're right, Pavlik," said Jocelyn. She rested her cup momentarily on the indicator panel. She felt as though the floor were swaying beneath her feet. "Is the ship moving?" she asked.

"No," said Gaynor. "At least, no acceleration."

Jocelyn proposed the toast: "To—us. The hunters and the hunted; the seekers

and the sought; the quick and the dead. To us!"

THE others didn't repeat the toast. Something was wrong. Clair spun around, his face picked out in a green glow that had never been seen before. They dropped their cups and crowded at the port. The ship was surrounded by a bright green glow that leaked even through the pores of the ship's metal hull. Gaynor turned to the speed indicator. "Look!" he cried hoarsely.

The device had smashed itself attempting to a record a fabulous figure.

Back at the port they saw one star that grew.

"We're held and drawn by a beam of some sort," excitedly Clair explained. "We're headed for that sun!"

As the disc of that star grew great in their heaven the ship slowed its mad flight. They could see a planetary system now. The beam had shot from one of those worlds.

Swift as thought their vessel shot down on one of the worlds. The green beam was more intense now; they could see that it emanated from a great structure on the planet. There were lights—dams—cities—great scored lines in the surface of the world that might have been roads.

The beam suddenly became a brake; they descended slowly and in state. A great concrete plain came in view—it was the roof of a building. There were first specks, then figures standing there. As the ship came to rest through the port they could see them as people—human beings—beautiful and stately.

It wasn't Earth, nor even much like it. But it was all that they wanted it to be—a point from which they might continue their wanderings, get rest and food, equipment and knowledge to set them on the right trail for home.

THE END

THE PREVIEW

GREN HABERLEY, pirate ruler of southern Illinois, sat in conference with an Asurian, a member of the dread sect of scientific researchers who were outlawed from every civilized planet of the Solar System for their callous experiments with human lives. Haberley, a ruthless and dissipated man, was in a wrathful mood, caused by the blunderings of his subordinates a week before when they had incautiously broken the arm of a woman they had abducted for his harem. The girl, Moira Presby, had had to be confined to a hospital. But even the powerful pirate leader could not afford rage in the presence of one of the grey-robed Asurians.

"I will pay the cult well for what I ask," he said, forcing his voice to a civil tone.

The Asurian stared at him for a long moment. "What use have we for money?" he rasped finally. "We only want that which we need in our laboratories, and the whole Earth is our store-room."

There was a pause as the Asurian's hooded eyes flicked over the room, returning to stare at Haberley. A sinister smile covered his face. "Yet, there is one way out. We cannot give you one of our servants. It is a law of the Cult that our servants can be used only on our own affairs.

"But we will make a bargain with you," he said. "It happens that we require certain information, which we can only get on Mars, in the city where lives this girl you want us to steal. The information is not important; we do not wish to risk one of our own invisible neophytes to get it—for it is closely guarded. So, if you will find a man willing to become invisible, we will make him so, send him to Mars, and there he can get what we want. Then and *only* then, when he successfully completes our mission, he can steal this girl for you. But the man must become our property; he will never regain his visibility, and he must live the rest of his life as a neophyte in our service. That is our bargain. . . ."

The bargain of the Asurians! No other group could make such a proposal, for it promised little to the other party. But the Asurians could drive whatever bargain they chose; as masters of the outlaw planet Earth, the entire world was theirs.

That evening, word went around that Haberley wanted every person on his service to appear at the assembly hall. When they had all gathered, he asked for a volunteer—for it was necessary that the deed be done voluntarily; the chances of making an escape under cloak of invisibility were too good for force to be of any use. Haberley had little hope that any would volunteer, for the ways of the Asurians with their neophytes was too well-known. But—

There was a commotion among the ranks of the listening men, and one sprang forward. "I'll do it," said Ollon Presby, husband of the abducted Moira. . . .

"Invisible One," by Neil R. Jones, is the story of Ollon Presby, citizen of the jungle-law Earth of the 26th Century, a man who would sacrifice anything he possessed for revenge upon the pirate-ruler abductor of his wife.

In the same issue:

"The Girl in the Bottle," by Jack Williamson, is a gripping story of the weird, other dimensional allies of a Terrestrial Dictator.

"The Invasion" is Robert Willey's tale of Earth's first visitors from space.

