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THE ROBOT EMPIRE

BY FRANK BELKNAP LONG

Also stories by
HANNES BOK
R. F. STARZL
M. E. COUNSELMAN
and others

FLESH OR THE MACHINE—WHICH?

There was only one thing of beauty left in that hard mechanical world . . . the primitive dance of a soft, curvacious woman. Although her master, the robot ruler of the Asian Free Brains, could have no personal emotions, could savor no private pleasure, his troubled mind was eased only by her sight. Yet, though power untold was at his tap, it was only this flesh-and-blood woman who held the key to world power—or total ruin!

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—*D. A. W.*

AVON
SCIENCE-FICTION
READER

No. 3

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Contents and Acknowledgements

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The Robot Empire

by Frank Belknap Long

The far, far future is veiled from us by a darker curtain than any that ever shut out the ancient past. We know from whence we came, we know our past limitations, but there will be no limitations in the future. Where, for instance, will be the end of robotics, of cybernetics, of the human body? We have in this story a vision of a future where man has followed two trends—both unnatural, both divorced from the fleshly sensations, both frustrated by the cold arts of metal. The story of the primitive woman and the ruler of the Asian Free Brains is almost a prose-poem of the rebirth of emotion in a world drowned by the passion of conquest.

THE PRIMITIVE woman danced before the Asian free brain. Her pale face was uplifted to the great horned moon, and her arms were rhythmically weaving serpents in the pale light. Calcon, the Asian free brain, rested immobile in his metallic casing and watched her as she whirled about.

A great responsibility weighed upon him.

The primitive woman knew that Calcon was the undisputed master of three hundred million human brains. In the terraced tower cities of Asia the brains waited impatiently in their cases for his grim decision.

The bodylike cases, she knew, were similar in structure to the one which inclosed the massive complex brain of Calcon. Fashioned of Alugan, a heat-resisting metal invented by Mongolian scientists during the ages of Mongolian supremacy, they were equipped with food and lymph tubes, mechanical palates, flexible metal limbs, and revolving wheels for long-distance locomotion.

The primitive woman had viewed no one but Calcon, but she had been taught about the others. She knew that all men and women had once possessed bodies. For hundreds of thousands of years they had possessed strong, robust limbs, and walked freely about the world, conquering and destroying others of their kind in merciless physical combat. The primitive woman even knew when and how the race had emerged from a slavish dependence on the physical.

Titanic world conflicts had stimulated the inventive genius of the war makers and paved the way for the rise to world supremacy of the Asian

free brains. Through miracles of surgery human brains were transplanted at birth into prepared Alugan bodies that could resist the extremes of heat and cold and the sinister flame-weapons of the war lords.

The great continent of Asia was inhabited by three hundred million Alugan-bodied free brains. Far away, on the northwestern continent, sprawled Asia's enemy in its immense mountain city. Incased in an impregnable shell of earth and rock this enemy, the Great Brain, was issuing swift commands to its dependent ganglia. The acquisition of a new destructive technique had given a fresh impetus to its dream of world absorption. It was reaching out to enslave and absorb all the free brains of Asia.

From the complex and prodigious central cortex of the Great Brain there radiated thousands of ganglion-flecked filaments. Each ganglion had once lived an independent existence. Lulan, the primitive woman, shuddered as she danced in mental recoil from the horror that loomed. She knew that if the Great Brain triumphed, all the Asian free brains and all the primitive men and women would be swallowed up in that sinister mental unit.

The Great Brain had absorbed the individualities of two hundred million human beings. Only Calcon now dared to defy and oppose it, but Calcon was not a puny opponent. With a single fervent command he could release planet-devouring furies.

Lulan was a lowly servant of the Asian free brains. She was one of the hopeless, primitive ones. The surgeon assigned to her at birth had botched the operation which had so profoundly transformed the majority of her kind. At a critical moment his hand had wavered, and the delicate transposing filaments had been prematurely severed. She had grown up free-limbed and robust, with a rebellious mind.

As she danced for Calcon to please and divert him while he pondered his grim plans, her gaze was riveted on Mago, who crouched in the shadows behind the Asian free brain's massive Alugan case. Though she danced for Calcon, she had eyes only for Mago.

Mago was a primitive man. But unlike most of his fellow servitors he despised and hated the dominant free brains. In a moment of embittered wrath he had once declared: "Our day will come. They call us primitives, but we are glad that we have limbs and can sing and dance beneath the stars of heaven. They think of us as slaves, but when they rejected nature's gifts they enslaved themselves. When the day of reckoning comes there will be no slaves in Asia."

The muscles rippled silkily in Mago's broad, sun-bronzed shoulders as he crouched in the shadows. He was tall and lithe-limbed, with clear brown eyes.

Calcon turned toward him suddenly, said: "Come here, Mago."

Mago advanced and knelt beside Calcon's case.

Calcon said: "You will pilot the rocket plane."

Mago bowed his head in grim silence. The burnished blue metal surface on which he was kneeling reflected his great muscular form and the box-like body case of Calcon. The huge audition hall was as silent as the shadows

of the primitive man and the primitive girl, who now stood immobile, frozen with fright.

Calcon said: "Turn on the telecurrents, Mago."

Mago nodded and withdrew again into the shadows. Presently a low humming filled the roofless rectangular hall. Throughout the vast continent of Asia the pathways of the ether had been cleared for Calcon's message. At the summit of the audition hall a revolving wireless transmitter hummed a vibrant warning to the millions of listening brains. Across mountains and winding water courses, and the sun-scorched Gobi, went the vibrant drone on swift waves of sound.

Calcon motioned to the primitive woman, and she bowed low and passed quickly to Mago's side. Calcon then attached the tip of a swinging metallic tube to the oral orifice at the summit of his case and announced his decision. Up above, the gigantic transmitter took up the message and sent it forth.

"The Great Brain must be destroyed," affirmed Calcon. "A primitive man will pilot the rocket plane across Asia, Europe, and the Atlantic Ocean. He will destroy the nerve filaments with flame and gas bombs."

Behind the raised platform where Calcon rested, the primitive man was whispering fervent words into Lulan's ear. He had taken her gently by the arm and drawn her toward him. Her head rested now upon his chest, and her arms were about his shoulders.

"I will destroy the Great Brain," he said. "The bondage that it seeks to impose upon us would be more intolerable than——"

He stopped. Calcon had turned about on his metallic limbs and was regarding him with cold fury. The crystal emotion-indicator on his forehead had turned an ominous purple.

"You will enter the rocket plane and ascend immediately," he said. "You will take the course charted by Free Brain E56."

Mago whispered: "I may not return. If I do not, will you remember Mago?"

Lulan clutched his arm and caressed his bearded cheeks with her slender fingers. Gently Mago freed himself, implanted an ardent kiss on her soft lips, and walked resolutely from the chamber.

As soon as he vanished Calcon descended from his dais and advanced toward her. The deep purple of his emotion-indicator was shot with turbulent streaks of yellow and crimson. He seized her wrist and forced her to her knees.

"My slaves do not embrace in my presence," he rasped. "Have you no respect for me at all?"

Lulan looked up at him. Her pale face was distorted with fright. "He will never return," she said. "You sent him away because you are envious of his strength and wisdom."

Calcon flung her from him with an infuriated oath. As she sank limply to the floor, Mago, who was unaware of her plight, climbed swiftly into the rocket plane. It was lying in a deep black hollow on a seaward slope. It was

supporting rail and watching the far stars swing about and seemingly shift their positions in the firmament above him. He had exhausted five of the explosive packets, and the rocket was now lighter, more responsive to guidance. He piloted it with a firm hand and turned occasionally to look at the location index on the panel at his elbow.

Across the surface of that luminous disk flowed a continuous stream of pictures. The location engine generated waves of photostatic energy that recorded minutely every variation in the landscape beneath. The waves swept the earth and were drawn back into the rocket by powerful receivers that transformed them into pictures on the flickering disk.

Deserts and mountains, bleak, dismal seas, the wide wastes of the old continent of Europe, the long, marsh-tipped archipelago called Scandava, the black shallow waters of the Baltic Sea, the Atlantic Ocean turbulent with its immense storm areas and belching volcanoes, had passed in rapid sequence before the luminous disk.

But though the vistas were desolate and awe-provoking beyond belief, Mago did not experience fright. He had gazed upon the bleak and forbidden outlands too often in a telluric recorder in the dwelling of Calcon. It was only when the low-lying eastern marshes of the northwestern continent swept into view that his fingers tightened on the pilot bars, and a tense, somber look came into his face.

The rocket plane pierced the stratosphere above the desolate eastern marshes at an unwavering altitude of fifteen miles until a vista appeared on the disk which caused the blood to mount and then slowly ebb in Mago's cheeks.

Nestling immense and forbidding in the cone of an extinct volcano, the dark abode of the Great Brain seemed a thing alien to the sane and ordered world which Mago knew. So fantastic and distorted were its dimensions, so ominous with a kind of geometrical insanity, that Mago shuddered and drew in his breath sharply as it usurped the white opacity of the location screen.

With thudding pulses he gripped the pilot bar and sent it spinning. The fate of a world hung perilously in the balance as the huge cylindrical rocket plane descended through fleecy layers of sun-flecked cirrus clouds.

It descended twelve miles, in a swift curve, and circled about in the clear, cold air directly above the sinister mountain. The day was one of perfect stillness.

Within on his platform Mago suddenly released long red tongues of destruction with his little primitive hand. From the base of the plane small, cubical flame-and-gas bombs issued in a continuous stream. Descending swiftly they exploded with a thunderous roar. A spire of fire enveloped the mountain's crest.

In far-off Asia, by the turbulent waters of the gale-lashed Pacific, Calcon gazed into the telluric recorder at the conflict which he had ordained. Colossal transmitters had sent waves of photostatic energy encircling the globe,

cylindrical in shape, with glistening metallic rotor blades on its burnished summit.

Mago heaved himself up till his limbs were abreast of the square, casementlike entrance, and crawled on his hands and knees into the electrically illuminated interior.

Beneath him, fitted snugly into an Alugan compartment at the base of the projectile, reposed fifteen oblong packets of high-powered explosive.

Standing on a pilot's platform just beneath the curving summit, Mago took firm hold of the ignition lever and thrust it vigorously forward.

As the first of the rocket packets ignited, the Alugan pivot at the base of the plane began speedily to revolve. For a moment the plane remained in the hollow, pivoting on its axis. Then a long flicker of scarlet flame enveloped it, and it shot swiftly skyward.

Mago stood on the pilot's platform clinging to a supporting metallic rod and stared with a kind of savage exaltation into the stratospheric mists. A sense of expansion and release flooded his being. Eight miles beneath him the squat, roofless dwellings of Calcon sprawled in the moonlight beside the black, continent-laving Pacific.

He knew that it was the abode of empire, and his heart froze at the thought of it. Froze and then thawed with the sweet, solacing memory of Lulan's fervent embraces. Through a circular glass window he stared at the swinging constellations, the thought of Lulan warming his heart, his mind aflame with a high relentless purpose. He was more powerful than Calcon now, for he held the destiny of a world in his lean and primitive hands.

Up, up the rocket soared, eight miles, and then ten, and then fifteen. Mago continued to stare outward from beneath heavy brows, his eyes narrowed in speculative concern. Suddenly he turned and revolved a dial in the square dark frame at his elbow.

An instant later the plane's trajectory altered. The great cylindrical frame ceased to mount into the chill cold of outer space. Swinging downward in a slow arc it settled into a horizontal position and seemed to hang for a moment suspended in the ether.

Mago thrust the ignition switch forward. There ensued a momentary thrumming followed by a flicker of swift scarlet flame. The platform which supported the primitive man had reversed its position in response to the tilt of the plane. As the projectile assumed a horizontal position Mago's body swung about inside, and his eyes came abreast of another window directly beneath the rotor blades on the summit. The summit was now pointing westward.

Mago drew in his breath sharply as the projectile shot forward. The ignition of the second explosive packet was always a hazardous undertaking. Sometimes the packet missed fire; sometimes the plane assumed a wrong angle and could not be righted. A surge of confidence went through Mago's being as the danger receded and vanished.

For five hours he remained rigidly alert on his platform, grasping the

and the waves were now returning. Transformed into visual images on the telluric screen they filled Calcon with a wild elation.

The luminous telluric recorder rested on a raised platform beside the storm-whipped ocean. Calcon stood grimly before it, his massive case vibrant with emotion, his Alugan hand gripping Lulan's arm.

"When he has blown away the cone," he said, "the Great Brain's flame planes will bring him down."

He raised his free hand and pointed at three wavering dots near the center of the screen. The dots had issued from a funnellike vent in the summit of the flame-wreathed mountain.

Her lips bloodless, Lulan watched them approach Mago's rocket. For a moment she stared in mute agony. Then a cry of exultation burst from her lips. "See," she cried, "he has destroyed the planes!"

As Calcon watched the three planes drop earthward in blazing spirals, his metallic fingers tightened on Lulan's fragile wrist till she winced with pain.

"He will not escape this time," he said.

He pointed, and Lulan perceived with terror that another and larger plane had issued from the vent and was circling in the air above the rocket. The rocket swooped and darted toward it. But unlike its ill-fated predecessors, the plane did not advance to meet Mago's flame guns. Instead, it darted downward in a slow arc, and hung for a moment suspended in the smoke-darkened air above the crater. Then its summit tilted, and it soared swiftly skyward.