Max C. Sheridan tells of the bitter joke Fate played upon a stranded Earthman in "Venusian Tragedy."

And there are five other novelettes and short stories of the science of tomorrow's world.

The September issue of *Super Science Stories* will appear July 19th.

MISSIVES AND MISSILES

Antipodean Advice

Editor, *Super Science Stories:*

I fully realize that your other correspondents are pouring in a ceaseless chain of advice, criticism, and suggestions, yet nevertheless I'm going to give my views on what an editor of an stf. magazine should do. Firstly, there is the art work. Nothing adds more to the enjoyment of a story than a good, expressive illustration. As a fan, you know that yourself. I'd recommend you use the following artists:

Morey, for general scenes and covers; Finlay, for people and weird aliens; Wesso, for practically anything; Dold, for semi-weirds and some types of space vessels; and, of course, Paul. Though you should use Paul's work sparingly. I believe the five artists I have mentioned could well handle any type of illustrating that is required.

The general makeup is another important item. You can either jam your magazine full of superfluous departments, or use only a few necessary ones. I favor the latter policy. A science fiction magazine must continually strive to keep well above the average pulp magazine. You cater for an intelligent section of the reading public and so you must appear better on the surface as well as in the stories. Lots of tiny departments are associated with average newsstand material. The only departments I would propose using would be a two-page informal editorial, a large readers' section printing letters that *discuss* the magazine and don't merely rate the stories, and possibly a two-page section for fan advertising.

Finally, but by far most important of all, are the stories. Any fan could talk for hours on what type of fiction you should print, but I'll briefly name a few authors and what I'd like from them. Neil R. Jones: a series similar to the Professor Jameson yarns. I've read all this series and have nearly gone crazy writing to other editors to get them to print more. Why not even continue this series? Dr. E. E. Smith: serials, powerful ones. John Russell Fearn: serials similar to "Liners of Time." Jack Williamson: novel and novelette-length stories, but steer him clear of the romantic ones. Festus Pragnell: a sequel to "Green Man of Graypec," if possible. Dr. Walter Rose: something like his "By Jove!" And, oh, so many, many others.—William D. Veney, 19 Newland Street, Bondi Junction, Sydney, N.S.W., Australia.

We Surprised Him!

Dear Ed:

Your critic here has just been nonplussed. After that terrible first issue of *Super Science Stories,* I rather expected the second number to fall in the same category, but was I surprised! This issue had only one story below par, of which more later.

The cover avoided garishness and proved attractive to the eyes; the girl, though, seemed stilted, lifeless. On the whole, it was not as good as the cover for the first issue.

The book reviews were well written and interesting. The preview department still needs to be enlarged. It should rate at least one whole page.

The article by Willy Ley was one of the best I've read in any recent publication. As long as you keep away from the "heavy science" type of article, they prove very popular and enjoyable.

The stories? One Grade "A"; seven

better than average; and one atrocity. The topmost story was one of the shorts, Lyle Monroe's "Let There Be Light." The science was presented in just the right doses, the characterization was superb, and the plot, an ingenious variation on an old theme, was well worked out.

Second and third honors went to "King Cole of Pluto," by Gottesman, and "Guardian Angel," by Gallun.

The recipient of the booby prize was none other than our old master of the atoms, Ray Cummings. His "Arton's Metal" was one of the most poorly thought out, ill devised, and terribly written stories I have ever had the misfortune to read. I don't know how it ever crept into our mag, as it is not science fiction or fantasy, but merely an adventure story. (In case someone disagrees, I defy anyone to show me any science in the story. Did he explain how the metal was created? No. Did he even state a theory? Again no.) And what business, dear Ed., has an adventure story in an stf magazine?

Now that I feel in a perverse mood, I might mention that Miller's "Living Isotopes" was rather shaky and should have had further revision before it was printed. Also, what about some decent inside illustrators? You've dispensed with the services of Foxx, the best one you had, and did not even so much as mention the possibility of obtaining the services of a better one.

And now, the readers' department. Keep it up. It furnishes us fans the best index for determining the popularity of the mag and the quality of the stories, as rated by other readers.