An exclamation of amazement came from Calcon's mouth tube as it vanished from sight. He pulled a lever and shifted the telluric focus. When the plane came into view again it was flying high above the clouds in an easterly direction. Calcon stared at it for a moment in silence; then shifted the focus back to the crater.

As Mago's rocket appeared on the screen a great burst of yellow flame shot heavenward from the gaping mouth of the dead volcano. Calcon knew then that one of Mago's bombs had ignited the gas in the enormous lethal chamber where the Great Brain anæsthetized and absorbed its free-brained captives.

"It is the end!" he exclaimed. "The Great Brain will not survive that explosion." His voice was vibrant with a savage triumph.

Lulan said: "If Mago does not return I shall surely die."

In his momentary exultation Calcon had forgotten the enmity which he bore Mago. But Lulan's brief assertion was a weapon with nine points. Each word pierced him, stinging his senses to a fury of hatred.

Venomously he stared at the victorious rocket. It was rising now, rising swiftly, and suddenly as he watched it a burst of crimson flame belched from its base. Mago had exploded another packet and was ascending into the stratosphere. Far beneath, a mountain that had once flowered redly blossomed again, but its skyward surging flames were no longer of nature's sowing.

Calcon threw back a lever, and the image dimmed and vanished. Lulan

was now kneeling on the damp soil a few feet away, her eyes misty with suspense and anguish. For an instant the great lord of Asia, whose will engirdled the continents gazed down at his little primitive servant and knew in his inmost being that he envied Mago with every drop of his tube-channeled blood.

"Look at me, Lulan," he said, and his voice was no longer harsh and vindictive.

The film vanished from Lulan's eyes. She looked up at him, her face twitching.

"I love you, Lulan," said Calcon simply.

Lulan made no response. She merely continued to gaze at him, and presently as he watched her in an agony of suspense he perceived that her thoughts were elsewhere, and that she had already forgotten that he was standing there beside her.

With a groan of despair Calcon turned and moved sluggishly toward the long, roofless audition hall. Up a black gravel slope he climbed in the moonlight, the sea spray glistening on the broad back and tapering sides of his swaying Alugan case.

He looked almost pathetically little and awkward as he toiled up the bleak hillside, which was dotted here and there with ocean-tossed shells and gleaming iridescent jellies.

Presently the dark soil deepened in hue till it shone like black quartz in the moon glow, and the outer corridor of the audition hall echoed to his ponderous tread. Two primitive men came forward as he advanced into the building and knelt at his feet.

Calcon said: "Turn on the telecurrents."

The primitive men nodded and moved swiftly to obey. Calcon relaxed wearily on his dais and waited. A gull screamed in the distance above the black ocean as he waited there in his abode of empire. This proud and lonely being, whose rule was absolute, whose power would have stunned and frightened the world-subduing Fascist dynasts of the ancient world, sat shivering and miserable and consumed with envy of the lowliest of his minions.

Presently a low humming announced that the pathways of the ether had been cleared for his message. With an effort he attached the tip of the swinging tube to his oral orifice and spoke into the mouthpiece.

"The Great Brain is dead," he said simply.

Throughout the terraced tower cities of Asia three hundred million Alugan-incased brains throbbed with a wild and savage joy. During many somber months the thought of extinction had weighed less heavily on the free brains of Asia than the hideous menace of the Great Brain's magnetically controlled planes.

As they awoke to a stunned realization that the Great Brain's planes would never darken Asian skies again, a retrospective ecstasy flowed through them. They recalled past perils with a kind of vicarious pleasure mingled with relief. They recalled the sinister air raids, the snatching up of relatives

and friends, the agonizing speculation as to the Great Brain's surgical techniques, and the final dark mystery of absorption.

The horror had lifted now. They were free—really free, forever now. A great joy flowed through them.

But Calcon knew no joy. He sat brooding in his case, wretched, withdrawn. For several hours he did not move. Then something seemed to rouse him from his lethargy. He arose and looked about him.

The hall was deserted. He was about to summon his primitive servitors when an obtrusive wisp of a memory which had been lurking in a corner of his mind assumed menacing proportions. It was like a fly, buzzing about in his brain in an insistent bid for attention. He had tried to drive it away, to sink back into his lethargy. But now it was buzzing, lighting. His mind filled with it, with the immense, buzzing weight of it.

Calcon arose and speedily left the hall. He descended the black, seaward slope, his Alugan body-case quivering with dread and terror. The dawn was breaking over the sea as he came abreast of the telluric screen.

He did not even glance at the slumbering form of Lulan that reposed beneath a little sloping rock shelter a few feet away. Clutching one of the telluric levers he thrust it forward. Light and shade appeared on the screen; then, more slowly, dark land masses, islands and archipelagoes, fleecy wavering clouds beneath a star-powdered sky.

He manipulated various levers in frantic haste. He saw curling breakers on a storm-lashed coast, billowing masses of cumulus clouds, the starglitter of far nebulae on deep waters. And then suddenly, amid the surge and turmoil of alien vistas, he saw it clearly. High above the clouds it sped—a long, fly-shaped thing with vibrant wings. It was the last emissary of the Great Brain, roaring through the ether toward Asia.

Calcon threw back the lever, and the image vanished. A groan issued from his Alugan mouthpiece. Lulan awoke at the sound, awoke and sat up. Her thin tunic was drenched with sea spray. For five hours she had been keeping silent vigil near the screen. She had not dared to manipulate the levers, but to her the screen was a precious mystic link with the unknown. When she slept beside it Mago seemed somehow nearer and his plight less hazardous. It was a woman's foolish whim, but it sustained and upheld her.

When Calcon saw her his body swayed. He advanced to where she was sitting and took her naked little feet in his hands.

"I am afraid Lulan," he murmured. "The last plane that left the Great Brain is still flying eastward. It is very near now."

Lulan's eyes widened. "If it is just a flame plane there is surely nothing to fear," she murmured. "It will be sighted, attacked."

"The Great Brain was wiser than I," said Calcon, in a voice which trembled with a terror-provoked humility. "I have destroyed it, but this plane, this last terrible emissary, may—destroy me."

Lulan's eyes grew suddenly hard. "Does the master of Asia fear death?" she asked.

Calcon said: "I did not until now, Lulan. But now I know that the most glorious solace life can bestow has been withheld from me."

As he spoke his rigid metallic arms encircled her slim waist and tightened about her till she screamed and strained madly away from him. "I cannot die until I know——"

The sentence was never finished. As Lulan struggled to free herself the sky burst into flames above them. A yellow mist descended, slowly enveloping the dark Asian sea slope and the spray-enshrouded headlands beyond. The two little figures by the telluric recorder ceased to struggle even as the clouds of saffron rolled downward.

Calcon fell forward, clutching at the bare rocks with his long metallic fingers while the emotion indicator above his mouth-tube turned green and then yellow and at last faded slowly to a dull gray, flecked with crimson.

He dragged himself toward the screen, his whole body-case trembling. He seemed to experience difficulty in moving his limbs. They responded jerkily to the control mechanism within, and as he raised his arms frantically skyward in a gesture of fierce imprecation, something burst inside of him.

He groaned and fell backward, clutching the edge of the screen. For a moment he hung there, in sick agony. Then he drew himself erect with an effort and pulled frantically on one of the levers. Light and shadows flickered on the luminous disk. He swayed and clutched another lever. As he did so a red froth appeared on his mouth-tube.

As the long plane swooped downward and passed above the audition hall with a steady, even drone, Lulan sank slowly to the ground in a dead faint. The plane sped onward toward the terraced tower cities of Central Asia.

When Mago's rocket plane descended from the stratosphere above the bleak, ocean-lashed coast, the land below was hid in a deep orange mist.

The rocket came slowly to rest on the sloping seaward landing base with a thunderous droning of rotor blades, and revolving auto-gyro vanes. An instant later Mago descended and ran up the dark hill toward the audition hall. His heart was pounding so loudly he feared it would burst in his bosom. He was puzzled and frightened by the saffron mist and the strange, pungent odor which surged heavily on the sea-tainted air. Above all, he was concerned about Lulan.

For an eternity as he clambered upward his mind was darkened with a sense of grim foreboding, of nameless fear. And then, suddenly, he caught sight of her. She was standing on a flat gray boulder looking down at him. Her lips were parted, and there was an exultant glow in her primitive blue eyes.

Before he could recover his breath she was in his arms. Eagerly he kissed her mouth and ran his fingers in rapture through her long silky hair. Her arms tightened about him till his torso ached.

"The tower cities are in ruins, and all the free brains are dead," she murmured. "The Great Brain sent a detached ganglion over Asia in a plane.

It was equipped with a new and terrible kind of vapor-bomb. The vapor corrodes Alugan, dissolves, and destroys it."

Slipping quickly from his embrace she gripped his hand and led him downward again toward the sea. She led him along a pebble-incrusted beach and through shallow rock pools in the shelving strand. As they drew near to the telluric screen, a hideous odor smote upon their nostrils.

A sharp indrawn sound came from Mago's lips when he saw what was lying before the screen. The great Alugan body-case was corroded and eaten away, and the thing that had once been the Asian free brain was a seething mass of corruption.

In the cold light of the moon the proud and lonely master of the planet was returning slowly to the elements, his prolonged mortality but a pitiful mockery now to the vast impersonal forces whose sovereignty he had defied.

The illuminated screen showed a towering volcanic mountain rimmed with black ash and charred ribbons of a dark granular substance that descended in all directions from the circular cone. The ribbons were flecked at intervals with thousands of tiny glittering blebs.

"He sat there and watched the Great Brain die," said Lulan. "He watched the swollen fires subside, and the seared and writhing brain substance crawl out over the crater's rim. He gloated with a savage malice on the death of his enemy while his own body-case dissolved about him and his own brain decayed. He was a strange creature, Mago—cold and proud and without compassion for any living thing. But at the last I ceased to hate him.

"All the great beauty of the world meant nothing to him, Mago. He lived a sterile and empty life because the love of power was like a fire in his veins. He lived for nothing else until—until something happened, Mago."

Mago gazed at her, and a look of understanding came into his face. He took her gently by the shoulder and turned her about till the sea was at her back, and Orion winked redly at her from beyond the crest of the high hill.

"Up there," he said, "we shall build a new world. All the primitive men and women of Asia, all the lowly disinherited, will help us build it. It will be a world of gardens and sunlight, of beauty and peace and comradeship. The war makers will have no place in it, Lulan."

Lulan looked up at him, and he perceived with amazement and a sudden breathless awe that his vision was already prefigured in her eyes.

P. N. 40

by S. Fowler Wright

The science of selective breeding was invented as a means of developing commercially valuable varieties of cows, horses, pigs, poultry, etc. It operates by means of limiting reproduction to selected parents, individuals possessing specific qualities the breeder wishes to perpetuate or accent. Such as speed in race horses. Its theoretical application to humanity is known as eugenics and its advocates propose it as a means of bettering humanity. The problem that then has arisen is—what are we looking for in human animals? What are the desirable qualities? Tallness? Blondness? Do we want only brainy people? Artistic talents? What? At once we run into a dispute which has no solution. Eugenicists can agree on weeding out hereditary diseases—and who would not? But what would constitute a better man, and would it be worth the sacrifice of love, affection, family ties, which would be the inevitable price of such experiments. Let S. Fowler Wright, who wrote The World Below, *tell you. . . .*

IN THE ninety-third year, (second period), of the Eugenic Era, there lived a girl named P.N. 40, who was, on the fifteenth of April of that year, within a fortnight of the age and ordeal of marriage.

For, (as we know), the Eugenist government of that time had decreed that every girl who was sufficiently sound in health and ancestry should marry between the first and tenth days of the May following her twenty-second birthday. The intention being that her first child should be born in the early spring, which Sir Mordith Blinkwell had shown to be the ideal period for such nativities.

The custom was subsequently modified when the statistics of twenty years showed that 67.03 per cent of first-born children had appeared in the inferior months of the year. Such is the perversity of women.

P.N. 40 was an exceptionally beautiful girl, which is an attractive subject for contemplation, but on the morning on which we first regard her she was an acutely miserable one, which is less so. The two statements may seem contradictory, but they are actually consequent.

She sat on the sunlit loggia of her ground-floor bedroom, in the early hours of that mid-April morning, gazing upon the 46.3 perches of ground which was the allotted portion for the back of every bungalow, with its two regulation trees and one bush, so planted as not to obstruct the light nor a duly assorted entrance of the four winds, and her mouth, which was

made for a quite different purpose, was shut very savagely, and her eyes were sullen.

The Eugenist government, being laudably anxious to improve the quality of the race, had realized that it cannot be done very rapidly under a strictly monogamous regime. It is a lamentable fact, illustrating how much Nature has yet to learn, that the two sexes are born in approximately equal numbers. In some cases, as with cattle or poultry, the position may be improved by slaughtering the less desirable of the calves or cockerels, (the males getting the worst of it, as usual), but, after three bills to deal with human babies in this logical and eugenic manner had been defeated in successive years, it was recognized that the problem must be attacked by different methods.