Am glad *The Science Fictioneers* is doing so well and wish to compliment you for publishing the names and addresses of all members. Please continue to do so. Also, I would appreciate it very much if you would make known the fact

that I am trying to organize a chapter, and would like to have all fans in the vicinity contact me to facilitate and hasten organization. I'll get a chapter formed here even if I have to join *The Science Fictioneers* twice more to do so! Anyway, keep the charter in readiness for me.

Looking forward to the next issue with keen satisfaction and high hopes, I remain,

—Joseph M. Lewandowski, Jr., *Science Fictioneer* No. 26, 17 Riverview Road, Brecksville, Ohio.

Constantly "Better" Is Our Aim

Dear Editor:

I have just finished the second issue of *Super Science Stories*. This number was better than the first, but the magazine still has a long way to go before it can compare with the leading science fiction magazines. There were no stories which stood head and shoulders above the rest in this issue, but those which I enjoyed most were "Juice," "Living Isotopes," and "Castaway." About the worst in the issue was "Let There Be Light." The story is nothing but drivel. I hope you never print another like it. "Yes, mamma," "No, Ape," . . . migawd.

The most improvement in this issue was in the interior illustrations. Eron really surprises in this issue. His figure work is superlative, although his machinery, etc., is not so good. Lasker wasn't so bad this issue either. I like Bok's style, but would hate to see him illustrate more than one or two stories an issue as I am afraid he would become monotonous. The cover was a let-down from the one on the previous issue. Why not keep Binder on the cover?

Print more poetry. Don't use more than one article an issue. "The Ersatz World" was very interesting, but one article is enough. Your book review department is very welcome. I believe that you have

the only magazine now printing reviews regularly.

I have enclosed my membership application to *The Science Fictioneers* and a self-addressed envelope. Stf has needed a real live-wire organization for a long time, and it looks as though we are going to get one finally.—Melvin C. Schmidt, R.F.D. 4, Mount Vernon, Indiana.

Light's Out

Super Science Stories:

As a constant reader of all science fiction, I naturally bought *Super Science Stories* as soon as it appeared. The May issue is a distinct disappointment. I prefer science fiction to the other pulp trash because I expect, there, to find good writing as well as good and interesting stories. As a particularly horrible example I refer to "Let There Be Light." The story itself is readable. But the vulgarity of the language is such as to make me look thrice before buying the magazine again. The same is true, to a greater or less degree, of others in the issue. Sex is acceptable and natural. But vulgarity and slang loses my business and interest. —M. Evans, Suite 912, 1860 Broadway, New York City.

That "Long Novel" Again

Dear Mr. Pohl:

I have just finished the latest issue of *Super Science* and I wish to make a few comments on it. I at once noticed the marked improvement in the stories, but the cover wasn't so good. "Living Isotopes," "Arton's Metal," "Let There Be Light," and "Hollow of the Moon" were the best stories of the issue in my mind. "Juice" had the worst plot in the issue, having been used so many times. "Bequest of the Angel" had me all mixed up. I had to keep looking back to see who was whom. The rest of the stories were so-so.

On the whole, as I said, the mag has improved greatly. But I have one complaint. Why do you have so many short stories? Why not have one long novel in either of your magazines, and all short stories in the other? I am sure many fans will agree with me on this.—Gereaux de la Ree, Jr., Secretary, *The Solaroid Club,* 9 Bogert Place, Westwood, New Jersey.

In Satirical Vein

Cheerio, Editor:

Gadzooks! I was *shocked* by the latest issue of *SSS!* From the color-splashed front cover to the tempus-fugit Missy on the rear (cover) was "indescribable ecstasy, indefinitely prolonged!" That front cover: what a magnificent command of colors! what startling concept! what verve! Glady would I poke my foot into the limpidly gaping mouth of the dainty lil' heroine, the bewitching miss fresh from some comic strip! I bewail the fact which necessitated the cover being abruptly sheared off a few inches below her bullet-belt . . . one can simply imagine the rest of her trim little self: betcha she wore blue satin slippers with gold buttons! (And every little pimple on her leg outlined with silk!)

And then a look over the contents page, and the blurbs for each story! Gee! Saliva drooled between my thick lips—my adams-ipple bobbed excitedly—*space-pirate stories!* And gooey vengeance! I tore into those stories immediately. After this cream had been skimmed from the top, for duty's sake I boredly read the rest of them. "The rest of them" being:

"Hollow of the Moon," "Guardian Angel," "Let There Be Light," "Juice," and "Castaway."