The prohibition of the marriage of the unfit, which had been enacted at the commencement of the second era, was of no assistance to the solution of this difficulty, for they were found to be of about equal numbers in either sex. The mutilation of the superfluous was hardly likely to be proposed again, after the massacre of the seventh year, which had followed the introduction of a bill of this purpose, and which had rendered necessary the election of a new parliament, from which most of the familiar faces were unavoidably absent.

It was the epoch-founding brain of Professor Gested, working with its usual mathematical precision, which had resolved the problem. He perceived that the Potential Maximum Fecundity of women is not increased by a multiplication of husbands, whereas a plurality of wives may lead to a substantial increase in the P.M.F. of mankind.

Building upon the solidity of this premise, he evolved a plan by which such a plurality, up to a maximum of six, should be allotted to those members of his own sex who were beyond criticism either in individual or ancestral health.

He proposed that men who were over the age of forty-two should be exempt from these inflictions, but it was only the slanderous venom of his enemies which pointed out that he was then on the threshold of his forty-third year.

By a contrary provision, men of inferior physical grades were allotted less than one complete unit of feminine companionship, to a minimum of one sixth, by which means he contrived:

(1) That a large majority of the next generation would be the children of a selected parentage.

(2) That all members of the community would be married (more or less), so that a minimum of opposition was aroused among the selfish anti-social voters who had done so much to retard the racial progress for which he toiled and pondered, for

(3) By this process of grading there would be no difficulty in avoiding an unallocated surplus, either of men or women, as the fraction of wife allowed to men of intermediate grades could be varied according to the number of women available.

Forty years had passed, and though the enforcement of this law had not been unopposed, nor always bloodless, yet it had been asserted successfully. The common sense of the race, with its dread of the old barbarisms still refreshed by the teaching of the intermediate seminaries, had been sufficient to discipline the rebellious reactions of youth, or the selfish criminality of discontented women. But it had been found necessary to segregate the young of either sex with an almost absolute division. A great national ideal cannot be reached without individual sacrifice, which, as Professor Gested had pointed out in his initial essay upon the subject, should be endured with equanimity, if not with joy.

II

But P.N. 40, however superficially attractive, had a mind which was destitute of the higher patriotism. Her heart did not beat more rapidly when she considered the P.M.F. of her sex.

It beat faster at the foolish imagination that 48 V.C. had regarded her with unusual interest as he had assisted her last February from the monoplane which had descended so unexpectedly (to him) on the shore of Llangorse, in Brecknockshire. 48 V.C., whose ancestry included an epileptic great-aunt, and who wore the pink-and-yellow arm-stripes which graded him for one-fourth of a wife at the next allotment.

P.N. 40 did not curse, for she had never heard of bad language, nor could she have imagined its possibilities adequately. The interjection was deleted from the vocabulary of an enlightened state. Even the wail of infancy had been stilled by a corporal punishment which descended automatically as it was electrically stimulated by the sound. She did not curse, but her thoughts were murderous.

It was the night before, in the common-room, that she had been publicly rebuked for seditious indecency by the Instructress, because she had expressed the opinion that a girl could choose her husband much better than the Board of Allocation would be likely to do.

"A pure-minded woman," she had been told severely, "does not discriminate between one man and another, if he be chosen as fit for fatherhood, nor does she rebel because she will only receive a fraction of his attentions."

Well, if that were so, she was not pure-minded. Very far from it. . . .

The *P.N. 40* branded beneath her chin was indelible. It would always proclaim her as the bearer of a health-proud name. Only the children of 47 L.K.-Z.V. 5 could claim a physical preference,—and 47 L.K. was not only of a stainless ancestry for four generations on either side—in fact, since the first stud-book of the present series had been commenced,—he was of a personal development so exceptional that when the Ministry of Pig-breeding, which was the most important government office under that which was held by the Premier, (unless preference be given, in spite of its inevitable unpopularity, to that of the Ministry of Insight), had been

awarded to him, it had been generally regarded as an exceptionally seemly choice.

And 47 L.K. still lived a life of robust vigour, though his years were seventy. One of his six wives, although themselves the cream of the community, had shown an inferior vitality. She had died last year,—died shamefully of a nameless cause, so that all her descendants had trembled lest the small red letter should be added to their branded names which would consign them to a childless end.

If there were truth in the envious whisperings of the common-room, she herself, P.N. 40, was selected for the high honour of the vacant place.

On the first of May, at the festival of the Branding of Brides, she would receive her husband's number beneath her chin, behind the place on which her own appeared already.

At the day's end, in the solitude of her own room, she would be able to look in the mirror, and learn to whom she had been consigned. Modesty did not admit of an earlier curiosity.

Then there would be a period of ten days, during which she would be entitled, at any moment, to require an aeroplane to convey her to her husband's home. If the eleventh day came, and she had not departed,—well, there would be no order to delay the fumigation of a section which should be no longer occupied.

. . . She knew that this allocation was not inevitable. Degeneration of character may disqualify the most physically-perfect for the honour of a Sixth-Grade marriage. She might do outrageous things during her last fortnight of freedom, such as would insure that she would never know the dignity of being the youngest wife of 47 L.K. She might even, by a diabolical ingenuity of graded follies, contrive to be classified with the Fourth-Grade women, who are the sole wives of a single husband.

But this thought brought no comfort. She did not merely wish to be a monogamous wife. She wanted (with an almost obsolete vulgarity) to be the wife of a particular man whom she should never have seen,—would, very certainly, never have seen, but for the maniac folly of P.T. 69, who had persuaded her to join in that disastrous escapade.

Besides, she was not free from the natural vanity of women. She could not easily endure the degradations which follow from a Fourth-Grade marriage. Girls of that class might be content enough, for they had expected nothing more, but she had been brought up differently. To pick her clothes on the fourth day, after the three upper grades had chosen all the lovelier colours! To sit in the back rows of the theatre, the solitary companion of the man beside you, and watch the grouped seats of the Sevens, Fives, and Threes, that graded backward, proclaiming the physical ignominy of the place to which you were relegated!

Such sacrifices have been made by women of ancient days (or so romance will have it) to secure the man of their choosing, but not, even by them, for a precarious difference in the percentage of a stranger's love.

III

The English schoolmasters in the public schools of the nineteenth century found that they could save themselves much trouble in the teaching of Greek and Latin (which were believed to be essential to the intellectual welfare of their pupils) if they stimulated their curiosity by providing them with the most indecent books which have survived in those languages, the vicious consequences of which procedure always filled them with a very innocent wonder.

It has to be chronicled, with whatever reluctance, that the seminaries of the Second Era were not free from a very similar obliquity. The study of the older forms of the English language was stimulated by the use of indecent text-books, one of the worst of which—entitled *The Oxford Book of English Verse*—P.N. 40 had nefariously retained at the conclusion of her literary instructions. This book, though still used in schools, was not one which any decent woman would allow on the tables of her reception rooms. It is largely occupied with lauding the consequences of Self-selection, or with the advocacy of unions in conditions of precarious poverty; and it will even treat its most tragic imaginations—such as the mating of immature women—with an obtuse levity, subversive of every purer instinct in the mind that reads it. The great subjects of poetry, such as The Intervals between Meals, and the Proper Spacing of Children, are not even mentioned in these crude songs of a forgotten barbarism.

Cultivating her sorrow, as folly will, P.N. 40 went inside, seeking the hidden book, with which she returned, and sat down to the idle turning of its familiar pages.

She knew that she could not be overlooked, except from the air, which, at this hour, was empty of random traffic on the lower air-ways. It was true that she might be under the observation of the Ministry of Insight, but that (she supposed) was arithmetically improbable, and, anyway, it was a risk which was never absent.

There was the case last year of the third wife of 60 S.V.K., who had made complaint that she was ignored by her husband, and baited by his other wives in various illegal ways. Naturally, he had denied it. Naturally, also, if the other wives were of the disposition alleged against them, they had supported his denials. But her own evidence was given with such an air of sincerity, with such an accumulation of circumstance, that it had been almost impossible to disbelieve it. It seemed incredible that it should have been invented without some impulse of suffered wrong, so that the denials with which it was met were discredited by their own emphasis. Anyway, the Assessors had decided in her favour, and it was only when 60 S.V.K. had been condemned, and was awaiting sentence, that the M.I. had ordered a further investigation, at which it had confronted the woman with a photographic record of herself and her husband in an attitude of affectionate intimacy. Threatened with the production of every moment of her life for the period in question, she had collapsed, and confessed the jealous origin of her baseless tales. . . .

No one had guessed, till then, the extent of the oversight which was exercised by this Ministry. Even now, it was surmise only as to whether it were casual or ubiquitous in the taking of such records. No one knew.

But P.N. 40 was in a mood to be reckless, and, anyway, there is little gain in stealing a book which is never read.

She loved those old poems, just as she hated the modern ones, which she had been forced to learn in the seminaries. There was *The Regulated Altar-Flame,* which every girl was expected to recite from memory on her fourteenth birthday. An interminable, sickening poem:

"She hath no cause for secret shame,
The Regulated Altar-Flame."

How she loathed the reiteration of that refrain! *"In fifteen years five children came."* Probably they did. She didn't care, either way. Her mind was more occupied with a satisfactory adjustment of the conditions precedent to such advents.

It will be seen that the selection of such a book indicated that she was making little effort to prepare herself for the high destiny of the marriage for which she had been physically qualified by the discretions of four precedent generations.

48 V.C., perilously watching from the evergreen shelter of a spruce-fir (it was a regulation that one of the two trees should be a conifer) came to that conclusion, and was encouraged to the temerity of revealing his presence to the unconscious girl.

Stated in advance of explanation, it may occasion more surprise that 48 V.C. should have been able to read the title of the book from such a distance, than that he should have been encouraged by the thought of its licentiously headstrong monogamies. Yet the explanation is simple.

Like the muscles of the athlete, or the suppleness of the acrobat, his eyesight had been trained and perfected from his earliest childhood, to fit him for his intended occupation, which was to be that of an air-pilot. The theory of selection which had so destined him from infancy had been justified in its results, for, at the age of twenty-three, which was that of male maturity and marriage at this period, he had gained the rare honour of being appointed to one of the Condor patrol-planes, of which there were but twelve, and which exercised a final control and supervision over the airways of the world.

The Condors were single-seaters. They were in all ways self-sufficient. They were so swift that they could circle round an inter-continental liner as a swallow passes an express train. By right of office, they were exempt from the traffic-laws of the air. All gave way before them when their sirens shrilled to the instruments in the ears of a thousand pilots, or their twin blue lights (interbarred with the warning pink) flashed, halcyon, through the night. Like shining minnows in the swaying weeds of the shallows, they twinkled nightly through the crowded planes of the port-ways as they swayed and strained rhythmically upon their anchors before the stresses of

the equal wind. They could talk with each other through a separation of ten thousand miles. They could command, and the haughtiest liner must change its course, or pause motionless in the void. They were independent of extraneous fuel, and, when their pilot needed rest, or would survey his patrol from a steady point, they could rise above the highest levels of traffic, and hang stationary, or drift idly upon the wind, for a week if need be.

48 V.C. might have been bolder yet had he known that this last attribute of his Condor had impressed the imagination of P.N. 40 so much that the sheet of paper closed between the printed leaves held the commencement of a poem which he had been inspired to attempt in the quaint, archaic diction of the book she loved so foolishly, and in which she compared him to the frigate-bird (or was it the albatross?) of the Southern seas. Her mind had not been cumbered with useless knowledge, so she avoided nouns of exact identification.

As that strong bird that dwells above the deep,
Lord of the wide wind-spaces of the sky,
Rests on sufficient wings in careless sleep,
Above the summer clouds securely high,
Unseen beneath the emulous surges leap,
Noise of contending navies comes not nigh. . . .

She hadn't got any further. The construction was becoming conscious of some grammatical embarrassment, and, of course, it was really nonsense, like the pastoral of a seventeenth-century poet. There were no navies now, contentious or amicable. . . . Besides, she did not think of him most often as resting in the high solitudes of the air, but rather as he darted, meteor-bright and meteor-swift, among the crowded traffic of the night; or as he descended, bolt-like, to her rescue from the empty sky on the windy shore of Llangorse. . . .

She turned the pages idly to pause at *The Lady of Shalott,* with its quaint unreal echo of a misery kindred to, yet so different from her own.

And sometimes thro' the mirror blue
The knights come riding two and two,
She hath no loyal knight in view, . .*

. . . She knew the voice that called her name from the shadow of the fir-branches, and her body thrilled with a sudden terror, and her heart beat chokingly. She did not know that she answered, but when 48 V.C. descended, and crossed the lawn toward her, she found words in an agony of fearful protest.

"Oh, but you must not!—if you were seen!—come inside!—come quickly!——"

* This emendation is due to Professor Garbit, who pointed out that loyalty implies truth, and that the great Victorian poet could not have been guilty of so needless a tautology as is exhibited in the traditional version.

In the shelter of her own room they looked at one another without speech for some moments.

Wild joy contended in her heart with utter terror at the audacity of his presence in that forbidden place, within ten miles of which no man had ever been known to trespass: where men only came when the bride-season was ended, and the apartments were delivered to the periodical fumigators. They stood under the shadow of a penalty that they could only guess, but which could be no less than the shattering of the lives they knew, if any life should be left them, not knowing but that an official of the M.I. might be recording every word and motion on the plates of his laboratory-instrument in Hampstead, scarcely thirty miles away. . . . And he was the only man to whom she had ever spoken intimately, or on a basis of equality!