To think that you would have the nerve to include such yarns as these in the same issue as SPACE-PIRATE STORIES!! (and gooey vengeance.) May an isotope get you—the more hideous the better!

(On second thought and fiftieth glance,

I should like to poke *both* feet into the canyon on the map of that "Delicia Dare" squeezing the flashlight gun on the cover!)

Meanwhile, let's have oodles and oodles more of the *SPACE-PIRATE STORIES!!!!!*—Bob Tucker (SFL No. 68), P. O. Box 280, Bloomington, Illinois.

Professional Fan Magazine?

Dear Sirs:

Please find attached my application for membership. I sincerely hope that everything is done to make *The Science Fictioneers* a live-wire club. Devote plenty of space to it in the magazine. Don't be afraid to cut down on stories to make room for its inclusion, for, on the whole, I believe you'll agree that there are too many stories in this field already. What I would like is a professional fan magazine chuck full of articles, biographies, pictures, poems, reviews, contests, satirical stories, and news. Please make a big thing of this, and the fans will respond with help, I am sure.—Donn Brazier, 3031 North 36th Street, Milwaukee, Wisconsin.

Were They As Good?

Dear Mr. Pohl:

I haven't finished reading your May issue yet, but I feel I ought to write and tell you what I think of your cover. Truly it is the best cover painting I have seen in the past two years. Is there any way in which I can obtain the original?

I have only finished two stories: "Castaway" and "Guardian Angel." If the rest are as good as these two, the issue will be top-notch.

How about going monthly? Two months is too long a time to wait between issues.—Art R. Sehnert, 791 Maury, Apt. 1, Memphis, Tennessee.

He Wants Trimmed Edges

Dear Mr. Pohl:

Re: May *Super Science Stories.*

Cover: Abominably marvelous. Table of Contents: shows improvement. Stories: Putridly grandissimo. Article: just plain lousy. Features: passable. Magazine as a Whole: Graded as C.

Comments: The big names featured on the cover are the only known authors in the mag (or should I say rag?) and they are all shorts. Why not a novel or a monthly? More letters, please. And how about a review of the fan magazines?

Trimmed edges! Trimmed edges! And *more* trimmed edges! I REFUSE TO BUY *SUPER SCIENCE* UNLESS YOU TRIM THE EDGES BY NEXT MONTH!—E. Sumers, 646 West Beech Street, Long Beach, New York.

"Pre-Prep Tripe"

Dear Mr. Pohl:

I just finished the May number of *Super Science Stories.* Frankly, I'm disgusted. If you are going to continue to print such pseudo-sophisticated, pre-prep school tripe as "Let There Be Light," you should change the name of the mag to *Naughty Future Funnies* and publish nothing else. Certainly "Let There Be Light" doesn't belong in the same magazine with "King Cole of Pluto," "Arton's Metal," or "Juice." "Bequest of the Angel" also has considerably more of this factor of silly naughtiness than it needs. Moreover, in neither "Let There Be Light" nor "Bequest of the Angel" does this factor have anything to do with the story; it is simply dumped in indiscriminately, much as if a strip-tease act were inserted in the middle of "Lost Horizon."

I suspect that the two objectionable concoctions were printed as an experiment, to test reader reactions. Well, you have mine. I hope you will print the above, or a similar expression from some

other fan (I'm sure you will get a good many!)

All in all, this issue of *SSS* is far below No. 1, and still farther below Nos. 1 and 2 of *Astonishing Stories.*

The article is excellent. Yours for a return to science fiction.—D. B. Thompson, 3136 Q Street, Lincoln, Nebraska.

For Female Fans

Editor:

Just received my May issue, and congratulations! First, on the number of new members (though I must admit I felt rather peeved because, of all that collection, only Mrs. Peck and I were women!) Second—the *grand* stories!

To get back to the members—what *is* the matter with the women readers—are they ashamed because they like stf? Believe me, I feel proud of my choice of reading matter. And I'd rather be looked upon as queer than to read a lot of so-called "good" books and magazines. At least stf doesn't stoop to trashy sexy stories or gruesome murders (when they do have murder, at least it is neatly and scientifically done). And they don't overcrowd the stories with a lot of silly mush.