If there were less fear in his equal silence, there was an even greater diffidence. To find the vision of his hopeless dreams within the reach of his hand. . . . To have dared so much, and to be conscious of the utter madness of the offer that he had come to make. . . . To be sickeningly conscious of the pink-and-yellow band upon his arm, which proclaimed him unfit to consort with such as she, and his children after him. . . . O, unscalable heaven! . . .

She recovered her self-possession first, as a girl will.

"How did you find me?" she asked, in a very natural wonder.

"I saw your number," he said simply, and the words, which explained everything, brought a flood of shame to her face, such as she had never known before. *Had she lifted her chin?* She had been taught from childhood that it is the lowest shame of womanhood. To lift her chin to a man to show him the letter-number by which he may trace and find her. A woman may call with her eyes, she may beckon with her hand, and it may be no worse than an idle teasing—but *to lift her chin!*

He saw the confusion he had caused, though he only vaguely comprehended it, for the teaching of the women's schools was outside his experience, and he added hastily:

"It was when I was lifting you out of the smash. I couldn't help seeing—really." And then, with a sudden honesty of laughter: "I didn't try, either."

She looked down silently, but without sign of resentment at this last audacious avowal, and he was emboldened to add:

"I would have found you, anyway, if I had had to search the world."

She gave him her eyes then for a moment, and thrilled deliciously at what she saw in those that met them. She half lifted her hands, and threw them apart in a gesture of impotence. It was no time for love's finesses.

"It's no use," she said, "no use! You know it's useless. I can't think why you came."

Her voice reproached him, as though he had been guilty of a needless cruelty, but her words told him that which gave him courage to speak his purpose.

"Of course it's use, if you'll come. We've only got to wait for a bad night."

"Come where?" she said, with a direct brevity which is as commendable

as it is rare in the mouths of women. There was a trembling dawn of hope behind the puzzled wonder of her eyes.

"To the forest reservation in Brazil," he answered, with equal directness, but an inward terror as to how his suggestion would be received, which was very quickly ended.

"Of course I'd come," she said. "Rather. But how could we? If we got there, we should be traced for certain."

"I don't think so," he answered, with a stubborn determination to smother the doubt in his own mind. In abrupt and eager phrases he told her the plan which he had formed for her abduction.

Ten years before, after the draining of the great swamps of the Upper Amazon, the forests had been cleared of human life, partially destroyed and replanted, and then relegated to a solitude of fifty years, for certain experimental purposes, which are not without interest, but which would involve too much explanation for the brevity of this narrative to contain it.

If she could join him under the boundary of the aerodrome thirteen miles away, on a night of cloud and storm (the worse the better, for his purpose) —and, fortunately, the coming nights would be moonless—he did not doubt that they could escape unseen and unfollowed. He supposed (foolishly enough) that even the M.I. would be unlikely to have its attention concentrated upon them at such a time. He was, indeed, more concerned for the conditions of the wild life that they must be prepared to face together than for the perils of the journey in his familiar element.

Nor did she think much of the danger of the flight itself, though she had a greater fear and a greater knowledge of the powers that ruled them. She thought of the flashing speed of *Condor 5* . . . they would escape in the night unnoticed, and who should follow? They would be almost there in the morning!

"I'm afraid," he said, with his irrepressible truthfulness, "it won't be so easy as you think. We shall have to try it in a Kestrel."

"In a Kestrel!" Wonder contended with dismay in the voice with which she answered, and there was good cause for her protest.

Everyone knew the Kestrels. They were the only form of plane that everyone was trained to handle. They were fool-proof and simple. When they had risen, they would not readily descend, without deliberate manipulations, too low for a parachute to be used with safety. But they were built for short flights on the afternoon of a summer day: they were forbidden to go over any considerable stretch of water: and though the difficulty of fuel did not arise, and they were swallow-swift in a quiet air, they were unfit either in strength or power of flight for any ocean passage, where their parachutes would be useless. Their speed and direction were controlled by a degree of muscular exertion that made a prolonged flight an arduous enterprise.

To consider one for such a purpose was as though a gnat should calculate its miles of motion, spinning in sunlit clusters, and conclude its fitness for a non-stop flight across the breadth of England.

Yet there was no other way. 48 V.C. had judged coolly enough that, even

could he descend in his own machine, and take the girl unobserved, its disappearance would lead to a world-search, and an almost certain finding. He might not even be able to destroy it effectively, or to hide it among the forest trees, before its location would have been observed, and their fate be certain. He must make excuse to put up *Condor 5* for repairs, and when on the free leave which would result, he could easily have one of the very numerous Kestrels so placed that it could start unnoticed in the night.

There was one point in their favour. The Kestrels, though small, had a roomy car, being built for summer picnics in the air, whereas the Condors were for work and speed, and had a seating space for one only. Also, with sufficient skill (which he must contrive,— and who could fail with such reward on landing?) the Kestrels were capable of a very high speed indeed, though it was seldom attempted. But, most important of all, he intended his plan to succeed by its incredibility. If the flight were known, and the disappearance of the Kestrel discovered, no one (he thought) would dream of looking for them more than a hundred miles away.

Yet it was with a natural doubt that he looked at P.N. 40 as he confessed his plan. Suicide was not a popular enterprise, even under the conditions of life which have been vaguely indicated, and no man can invite a young lady he scarcely knows to join him in a very probable drowning without some natural doubt as to the nature of her reply.

But P.N. 40 did not hestitate. Perhaps she did not realize the utter madness of the project as clearly as she would have done had she had a wider experience of the air. Perhaps she had a confidence in this audacious lover which might not have been felt by a more indifferent auditor.

"Oh, yes, if you think a Kestrel's best. You ought to know," she answered easily. "But you'd better go now, or we'll neither of us go anywhere. The disk's changed colour twice already."

She pointed to the signal which had twice reminded her of her remissness in approaching the morning meal—a remissness of which she had not been guilty in a score of previous years, and which could not continue for many seconds longer without some emphatic interruption resulting.

48 V.C. turned reluctantly. He wanted to make clearer arrangements for meeting. He wanted permission to come again, if the chance should offer. He wanted . . . But the girl had no mind for a needless peril.

"Come again? Of course not. Are you quite mad? Of course I shall find it. I'm not a fool, really. The first night the indicator shows below two-seven, I shall be there at half-past three. You needn't look for me earlier. If the nights are fine till the twenty-eighth, I'll come then anyway. . . . You'd better go while the sky's clear."

He did not want to go. . . . He wanted to say good-bye, and lacking practice, he was not sure how to begin. A night-passage to Brazil seemed a less formidable enterprise.

He looked uncertainly at the empty sky, and back into the room—and found it empty also.

Then he went.

P.N. 40 might be willing to risk her life for a lover. She might (which

seemed to her a more serious consequence) be prepared to abandon the amenities of civilized life for his companionship. She was not in the least disposed to risk everything which was at stake because he could not understand that it was time to go.

IV

P.N. 40 entered the breakfast-hall bravely enough, though she was conscious of the puzzled wonder of a hundred pairs of eyes that were directed upon her, and her heart might well have failed at the thought that she had already drawn inquiry, which might so easily turn to suspicion, in her direction.

She was three minutes late, in a world in which unpunctuality was as rare as manslaughter.

There had been a period of many centuries during which men had learnt to rely upon mechanical instruments, not only for recording, but for notifying them of the passage of time, and had become consequently almost insensitive to its durations.

Then a country schoolmaster, a Mr. Alfred Borton, had immortalized himself, and revolutionized the organization of society, by observing that, if he established a habit of feeding his flock of geese at seven minutes to four, they would appear at his back-door at that time, neither before nor after, with an exact punctuality. He had reflected that what is possible to a goose should not be impossible to a man, and he had first experimented with one of his own family, a child of three years, who had learnt that it must leave its nursery at exact periods, of which no indication was given, for an adjoining meal-room, if it were to obtain the quantities of food that it required, or the delicacies that it coveted. It was found that children so trained could achieve automatic habits which would not vary more than from seven to thirteen seconds from exact punctuality. They would observe the regularities of an ordered household with no more conscious thought than they would give to the separate movements of the limbs that bore them to the waiting table.

It was natural, therefore, that Instructress 90 should have been alarmed and puzzled as three successive minutes passed, at the end of each of which she had given the signal, which should have been so needless, and which, she knew, must have discoloured and agitated the warning disk which was fitted into every bedroom to deal with such an emergency, before P.N. 40 approached the table, unaware of how successfully she was concealing the perturbations of her secret mind.

The Instructress was a lady of seventy, wearing the white dress of widowhood, below the rose-pink collarette of honour which was the badge of the Sixth-Grade Women. The four red stars on her right sleeve were the number of her living children. There were no grey disks of the dead. She was now a tall, somewhat angular woman, with a rather long nose, and a high crown of greying hair. In younger days, she had been a famous athlete.

She had been born in the early days of the Second Era. She believed in it absolutely.

The glance which she gave to the approaching girl was shrewd, but kindly. She guessed that some abnormal mental disturbance must have occasioned so startling a breach of ordered living. It was not unusual for her to have to deal with such a difficulty among the lower girls, though she had never before known it to occur to one of her own grade, nor to have so disconcerting an evidence. A Sixth-Grade girl was usually too sensible of the honour which was before her. Also, they were not numerous. This year, P.N. 40 was the only one at the table of Instructress 90.

"What has happened?" she asked, as P.N. 40 lifted her chin courteously, and seated herself at her right-hand.

"I was thinking . . . I forgot."

The Instructress considered this impossible answer.

"I trust it was not done deliberately? After the scene of last night——"

"Oh, no, Instructress. I am very sorry. I didn't mean it at all. It won't happen again."

There was an evident sincerity in the voice that answered. A sincerity of regret which was unmistakable. And the tone was more satisfactory than had been usual from P.N. 40. The matter must be reported. It was too serious for a mere reprimand to condone it. But it might be less so than she had feared. Perhaps an instinct of rebellion had culminated in this outrageous breach of etiquette, and had produced a natural reaction. She said no more.

P.N. 40 had to exercise a more severe self-discipline to avoid the friendlier queries of her right-hand neighbour. R.E. 7 was a rather heavily-built girl, with very light hair, and small eyes. She was wholesome and healthy, but not outwardly attractive. She wore the badge of the Fifth-Grade only, her lack of physical beauty having excluded her from the highest rank, to which she would otherwise have been eligible. The two girls had been at the same seminary, and there was a tested and confident friendship between them. P.N. 40 had been the captain of the Hockey Team which had won the World Championship for three successive years, at Buda-Pesth, at Stockholm, and at Pretoria. The success of this team was commonly attributed to P.N. 40 herself, who, from her forward position of inside-left, had shot more goals than had been credited to a single player since the present championship had been established. But P.N. 40 knew that the stability of the team, and the bulk of her own opportunities, came from the rock-like defence, and the skilful feeding of the centre-half-back behind her. In other ways, too numerous to detail, too different for brevity, she had learnt the reliability of her companion. She would have told her all, when the opportunity came, with an absolute confidence both in the reticence and the loyalty of the friendship that would receive it. But the fear of the M.I. was upon her. The spoken word might not be safe, in whatever privacy; even the articulated thought. . . .

R.E. 7 saw that her curiosity was unwelcome. She became silent, and P.N. 40 was quickly joining in a foolish discussion which arose among the

lower-grade girls as to why the law did not allow an uneven number of wives (the gradations were six, four, two, one, one-quarter and one-sixth), and whether the single wife allocated to Grade Three infringed this rule—a discussion which was allowed good-humouredly by the Instructress, until it touched the borders of impropriety, when she intervened with the silencing remark that such subjects were more suitable for the class-room than the breakfast-table, and that she would deal with it sufficiently at a future session, when the Routines of Matrimony would be the subject of the day.

v

The days passed without any disturbing incident, but also without the break of weather for which P.N. 40 was watching with a concealed anxiety, until the 27th of April, when the skies clouded heavily and a cold tempestuous wind, veering unsteadily from one point of the compass to another, resulted in the air-warning which brought all the pleasure-planes to the crowded anchorages, and caused the freight-planes to descend to the lower levels which the pleasure-planes had vacated. Only the mile-high continental liners continued their scheduled way, indifferent to any elemental discord.

That afternoon, *Condor 5* descended to its aerodrome, reporting a strain on the hinge-expander of the falling-tail, which would take two days to repair.

That night, at 11:45, when, for three-quarters of an hour, the long lines of the sleeping-bungalows had been dark and silent, P.N. 40, bare-headed, but clothed in a suit of waterproofs, and with her most precious possessions slung from her shoulders in an oilskin satchel, opened her bedroom window, and stepped quietly out into the blackness of the driving rain.

The method by which the grazing-park, which surrounded the great circle of the sleeping-bungalows, was drained and irrigated does not concern us, except to remark that it simplified the difficulty of finding a twelve-mile way through the blinding rain which she had never traversed before, and for which her only guidance was the red lights of the landing-platforms of the aerodrome she was seeking.