So come on, you woman stf readers—be *proud* of your reading tastes. Why should you care about a few love story readers' raised eyebrows?

I'm anxious to get my pin—I think they'll be good pins, so twenty-five cents seems quite cheap. Let's not cheapen our organization with *tin* pins—I'm sure most of us would rather pay 75c for a good silver or gold-plated pin with a safety clasp. How about it?

Keep up the good work. I'm satisfied with *Super Science* and I just got a copy of *Astonishing*—another grand magazine. Here's to success!—(Mrs.) Ginger Zwick, *Science Fictioneer* No. 105, Just-a-Mere Farm, Box 284, Orchard Park, New York.

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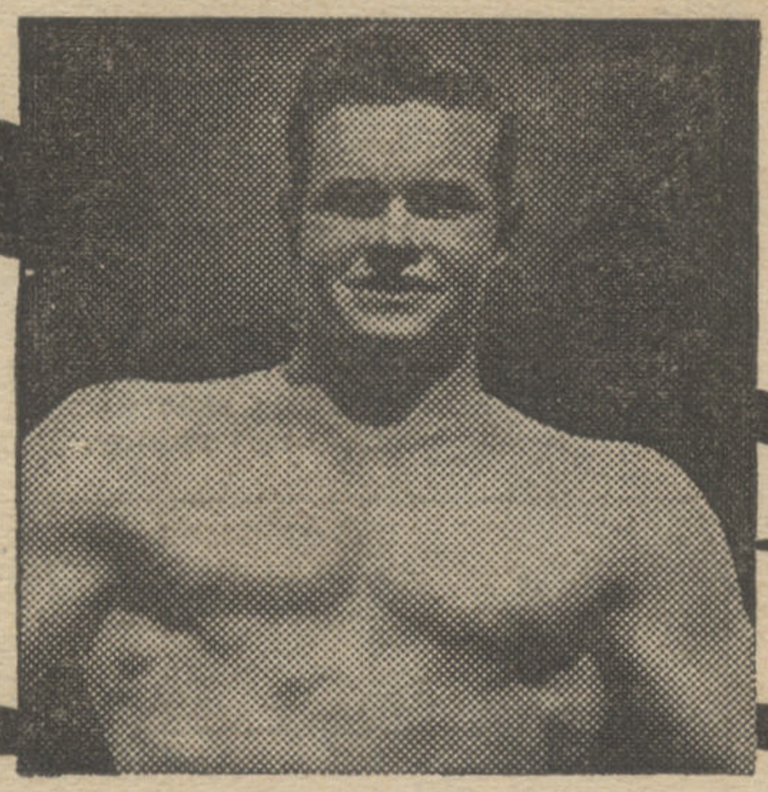

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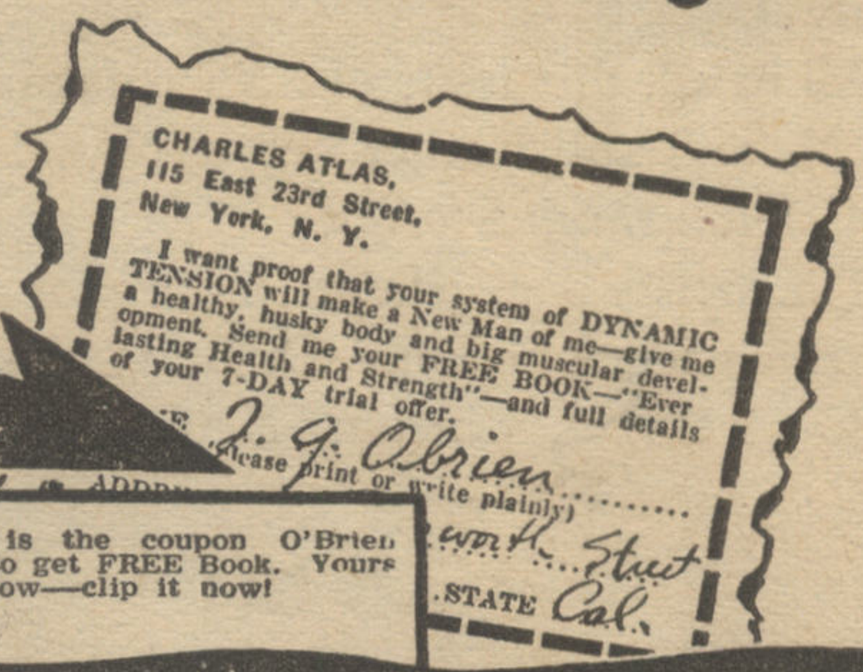

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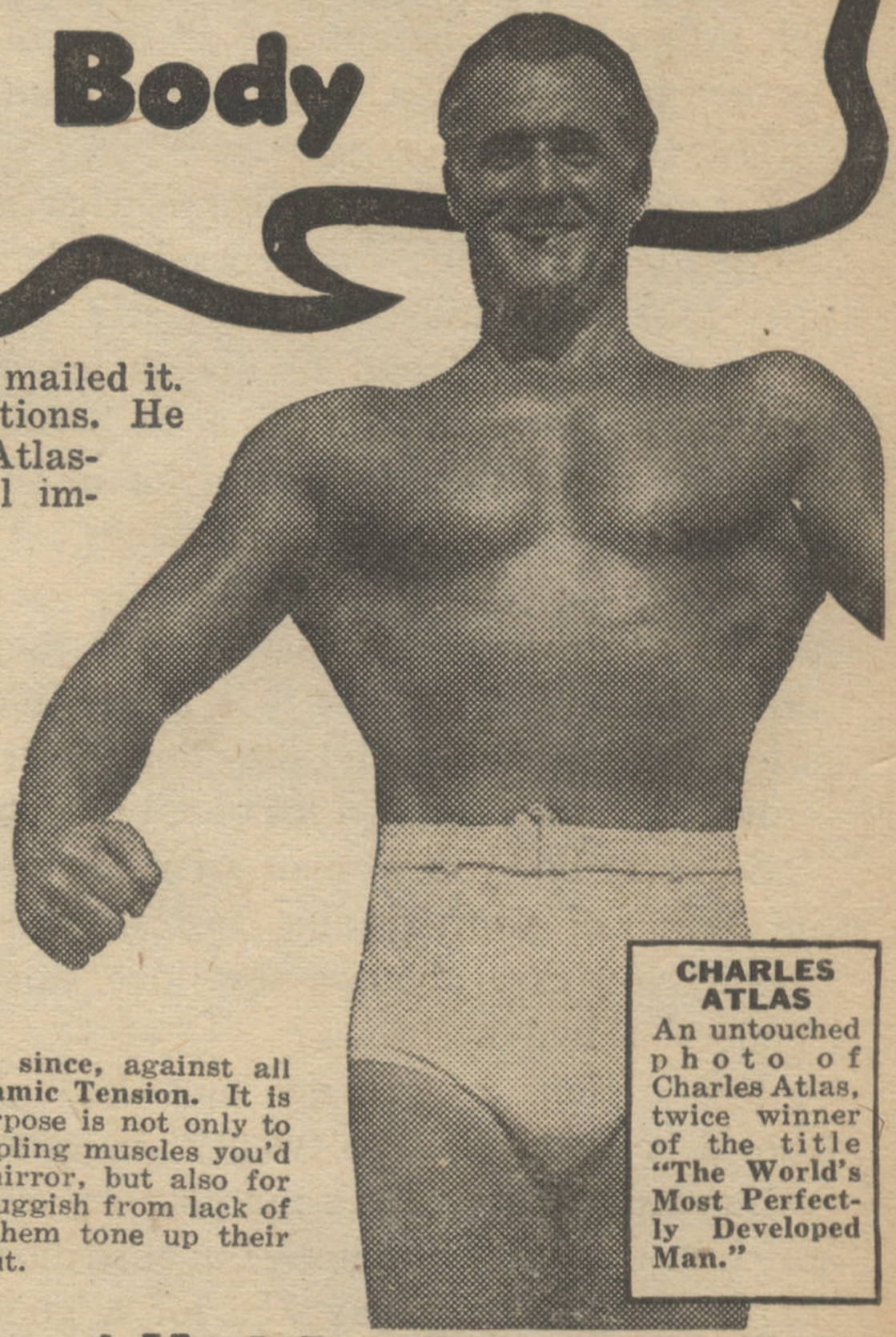

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