This aerodrome was, in fact, no more than a depot for pleasure-Kestrels, and a government repairing-shed for planes of the lighter patterns. It had no accommodation except for such as could easily come to earth, or which were so built that they could settle on the landing-platforms. The flat fields of Middlesex offered no security of anchorage for the larger airships, such as can be found in the Devon coombes, or the valleys of Wales, where the largest plane may inflate its buoys, and swing on shortened cables in defiance of storms from whatever quarter. The nearest airport (and that an inferior one) was in the Chiltern Hills.

Yet, however small in comparison with the major ports, the aerodrome was of sufficient extent to make the place of appointment somewhat vague, even had there been light to aid her. But P.N. 40 had spoken truly enough when she said that she was no fool, and she now applied a simple logic to

the problem before her. He would know the path by which she would come, and she was here on the night, and at the time, she had promised. She did not want to advertise her presence. Secrecy was vital. She looked across the phosphorescent luminosity of the boundary, waiting in the darkness for any voice or movement to call her.

But nothing stirred. There was only the scream of the wind through the plane-platforms, and the nearer rattle of the rain.

Should she call aloud, and perhaps bring the discovery which would be ruin?

Should she return, to lose the wild hope which she had hidden during those waiting days? Perhaps to find that her absence had been discovered, and to meet some terrible or shameful penalty?

She could not wait here for ever. . . .

Had he forgotten his promise?

Perhaps he thought the storm too bad for so perilous an adventure.

Perhaps he was asleep and unheeding, or far away in his Condor, resting above the storm.

What did she know of men, that she should trust him with her life so lightly? Sin, as she had been taught from childhood. Folly, with its inevitable fruit of pain.

So her thoughts warred, while she stood patient and resolute in the storm.

Lightning flickered, and a dark shape showed, not fifty yards over the boundary.

Surely a Kestrel; and Kestrels are not left out in such positions without reason through a night of storm.

She had been a fool, after all.

But why had he given no signal?

She must have stood so silently that he had supposed that she had not come.

So they must have waited, each for the other, not fifty yards apart!

And the vital moments were passing.

Thinking thus, she went confidently forward.

She came to dim bulk of the Kestrel, for such it was. She had been right so far.

"*Forty-eight,*" she whispered, but there was no answer.

Fearful, and trembling with an anxiety which she could control no longer, she felt for the lighting-switch, and illuminated the interior of the car.

It was rainsoaked, and empty.

The significance was too clear for any hope to survive it. If this were the chosen car, it would at least have had a store of provisions and water, if not of a hundred things that they would need in their forest solitudes. . . .

She heard the beat of the balance-wings as *Condor 5* came to the ground beside her. It came down with no pretence of concealment. Its landing-lights shone through the rain. She was aware of the wail of the signal-sirens, and of long arms of light that rose, stabbing the storm.

"Quick," said the voice of 48 V.C., "heave these things in. We've got two minutes, with luck."

VI

In the barbarous period of the twentieth century, it had been customary to choose a Premier for his capacity to talk loudly enough to engage the attention of a numerous audience, vaguely enough to avoid the danger of any absolute statement, and cunningly enough to conceal the emptiness of his declarations. Having these qualifications, he might be a lawyer or an iron founder, or (and more probably) a man of University education, who was destitute of any practical knowledge, and without any specialized occupation.

In the Second Eugenic Era such a leadership would have been regarded with an astonishment which might not be entirely unmerited. A government has many responsibilities. It must have many departments. But, of all these, the most important must surely be the care of the physique of the race itself, for the benefit of which the other departments exist, and a man without expert knowledge on that greatest of earthly subjects could be little fit to guide its destinies further.

Professor Pilphit (66 D.T.) who held that office in the ninety-third year of that era, was so conscious of the importance of the subject in which he had specialized very brilliantly that he had himself taken charge of the Physical and Selection Department, which had never been more vigorously administered than when under his enthusiastic direction.

He had himself shown, in his well-known monograph *On the Psychology of the Adolescent,* that the atavistic impulses of youth can be controlled without too serious difficulty, providing that there be no discernible possibility of their realization. A hope, however slender, that the law of allocation could be successfully evaded, would be the cause of a multitudinous unrest, which might require a stern severity of repression, or would cause the precarious foundations of the youthful civilization which he controlled to shake beneath him.

It followed that every instance of erratic contact, however casual or trivial, between the youths and girls of the separated seminaries, was regarded with the importance of a seed from which a crop might develop which would choke the healthy growth of the entire community. Professor Pilphit had given orders that such instances should be reported instantly to himself, and the escapade in which P.N. 40 had been involved with P.T. 69 had naturally come before him. It had been shown that P.T. 69 had been primarily responsible for that incident, and she had been degraded accordingly, but P.N. 40 had escaped any serious penalty, though her subsequent conduct had been very closely watched, as had that of the youthful pilot who had effected her rescue.

The report that the girl had been late for breakfast, without any credible explanation, within a fortnight of the Branding Festival, had caused an instant requisition upon the Ministry of Insight to expose the truth of her conduct.

The apparatus of the Ministry of Insight, at this period, had reached a point of excellence of which it was difficult to take the fullest advantage.

It was no longer obstructed by intervening walls, nor dependent upon visible light-rays for the photographs which it obtained. In theory, it could, and did, record every incident of the lives of every individual from Penzance to Wick, and it could reproduce every audible sound they made from its records, not only of the moving lips, but of the diaphragm from which it came.

But the very extent and quality of this success produced its own difficulty. How could so vast an accumulation of records be stored, tabulated, developed? There were difficulties not merely in their use, but even in their retention. Without the application of a newly-discovered element of comparative rarity, they faded within a few hours of their production.

The result was that the records actually retained related to events of national importance, to specimen records of selected lives, and to periodic photography of the interiors of the bodies of the nation, this census being taken at intervals of six or seven years, without public knowledge of the time of its incidence.

The demand for the exposure of the actions of P.N. 40 on the occasion of her unpunctuality was made within seven minutes of the circumstance coming to the Premier's knowledge, and within twenty-four hours of its occurrence. Everything possible was done to supply his requirements, but the result was incomplete, although sufficiently dreadful in its disclosures to prove the use, indeed the necessity, of these records, if anyone then living had been sufficiently foolish to question it.

The picture of the bedroom itself had faded into a dim scene of two figures which did not appear to move about more than a little, or to approach very closely. Nothing could be recovered of speech, or even of expression or gesture. But there was a clear record of 48 V.C. leaving the window, and making his covert return to the aerodrome. The expression of his face was not that of one who has been suitably rebuked for a very shameful trespass.

Considering this sinister episode, Professor Pilphit gave instructions for a special photograph of P.N. 40 to be taken, and being satisfied therefrom that she had, at least, preserved her physical integrity, he decided to do nothing further for the moment, but to watch the delinquents very closely until she should have passed into the care of her selected husband.

The reports he received were satisfactory until the morning of the 27th of April. P.N. 40 was punctual in attendance at her meals and classes. She seemed placid and cheerful. She took an intelligent interest in the instructions she was receiving in the Seven Duties of Marriage. 48 V.C. was occupied on his patrol, and had shown no disposition to descend to the aerodrome, nor consciousness of the existence of P.N. 40. There had certainly been no communication between them. Professor Pilphit began to hope that the incident might pass without consequence. If so, it would be best for many reasons that nothing should be done to revive it.

When, on the morning of the 27th, he heard that 48 V.C. had descended with a report of damage to his machine, he was cautious, but not alarmed. He inquired as to the nature of the alleged damage, and learnt that it was

certainly genuine. It did not render the machine unfit for flight, but it might render landing dangerous in a rough wind. 48 V.C. had been right to report it. It might have been wiser to do so earlier. Certainly, it would have been wrong to continue flying in the storm which had now risen, with such a defect unremedied.

All this seemed right enough, but the Premier took no risks. He ordered a police-officer to remain in the company of 48 V.C. until he should return to the air, and to report telepathically to his private instrument, to avoid the delay of communicating through the Ministry of Insight, should any suspicious circumstance require it. It is to his lasting honour that the possibility did not enter his mind that P.N. 40 could be so shameless as to go out into the night to seek her lover.

It followed that when 48 V.C. strolled into the mess-room, having (very fortunately) already arranged, on some plausible pretext, for a carefully-selected Kestrel to be left for the next twenty-four hours near the boundary of the aerodrome, he found a certain Police-Inspector, 17 T.P., with whom he already had some acquaintance, had developed a friendliness which he was very disinclined to welcome, but which he found it impossible to shake off.

After some hours of abortive fencing, when the necessity of obtaining supplies for the Kestrel was becoming desperately urgent, he attacked his persecutor with a direct inquiry.

"You seem very fond of me today, Inspector. Have you been told to watch me?"

"Yes," said the Inspector.

"Why," asked 48 V.C.

"I don't know."

"Are you reporting everything I do?"

"Yes."

"Everything I say?"

"No."

"Well, that's something."

48 V.C. had exceptionally good nerves, or he would not have been a Condor-pilot at twenty-three. He showed no sign of more annoyance than would be natural under such circumstances. Very quickly, he thought of an audacious expedient.

"Well, if you've got to come around with me, you might lend me a hand. I'm going to load up *Condor 5,* ready to fly as soon as the repair is finished."

"She'd fly all right now, if you wanted to get away from me," said the Inspector.

"Yes, but I don't," said 48 V.C.

He commenced, with his companion's help, to load the well of the Condor with an unusually well-assorted store of food and water. He thought of tools, and many miscellaneous things, which might be useful in the air. He explained that he never knew what accidents he might have to succour, or in what distant places.

"Are you reporting all this?" he asked pleasantly.

"Yes," said the Inspector.

"You might tell them that it looks as though I mean to disappear altogether."

"You couldn't do that," said the Inspector. "Not in a Condor, anyway."

"I suppose not," said 48 V.C., laughing. "I'd better alter my plans."

The Inspector laughed also. He did not take him seriously. They both knew that in the chartroom of the Ministry of the Air, the location of every machine with a metallically-responsive hull could be told at any moment, within half-a-mile in either altitude or direction. Only the Kestrels were built of the commoner metals, and their little flutterings were outside the knowledge, as they were beneath the notice, of the chartroom records.

It was after three a.m. when 48 V.C. rose from his berth in the dormitory, and commenced dressing.

"What's the game?" inquired the Inspector, rising with an equal alertness.

"It's the weather," said 48 V.C. "I think the things in the Condor may need moving."

"Are you gone crazy?" said the Inspector. He began to understand why he had been detailed to watch this young pilot, in whom insanity was developing so rapidly. A sad case. He followed him out into the storm.

"Inspector," said 48 V.C. from his seat in the Condor, "it's a bad night for flying. You weren't told to come with me, were you? You'd better go back and report."

"I can report without going back," said the Inspector grimly. He wiped the rain from his eyes to watch the Condor as it rose abruptly into the air, and circled back to the further side of the aerodrome. There was something here for which prompt action might be needed. The next moment his whistle shrilled through the darkness. For the last news he had sent had closely followed an alarming telepathic report from Instructress 90 that the room of P.M. 40 was empty, and orders had come to arrest the fugitives by any method, without regard to their lives, if they should attempt resistance, or their flight continue.

VII

There were running feet within ten yards as the Kestrel felt the impulse of the release, and rose clear of the hands that clutched in vain in the rain-drenched darkness for the mooring-ropes, which they guessed that she must be trailing behind her.

"Won't they follow?" she asked, as he switched off the car-light, and the darkness closed them. Harshly, through the noises of the storm, there came the useless barking of an Elston gun.

"Not in *Condor 5*," he answered. "I've seen to that. They may in others, but they won't have them out for five minutes yet, and how will they find us then?"

He laughed excitedly, and then became tense and cool, as he saw a streak of light that searched the sky turn from white to orange-red as he watched

it. The Kestrel swerved to his steering, so that the girl was thrown against the side of the car in the darkness.

"What's the matter?" she said, laughing at the mishap, in contempt of a bruised shoulder. "Do you usually steer like that?"

"I may do it worse," he answered. "Don't talk now. Get the straps on quickly. Don't switch the light."

She knew that it was no time for talking, as she groped in the dark for the first strap she could find which would serve to hold her in the swaying plane.

Overhead, the red light moved incessantly, probing the night.

Flying low, with frantic dashes, right or left, as the blind search pursued them, the Kestrel dodged like a snipe, till, perilously low, it passed over the great circle of the sleeping-bungalows, and the public halls which they surrounded, with the lighted tower in the centre.

P.N. 40 spoke at last, with a natural question.

"Did it matter so much if they saw us? They knew we were there." She was puzzled, realizing that they must have circled round, while they might have been fifty miles away.

He answered: "I didn't think they'd have done that. We're safe now, if we fly low for a time, but I had to get the rise of the land between us. No, the searchlight wouldn't have mattered. Not while it was white. But the orange-red is meant to kill. We should have shrivelled up like a cinder if it had once settled upon us. . . . Do you mind?"

He spoke with a sudden contrition for the reckless perils into which he had lured her. . . . Her of whom he had dreamed, unhoping. . . . This stranger who touched his knee.

She did not answer in words, but he had switched on the car lights, and her eyes spoke clearly.

"We shall be steadier now, for a time," he said, "if the wind holds as it is." They began to plane upward. Side by side, they settled themselves into the seats in such comfort as the space allowed. For ecstatic breathless moments they forgot everything but themselves. The wonder of the new companionship; the joy of the distant goal.

The speed increased to the maximum. They knew now that they were out over the Channel. The light in the open car made the surrounding blackness more absolute. There was no steadiness in the wind, which drove gustily. Out of the darkness the storm came in heaving oceans of air through which the flying speck of the little Kestrel fought, and swayed, and faltered. It was colder now, and the rain had become sleet in their faces.

"They won't find us?" she asked.

"Not they," he said confidently. He felt fairly sure of that, during the darkness at least—though he had been startled by the use of the orange ray, and the ruthless purpose which it showed. He meant to be very far across the sea before the light should aid them.

But he knew that there was an even greater peril in the flight itself—a peril which he could only guess, for no one had ever put a Kestrel to such

a test before . . . and in such weather as this, with the length of the Atlantic before them!

"Can I help?" she said, after a time.

"Not yet," he answered. "I can keep on for a long while yet. I'll tell you when I get tired. You'd better sleep now."

Soaring still, the straining body of the little Kestrel fought its bitter way through the storm, and she slept beside him. Should it fail, as at any moment it might, should the frail parts snap at pressures which they had not been made to meet—well, it would be useless to wake her. He knew they could not go on for very long like this. There might be better weather if he still went upward. He knew that he had reached a level where there was an added danger in the darkness. Any moment an air-liner, shouldering its smooth contemptuous passage through the night, might strike them broken-winged to the water, and pass on, unaware of their triviality. But it was the only chance they had. His foot pressed harder on the soaring-lever, and the wing-beats quickened. They went upward through the storm.

VIII

There was a murmur of protest in the Telescenic Laboratory.

"They want us to *find a Kestrel*—in the night!"

"Where?"

"Within fifty miles of Brentwood."

"It can't be done. . . . There's no responsive metal in a Kestrel. How can we tell where to look?"

"Why can't they wait till morning? We can't miss it when it comes down. A Kestrel can't go far."

"They say it first circled low, and then rose, and headed south."

"Well, we've got to try."

"*South?* It can't go far that way. Does it want to fall into the Channel?"

The operators might murmur, but the words of protest were over in ten seconds, and already the crackling sounds of the batteries, and the droning of the great disks, showed that the search had started.

For twenty minutes the swift miles of magnetic air passed before the eyes of the operators, luminous as though unaware either of storm or darkness, before they found the speck they sought in the immensity of the night.

Nearly two miles up, they reported, *heading south-west for the Channel.*

Can it last? came the query.

It may be blown back. It is facing the storm. But it is making for the open sea.

Can it live, if it does not return to land?

On the screen, the Chief Operator studied the driving blur of the storm for some minutes further before he answered the query.

A wind-tossed Kestrel showed faintly.

Lightning flickered around it.

Knowing that it had no electric control, he looked for it to crumple and disappear, but it still kept onward.

Its course was rapid, but so erratic at times that they had difficulty in keeping the sights upon it.

He noticed that it was still climbing upward, between the buffetings of the storm.

Then he saw that it was falling—falling fast. Was it injured? He thought it righted for a moment, and then he lost it.

They searched for it to the limits of height which they could reach, and downward till they skimmed the blackness of the heaving sea, but they could not find it again.

Did it matter whether it were already beneath the waters, or a wind-blown atom in the screaming heights? There could be only one end. He ordered them to give up the useless search.

He reported: *It is out of sight, and is probably sunk already. If it be still flying, it must return, or fail and perish. It is unfit for such a flight, and the air to southward is foul with crossing storms.*

He spoke of failure, not understanding that they had triumphed already. For all men die, but few live.

IX

Far up, far over the Atlantic wastes, the little craft, with its two warm-hearted lovers, beat upward through the snow-swept night, upward against the fury of the freezing wind, still upward . . . upward . . . to over-ride the storm.

The Master Ants

by Francis Flagg

Every now and again we will read someone's alarmist speculations concerning the insect menace. Anyone who has ever had to worry about termites, ants, roaches, and crop pests, will understand perfectly just how tough an opponent the insect world is. But are insects capable of intelligence? In one of the interesting books written about the flying saucers, Gerald Heard has advanced a serious case in favor of the intellectual standing of bees and ants. If such be the case, the failure of these insects to seriously menace us may be merely a matter of bad eyesight—they can't recognize us for what we are. Francis Flagg's speculation on the mastering ants is food for thought.

THE thing is a hoax."

"Palpably a hoax."

"And yet the handwriting is theirs."

"Or a forgery."

"A clever forgery then. Schultz is a handwriting expert, you know, and he declares the signatures to be genuine."

"But the thing is incredible."

The two men looked at each other helplessly. One was a Doctor of Science; the other a nationally-known criminal lawyer. Several days before a strange thing had happened. The nationally-known lawyer had been dining with his family in his home on Tanglewood Road, Berkeley, California, when what was at first taken to be an infernal machine of some sort dropped in the midst of the dinner table with a crash, upsetting the table and narrowly missing injuring the diners with its flying wreckage. Yet, as it was the rainy season and the evening was damp and raw, no windows had been open; nor did investigation show any of the panes or sashes to have been broken, as would have been the case had the machine been hurled through them. In short, save for some spatters of food and a few dents in the walls made by the flying metal, the room was intact. Only one door had been open at the time, the door leading into the kitchen; and the kitchen had been occupied by the cook, a middle-aged lady who had been in the employ of the lawyer for five years. Seemingly, the infernal contraption had materialized out of thin air. As if this were not startling enough, there was the manuscript.

"I found it," said the lawyer, "in the midst of the wreckage."

The third member of the party, an ordinary practising M.D., examined

the manuscript with curiosity. It had evidently been tightly rolled and was yellow, as if with age.

"You say," he said, "that this purports to be a message from two men who dropped out of existence some twelve months ago. As I am only visiting in the East Bay for a few weeks, I am not acquainted with the facts of their disappearance. If it wouldn't be too much trouble . . ."

"Not at all," replied the Doctor of Science. "John Reubens was a fellow professor of mine at the University and held the chair of Physics. Raymond Bent was a student, working his way through college by doing secretarial work for him. Reubens was a man of about forty-odd, well-known in scientific circles as a brilliant, if somewhat eccentric, physicist. In fact, he had studied under, and once collaborated with, Jacques Loeb, before the death of that great mechanist. He lived with his widowed sister in a large, old-fashioned house on Panoramic Way, and had a splendidly equipped laboratory there in which he carried out strange experiments of his own. I will frankly confess that while we acknowledged him to be a brilliant man in some respects, the majority of other professors thought him a nut because of wild theories he was wont to voice in relation to time. On the other hand, he made no secret of regarding us as so many 'Dumb Doras' without vision enough to see beyond the tips of our noses. That's the best picture I can give you of the man who went into his laboratory with his secretary on the 14th of October, 1926, and never came out again! But let his sister give you her version of the affair. I clipped this interview with her out of the *San Francisco Examiner* and saved it."

The M.D. took and read the proffered piece of paper.

"At four o'clock Raymond Bent came and I let him in by way of the side door. He chatted with me a few minutes before going to the laboratory, where my brother was. The laboratory is on the second floor and I had occasion to pass it several times on my way to and from my bedroom. My brother never told me about his experiments, and it was understood I was never to enter his workroom. One time the door was ajar and I saw the two of them standing by some sort of a machine. That is all, except, at about four-thirty, when I was passing the laboratory door on my way downstairs, I heard a terrible crash. I guess it was a pretty bad one, because all the plaster was knocked off the ceiling in the room below. When my brother didn't answer my call, I got frightened and went in. Things were upset—you know, basins and things—but neither Bent nor my brother was there."

The article went on to state that Reuben's sister admitted that the machine had also disappeared.

"Some bright reporters," remarked the Doctor of Science, "got to speculating if the professor hadn't hopped off in some sort of an airship he had built; but the theory wouldn't stand up against the fact that while one end of the laboratory was all glass, and the great door-like windows swung wide open, a crow could hardly have winged its way through the iron grilling, which protected them on the outside."

"Wasn't there talk of missing money in connection with the affair?" asked the M.D. "Seems to me, now, that I do recall reading the case. Only . . ."

The nationally-known lawyer nodded. "Unfortunately, yes. At the time of his disappearance, the professor had drawn twenty thousand dollars of his sister's money from the bank for reinvestment. The money had been issued to him in Treasury notes of one thousand dollars each. Some people were uncharitable enough to find in this fact full explanation of his disappearance. However, notes bearing the serial numbers of those issued to him have never appeared on the market, as far as is known."

At this juncture the doorbell rang and a few minutes later the president of the university and two members of the faculty were ushered in. When they were seated, the lawyer addressed the gathering.

"I take it that everyone of you is aware of why I have asked you here tonight." He held up the manuscript. "My letters, I believe, explained adequately how this document came into my possession. It only remains for me to say that I have submitted it, with specimens of the handwritings of Professor Reubens and Raymond Bent, to Herman Schultz, the chirographist, and he pronounces the writing and signatures in the manuscript to be identical with that of the specimens submitted."

The president of the university nodded. "I believe that is clear to all of us. The manuscript is held to have been written in the hand of Raymond Bent, and bears both his signature and that of Professor Reubens. Very well, then. We are acquainted with the peculiar manner in which you received it, but as yet are unaware of its contents. If you would kindly read the communication to us . . ."

Thus bidden, the lawyer cleared his throat and read what is probably the strangest document ever penned by human hand:

Whether any human eye, in the age I have left behind me forever, may chance to read this writing, I do not know. I can only trust to Providence and send what I have written into the past with the fervent prayer that it will fall into the hands of intelligent people and be made known to the American public.

When I came into the Professor's laboratory on the afternoon of October 14, 1926, I had not the slightest inkling of the terrible fate that was so soon to befall me. If I had, I would probably have fled in horror from the place. The Professor was so absorbed in tinkering with the mechanism of the machine which had engrossed his interest for nearly two years, that he did not at first notice my entrance. I picked up a book lying open on a stand to one side of him. It was H. G. Wells' "The Time Machine." I smiled at the absurdity of a great professor being interested in such truck. The Professor turned and caught me smiling. "Impossible fiction," I remarked, with what, God help me, was an illy-concealed sneer.

"Fiction, yes," replied the Professor, "but why impossible?"

"Surely you don't think there is anything possible about this?" I exclaimed.

"Yes, I do."

"But to travel in something that has no reality!"

"What is reality? The earth on which we stand? The sea on which we

sail? The air through which we fly? Have they any existence outside of the attributes with which our senses endow them?"

"But I can touch the earth," I protested, "I can feel the sea, but I cannot touch or handle time."

"Neither can you touch or handle space," said the Professor dryly, "but you move in it: and if you were to move through space, say from this spot to the City Hall in Oakland, you would probably calculate the journey took you fifty minutes of time. In that sense time would have a very real significance for you, and you would have moved in it to the extent of fifty minutes. But if I ask you why it isn't possible to move ahead in time not fifty minutes, but fifty centuries, you consider me insane. Your trouble is that of most people, my boy; the lack of enough imagination to lift your brains out of the accustomed rut."

"Perhaps so," I replied, reddening angrily; "but, save in fiction, who has ever invented a time machine?"

"I have," answered the professor. He smiled at my look of disbelief. "Now this thing," he added, patting the mechanical creation affectionately, "is a Time Machine."

It was the first time he had ever told me what his invention was supposed to be.

"You mean it will travel into the future?" I asked skeptically.

"If my calculations are correct—and I have every reason to believe they are —then this machine will take us into the future."

"Us!" I echoed.

He walked over and shut the door with a bang. "Have you any objections to taking such a trip?"

"None at all," I lied, thinking the chances of doing so were very remote.

"That is splendid. Then there is nothing to prevent our giving the machine a trial this afternoon."

The machine had two seats, with backs probably two feet high. The Professor seated me in one of them, while he occupied the other. "Just as a precaution to keep you from falling out," he smiled, buckling me in with a broad leather belt. In front of himself he swung a shelf-like section of the apparatus on which was arranged a number of dials and clock-like instruments. In some respects—save for the clocks—the shelf resembled the surface of a radio board. Whatever cogs and wheels there might be were hidden in the body of the machine, under our feet.

"That," said the Professor, indicating a dial, registers the years and centuries; the one next to it, the weeks, days and hours; and this handle," he touched a projecting lever, "controls the machine." Before sitting down, he had lifted the bottom from his seat and revealed below it a hollow space filled with tools and provisions. "It is the same with your chair," he said with satisfaction, "and if you examine the leather belt, which holds you in, you will discover that it also acts as the holster for a Colt automatic and a box of spare cartridges." He settled himself comfortably in his seat and grasped the lever. "Are you ready, my boy?"

So business-like was his manner, so self-assured, that for a moment a

qualm of doubt assailed me. What if the confounded thing were to work! Then my commonsense got the upper hand again. Of course it wouldn't! Already I began to feel sorry for the professor. At my nod of assent, he pressed down on the lever. The machine shook; there was a purring noise; but that was all. I smiled, partly with relief, partly with derision. "What's the matter?" I asked; and even as I spoke the whole room spun like a giddy top and dissolved into blackness. The roaring of a million cataracts dazed and stunned me. There was an awful sensation of turning inside out, a terrible jolt, and then it was all over and I was lying sprawled out and half senseless in a wreck of disintegrating iron and steel. My first thought, of course, was that we were still in the laboratory. The machine had turned over, or exploded, and nearly killed me. That's what came of listening to bughouse professors and their crazy inventions! I felt my head and limbs blindly. Sound enough, I seemed, save for a few scratches and bruises. I struggled to sit up; as I did so, I came face to face with an old man with a tangled mane of gray hair and an unkempt beard. It was several minutes before I realized that I was looking at the professor. Even as I did so, I became conscious of the fact that black whiskers hung down on my own breast and that the top of my head was as bald as a billiard ball. I looked around and saw that we were lying on a prairie-like expanse of country. Some trees were far off to one side and the immediate plain was covered with stunted bushes and tufts of grass. Anything more different from the laboratory could not well be imagined. As I stared stupefied, not yet realizing the awful truth, the Professor gave a deprecating cough.

"I'm afraid," he said in a voice that was his, yet curiously changed, "I'm afraid I overlooked a very vital thing." He shook his head. "How I was so stupid as not to think of it, I can't understand."

"Think of what?" I mumbled.

"Of the almost elementary fact that as we journeyed into the future our bodies would age."

His words brought me to my senses. Incredible as it seemed, this was the future. At least we had come to rest on some other spot than that of the laboratory. And undoubtedly physical changes had taken place in the Professor and myself.

"We must return at once!" I cried.

"Of course," replied the Professor, "at once. But how?"

I looked at him dumbly.

"As you see," he remarked, picking up a piece of rusted, crumbling metal, "the machine just kept going until it was so old it fell to pieces. My boy, we have had a lucky escape."

"A lucky escape!" I echoed.

"Yes; for if the machine had not worn out when it did we would have gone on until we perished from old age."

"But I thought you told me once that old age was not caused by the passing of time."

"I did; but you can readily understand that in our journey through time

we encountered more or less friction from environment. Of course the faster we traveled through a century, say, the less action of environment on our bodies there would be in a given period of time. But still there would be enough to age us after awhile. At least, such seems to have been the case."

"How far have we come?" I asked.

"I don't know. All my instruments are destroyed. As you see, the machine is junk."

"But we can build another."

"What with?"

I groaned. Machine, tools, weapons, all were gone. God knows how many centuries in the future, we stood on a bleak prairie, middle-aged and old, the rotting clothes falling from our backs, with only our bare hands to protect us from whatever dangers might lurk for us in this new and unknown age. With despairing eyes I stood up and scanned the horizon. "Look, professor, look!" I cried, seizing him by the shoulder. "Aren't those men running towards us?"

The professor focussed his eyes in the direction my finger pointed. Perhaps a half mile away, having seemingly just topped a rise, was a body of what appeared to be men. Even at that distance something about them looked peculiar; and when they came nearer we saw that they were running with bowed backs, their heads jutting at almost right angles with their bodies, and their arms dangling loosely in front of them.

"Those are the queerest looking men I've ever seen," I said in alarm, looking around for a weapon to defend myself with in case of attack, and plucking up the only thing available, a piece of rusted iron. The professor did likewise. Thus armed, we stood up to await their approach, for there was no place to hide, and nothing behind which we could find shelter. Perhaps three hundred yards away the odd men spread out into a semi-circle. There were probably twenty-five or thirty of them, naked, with not even a breach-clout, shaggy of hair and beard, and with hair almost as heavy as fur running down their backs and on the weather sides of their arms and legs. They continued coming at a fast gallop; but just when it seemed they would run on and over us, they reared back—much as do horses when reined in—and came to an abrupt stop, shaking their heavy manes, and pawing at the ground with their feet.

"Very peculiar; very peculiar indeed," said the Professor thoughtfully. "Except for the clearly defined features of their faces and the general structure of their bodies, one would not take them for men at all."

"They seem more like apes," I retorted. "I hope they're not as savage as they look. Speak to them, Professor, before they start something, and see if they can't talk."

The Professor held up one hand in a peaceful gesture and took a step forward. He raised his voice so as to make it carry across the thirty or forty feet which still separated the shaggy men from us.

"We are American travelers!" he shouted. "Is there any among you who can talk English?"

The only response to this was a snorting and a rearing, accompanied by a

rustling sound which affected the nerves disagreeably. Several of the shaggy men broke from the circle, doing a great deal of plunging and rearing before reluctantly coming back into formation again.

"By God, Professor," I said fervently, the goose-flesh appearing on my body, "I don't like this at all."

The Professor repeated his question in French, Spanish, Italian; he asked it in Portuguese, and in what he later told me were several Indian dialects; but all to no purpose. Only every time he paused to catch his breath, there came that dry rustling as of the rasping of metal on metal. Suddenly he stepped back and caught me by the shoulder.

"Those creatures," he whispered, gesturing towards the shaggy men, "are controlled."

"Controlled!" I exclaimed. "What do you mean?"

"That there is something on their shoulders."

I thought the Professor was taking leave of his senses. "What could it possibly be," I began, then stopped, for the shaggy men were in motion. They divided, one group going to the right of us and the other to the left. In our rear they joined ranks and made us retreat before them. It was then I caught my first glimpse of the unbelievable riders that perched on their shoulders and rode them, much as human beings ride horses. Long antennae reached down on either side of the shaggy men's faces, gripping the corners of their mouths and serving to guide them as with bit and bridle. Other antennae waved in the air, or rubbed one on the other, producing the rasping noise which had so grated on my nerves. The bodies to which these antennae were attached were about a foot in length.

"In the name of God, what are they, Professor?" I screamed, half raising my piece of iron as if to throw it at the slowly advancing horrors. But the Professor gripped my arm. "Don't start fighting," he warned sternly, "unless you have to. As to what they are, I'm not certain, but I believe them to be some sort of ant-like insects."

We retreated, slowly at first, then at a brisk walk, finally at a trot. When we moved in a given direction the insects were content to keep their steeds at a distance; but when we veered from it they urged on the shaggy men to head us off.

"I believe those insects are driving us in front of them as men herd cattle," gasped the Professor.

We topped a rise and saw stretching away before us a level plain. Far out on this plain—several miles away, perhaps—were numerous mounds, and it did not take us long to suspect that they were our destination. Several times the Professor sank to the earth, utterly winded, unable to run another step. At such times, I stood over his body with my iron club, determined to sell our lives dearly, but there was no need to fight. The shaggy men were brought to a halt and their uncanny riders waited patiently until the Professor could regain his feet, when we were once more urged ahead at a brisk pace.

Night had fallen and it was almost too dark to see when we finally staggered through a narrow gap into a large enclosure and were left to our own

devices. The splash of water led us to a stream, where we slaked our thirst and bathed our sore and swollen feet; and then, too miserable and tired to care what further happened to us, we huddled together for warmth and fell asleep.

Several hours later, the Professor and I awoke, chilled to the bone. And no wonder! For we were practically naked, only shreds of cloth clinging to our backs. The moon was riding high overhead, making the enclosure as light as day. Now and then the silence would be broken with a shrill scream or a heavy snort. Once or twice we heard the metallic slithering of antennae; and once, in looking up, I saw an insect crawling on top of a mound, its sinuous body etched sharply against the sky. I shivered with more than the cold. "Professor," I whispered, "is this a nightmare or am I really awake?"

"I'm very much afraid that both of us are wide awake," said the Professor with a sigh.

"But it doesn't seem possible," I exclaimed. "Those bugs . . . My God, Professor, what has happened to the world!"

The Professor pulled thoughtfully at his unkempt beard. "I don't know. In our day there were scientists who held insects to be a growing menace to man's rule. Perhaps . . . But you could see for yourself that those ants rode men!"

"Were they men?"

"Yes; I believe they were."

"But their hair?"

"Could be accounted for by the fact that they were exposed, naked, to all kinds of weather. The fit, in this case, the strong, hairy ones, would survive and breed. A few centuries of such breeding could possibly produce the type we saw."

The thought of a world in which insects were the dominant species and men subject to them as beasts of burden, filled me with horror. If such were the case, what would our fate be? In spite of the chill night wind, in spite of the fact that we were cold and hungry, I dreaded the morning. But daylight came at last, and then we were better able to examine our surroundings. The enclosure was probably a half mile square and fenced in with an irregular line of mounds anywhere from ten to twenty feet high. Across the stream from us, bedded against the walls of a mound, were several hundred of the shaggy men. Soon after daylight they were afoot and came down to the stream to drink, wading into the water, in some cases, up to the waist, and drinking with an animal-like abandonment that filled me with disgust. It couldn't be possible that those creatures had once been human beings like the professor and myself. No, no! It seemed incredible that mankind could ever have fallen so low.

Some of the shaggy men crossed the stream to view us more closely. Most of these were females, stooping forward as they walked. One of them came quite close to us, uttering plaintive cries, and the Professor stepped forward in an attempt to speak to her. At this a great hulking bull of a fellow, with fiery red hair that glinted in the sun, and who would have stood well over

six feet if he had straightened up, rushed at the Professor with a roar. The latter retreated hastily; whereupon the leader of the herd—for you could have called the gathering of shaggy men nothing else than a herd, and the red-haired giant the leader of it—turned upon the females, and with blows of his fists and sundry kicks of his splay feet, drove them back across the stream where they all, men, women and children, took to grubbing in the ground for some sort of roots.

"And you call them human," I said to the Professor.

"They once were."

I shook my head. "Those creatures are bent almost double. Even the children are so formed, and the posture seems a natural one to them."

"Perhaps they were bred for that characteristic."

"Bred!"

"Why not? If things are as I suspect, then those men have become the domestic animals of the insects. In the beginning they were probably bent double by bearing the weight of their riders. Acquired characteristics are, of course, generally conceded to be uninheritable, but little is known of the possibilities of variation—what effects the constant doing of a thing may have on the germ-plasm. It is possible that mutations with certain peculiarities of structure were born and men, such as you see, bred from them."

Before I could make reply, we had our first leisurely view of one of the ant-like insects. It suddenly appeared on top of a ten-foot mound a few yards from where we stood. Its body was in three segments of an almost metallic blackness, being raised, on stilted feet, about eight inches from the ground. Four feelers, or antennae, waved in the air or rasped one on the other, and were attached to a mobile head. There was no indication of eyes, yet the weird thing paused in one spot for all of five minutes, as if intently regarding us, and I, for one, believed that it could see. Other insects appeared on the mounds, and soon the air was full of metallic slithering. At the sound, the males of the shaggy herd pricked up their ears, stamped the ground with their feet, and then continued feeding. On the other hand, the females ran towards the mounds, stretching up their hands to the insects on top of them, and calling out with imploring cries. Then we witnessed a strange sight. The ants crawled down the wall in one stream, paused beside a female for a moment or two, and then crawled up the wall again in another. It was a few minutes before the reason for this dawned on me.

"Good Lord, Professor!" I exclaimed suddenly, "they're milking them!"

It was true. The females of the shaggy men were so many cows being milked. Again the horror of our position came over me. We were castaway in a future age where man no longer was lord and master. Instead, he was a beast to be driven like a horse, milked like a cow, and—since ants ate meat, or used to—slaughtered like an ox. I wiped the cold sweat from my forehead.

"Professor," I said, "we must escape from here."

"Of course," replied the Professor; "but how—and where to?"

There was no answer to make. The mounds hemmed us in; and even if we could get beyond them and away from our present captors, there were

doubtless other mounds and other insects who would capture us. If the world was really in the hands of ants, then we were animals to be hunted down, tamed or killed. This age into which we had blundered was not safe for man—at least, not for civilized man. I closed my eyes to shut out the horrible sight of crawling insects. I tried to shut my ears to the sound of insane slithering, but heard readily enough when the Professor said somewhat nervously, "My boy, I believe they're coming over here." Three of the ants had mounted on the backs of shaggy men and were trotting them towards us. I looked desperately around for my piece of iron. It was gone. So was the Professor's. Someone or something had removed them while we slept. Nor was there anything else that could be used as a weapon. In this dilemma we turned and ran, but were soon overtaken. Two of the shaggy men closed in on me, while the third held the Professor powerless. I fought like a fiend; but the four hands of the shaggy men were like iron bands, the grip of their fingers like vises. In a few minutes I was helpless. Then came the crowning horror. One of the insects dismounted from the back of its steed and climbed on mine. At the feel of its suction-like legs on my flesh I went crazy. The muscles writhed in horrified protest under my skin. I bit and screamed and lashed out with my feet. All to no avail. Relentlessly, the loathsome thing clambered upwards until it had settled itself firmly on neck and shoulders. Two antennae reached down my cheeks, gripping the corners of my mouth and clamping themselves there. Almost at the same instant the shaggy men loosed their grip of men and I was free. For a moment I stood still, dazed and trembling; then the antennae gave a pull at my mouth, wrenching the head back with a cruel jerk. With a scream of pure terror, I plunged forward in a mad leap, clawing upwards with my hands at the awful incubus on my shoulders, tearing futilely at the antennae which gripped my mouth. And as I fought to unseat the inhuman rider perched on my shoulders, I knew what I was: I was a horse being broken, a wild mustang, knowing for the first time the torture of bit and saddle, of spur and quirt; I was an inferior animal being conquered, beaten, trained by a superior one. The blind, unreasoning fear I felt, a thousand wild horses being brought under the yoke of all-powerful man must have felt. I ran—it seemed for ages—goaded, spurred, until I could run no more. My gait slackened, became a trot, a walk. Finally I stood still, frothing blood and saliva at the mouth, gulping painfully for air, trembling in every limb. The incredible insect breathed me for a few minutes before again urging me into a trot. I made no protest. I was beaten, cowed. The antenna on the left pulled; I went to the left. The one to the right tugged; I went to the right. My rider drove me past mounds where ants perched watching, much as cowboys of the past were wont to straddle corral fences and observe one of their number perform. They slithered what was undoubtedly their applause. For about twenty minutes I was put through my paces; made to walk, canter, circle, wheel and stop at command. Finally the insect slid from my shoulders and I sank to the ground, too miserable and distraught to care whether I lived or died. I flinched and closed my eyes when it patted me with its antennae and slithered soothingly, much as a man might pat a

horse and at the time say, "There, there, old boy, don't be afraid." Afterwards a quantity of raw vegetables and what appeared to be coarse grain cakes were tossed to me and the insect went away. I lay there for a long time, hardly stirring a finger, when the Professor came up and sat down beside me.

"No," he said, "they didn't ride me. Too old, perhaps."

He picked up a grain cake and gnawed at it hungrily.

"Try one, my boy, they're not half bad. Besides you'll feel better if you eat something."

I suppose it seems queer to tell it, but we sat there on the rough grass, with the slithering ants coming and going about their business, and ate those cakes. Neither one of us had tasted food since the day before—or was it several centuries before?—and were half starved. Only hunger could make eating at all bearable with my sore and lacerated mouth. Suddenly the Professor spoke to me in an odd tone.

"My dear boy, I don't like to arouse any false hopes, but will you take a look at that thing in the air and tell me what you think it is."

I glanced up apathetically enough; then at sight of what I saw I leaped to my feet with a wild cry; for, soaring through the air at a height of about seventy feet from the ground was a craft of shining metal.

"An airship!" I shouted deliriously. "An airship!"

Yes, it was an airship. There could be no doubt of that. And where there was an airship, there must be human beings, men.

"Then civilized people are still living on the earth," cried the Professor exultantly. "Quick, my boy, shout and attract the driver's attention."

He had no need to urge me. Pain, weariness and despair were forgotten as I waved madly. "Help!" I shouted, dancing up and down. "Help!"

The strange craft jerked to a pause in mid-air, hung motionless for a moment, then sank directly earthwards for what must have been forty feet or more. Over the side looked a girl, her beautiful face wearing a look of amazement.

"For God's sake, help us!" I shouted again, "or the ants . . ."

I got no further, fear throttling my voice, for the ants were coming. Thousands of them suddenly appeared in sight, literally covering the tops and sides of the mounds. They saw the airship; there could be no doubt of that. A half million antennae reached threateningly heavenwards, and the angry slithering of them appalled the ears. The woman shouted something, what I could not hear, and waved her hand. Even as some of the insects surged down from the mounds and made for us, the airship dropped. It was a close thing. We leaped and clutched the metal sides, hanging on with the grip of desperation, as the strange craft brushed the earth like a feather and soared aloft again. I felt the sucking claws of an insect fasten to one leg and kicked out in a vain endeavor to rid myself of it. Suddenly a withering ray flashed from a cone in the girl's hand and played on the insect. There was an acrid smell of burning, a little flash of light, and the grip on my leg relaxed. With a sob of relief, I stumbled over the side of the car and fell in

a heap on the floor. "Safe, my boy, safe!" exulted the Professor, who had preceded me; then, turning to the girl, who was regarding us with wide-eyed wonder, he asked, "What year is this?"

"2450," she answered in perfect English.

"A.D.?"

"Yes."

"Hum," muttered the Professor, making a quick mental calculation. "Five hundred and twenty-five years in the future."

But I was too busy adjusting myself to this sudden change in our fortunes to give him much heed. Far below us the earth was unrolling like a checkered carpet, mounds, hillocks, trees sweeping by at considerable speed. What power was driving the airship, I wondered. There was no sign of a propeller; neither did the craft possess wings and a rudder; nor any of the other properties associated in my mind with flying machines. Only the girl stood in front of a square box and now and then shifted a small lever. She was, I judged, twenty-one or two, with red-gold hair, eyes like slanted almonds, and skin of yellow ivory. Her lithe body was of medium height and clad in a loose-flowing robe of some scarlet-colored material.

"Where are we going?" I asked her.

"To the Castle," she answered.

As she regarded me, I realized for the first time that I was naked; but the Professor seemed blissfully unconscious of the lack of any clothes.

"We have to thank you for rescuing us from a very dangerous and awkward position," he said courteously.

"I took you for beast men at first," she replied, "and if you hadn't called out in English, I shouldn't have stopped. Tell me, where do you come from and how did you fall into the hands of the Master Ants?"

"We came from the past," replied the Professor, "and landed on the plain about seven miles from where you picked us up. The insects—what you call Master Ants—captured us there."

"The past?" questioned the girl. "Where is that? Over the sea?"

"No," answered the Professor. "In another age, an earlier one than this. Out of the past, you know."

The girl didn't know. She stared at the Professor as if she thought the hardships we had undergone had unbalanced his mind. As for me, I was content to sink into a seat and wonder what kind of place was this Castle she was taking us to, and what manner of people were they who inhabited it in the year of our Lord, 2450. I had not long to wonder. About an hour's flight brought us in sight of a vast structure which crowned the top of a high hill. Its walls glittered like dull silver under the rays of the afternoon sun, and its roof seemed to be one large garden or park. Never had I seen anything more beautiful or bizarre. Here and there domes of silver towered among swaying palm trees, spruce and live oak. The car swooped down like a homing bird and came gently to rest on a wide plaza and was immediately surrounded by a crowd of curious people of all ages and both sexes. The women were clad in gay-colored dresses; the men wearing white trousers, with soft linen tunics. Both men and women went bareheaded and bare-

footed, and the men were clean-shaven. At sight of us, the women and children fell back with cries of alarm, and some of the men made as if they would attack us forthwith; but the girl cried out that we were not beast men, but English-speaking travelers whom she had rescued from the Master Ants. At this announcement hostility ceased, but the amazement with which we were regarded deepened.

"How is this possible?" said one handsome young fellow. "Save for ourselves, there are no English-speaking people left alive in the two Americas, and for three hundred years no word has come from Europe. The Master Ants rule this country, and perhaps the world. Where, then, could these men have come from unless it be from the ranks of the beast men?"

"We are Time Travelers," began the Professor; "we come from . . ."

But a tall, commanding man of about sixty interrupted him.

"Our guests are worn and weary. Time enough for questions after they have bathed and fed and rested. Come, come! Are we of Science Castle so inhospitable as to leave two wayfarers to faint at our very door?"

At these words, the young fellow fell back abashed and willing hands lifted us from the aircraft. It is hard to tell of the exquisite enjoyment of the next few hours. We were led into a central roof building of dull silver and bathed and washed. Soothing lotions were applied to my wounds. Our bodies were anointed with refreshing balms and swathed in soft robes. Tangled beards were clipped to the skin and our faces shaved. After all these ministrations, I glanced in a mirror and saw the reflected features of a man of about forty-odd, bald of head, yet not entirely unreminiscent of the youth I once had been. Food was served to us as we lay on soft couches. First a thick broth, aromatic, satisfying; then various dishes whose names I did not know; but all were palatable. After eating, we fell asleep and slept, we discovered later, until eight o'clock of the next morning.

Without a doubt, our couches had been enclosed by four walls when we fell asleep. What miracle was this? We were lying in an open space with only some green shrubbery between us and the wide plaza on one side, and walks and gardens on the other three. Children were romping in the plaza, evidently laughing and shouting, yet their voices came to us but faintly.

"I suppose we're not dreaming," said the Professor. He got up and took a few steps forward; then came to an abrupt halt. "This is very odd," he said; and even as he spoke, the four walls magically enclosed us, the Professor standing with his face against one of them.

"Good morning," said a laughing voice. "I forgot your room was to be left opaque and turned on the ray."

It was the handsome youth who had questioned us the day before.

"The ray?" asked the Professor.

"Oh, I forgot!" exclaimed the youth. "Everything is probably strange to you. The ray is what makes the walls transparent, so that one can look through them."

"But what is it?"

The youth looked puzzled. "Why I don't know that I can tell you,

offhand." He scratched his head in perplexity. "I guess it's like electricity used to be. Thousands of people turned it on every day, but nobody could tell you what it was."

We dressed ourselves in white trousers and soft tunics of a fair fit and followed him to a central dining room. It was strange to walk through what was undoubtedly the corridor of a large building and yet never be certain whether one were indoors or out. Two or three hundred people were breakfasting in this central room and I noticed that they seemed to be a mingling of all races. There were some with the slanted eyes and yellow skin of the Chinese; others, plainly, had more than a drop of Negro blood in their veins; yet all were mingling with their white companions on terms of perfect equality. In Science Castle, I was to learn later, no distinction was made as to race or color. Among the early inhabitants had been numbered Japanese, Negroes, and Chinese, as well as whites. A common foe, a common vital danger had served to weld the various strains together. "Race and color antagonisms," a Scientian told us, "would have proved fatal to the small community. Of necessity a mingling of races took place. My grandfather was a Negro. The girl who rescued you has Chinese blood in her veins. Whatever differences existed among our people in the early days has been ironed out by centuries of a common culture and environment." But I am anticipating.

Breakfast consisted of fruit, cereal, scrambled eggs, and milk, and we served ourselves cafeteria fashion. After eating, we repaired to the plaza where several hundred people were gathered, seated on the grass or on rustic benches. Seats were given us on what was evidently the raised platform of a speaker's rostrum. The tall, elderly man who had spoken for our welfare the night before, received us kindly.

"My name," he said, "is Soltano, Director of Science in Science Castle. I am speaking for my companions as well as for myself when I assure you that you are welcome to our home and refuge, and need fear no harm. However, you must realize that it has been centuries since strangers like yourselves have entered Science Castle, and understand that your rescue and coming has caused us untold amazement. Now that you are clothed and shaved, we readily perceive you to be, not beast men, but civilized beings like ourselves. Yet are we puzzled as to whence you could have come."

The Professor replied courteously: "My companion and myself thank you for your kindnesses to us and gratefully receive your assurances of future asylum and safety. A little of your curiosity, I can understand, and shall do my best to satisfy it."

He had raised his voice so that the words might carry to the people below.

"There is no need to pitch your voice above its ordinary key," explained Soltano. "This rostrum is really an instrument which broadcasts and magnifies it. Everyone—even those of us who are employed elsewhere—will pick up what you say by means of ear-phones."

I noticed, then, that the attentive people in the plaza were holding round

devices to their ears and ceased wondering how some of them, leaning on the parapet two hundred yards away, expected to hear.

"Splendid," said the Professor. "Some sort of an amplifying, radio machine, I see." He beamed on Soltano. "I merely talk to you, is that it? and all will hear." For a moment I thought he was going to interrupt the interview long enough to examine the platform; but if he wanted to do so, he conquered the temptation. "My name," he said, "is John Reubens, late Professor of Physics at the University of California, and this lad here is Raymond Bent, my secretary. We are Time Travellers."

"Time Travellers!" echoed Soltano.

"Yes," replied the Professor, "from the year 1926. This means, of course, that we have come five centuries and a quarter out of the past."

There was a stir in the crowd below. Soltano looked amazed, as well he might. "This is a strange thing you are telling us, John Reubens," he said at last, "and well-nigh incredible. Much simpler would it be to believe that you had managed to come over the sea from Europe or from Asia. Never have we listened to such a tale before."

"Nor anybody else," replied the Professor with dignity, "as we are the first human beings ever to make such a trip."

"And how did you come?"

"By means of a Time Machine, the remains of which lie rotting on the spot where the Master Ants discovered us." He then proceeded to tell of the building of the Time Machine, of our incredible rush through space and of our awakening in another age. Then he told of our subsequent capture by, and experiences with, the insects. When he had finished, excited talking and gesturing broke out among the people below. Evidently there were doubting Thomases among them, who discounted our story. But the Professor was not disturbed.

"If you are amazed at what I have told you," he said, "how much more amazed are my companion and myself to find ourselves in a future where ants ride men as steeds and human beings live penned in such a castle as this. Such a state of affairs was not even dreamed of when we left our own day and age. Naturally we are curious to learn how it has come about."

"Our historians are not quite clear as to that," replied Soltano. "If you came through time from 1926, then you left your period years before the ants began their attack on mankind. It was in 1955 that the papers printed news of a queer happening in South America. Natives came fleeing from the jungles with stories of how the white ants were eating everything up in the forests—even men! In the United States no one paid much attention to the news. The world, at that time, was in a state of political unrest and the government and people were watching Europe and building up a great air force, they were too busy to give heed to preposterous yarns emanating from Latin America. A year later the newspapers again flamed into headlines with news from Argentina, Peru, and Brazil. Small towns in the interior of these countries were being devastated. It had always been known that termites would destroy things carelessly left exposed in the fields or jungles; but now

they were eating up brick and stone. Buildings collapsed at the touch of a hand. Men woke and turned to wake a sleeping companion who dissolved into dust at a pressure. Sunday supplements carried lurid stories and sensational pictures for the edification of their readers. Then all such nonsense was swept into oblivion by the outbreak of war. In the United States ensued what were called prosperous times. Munition factories provided well-paid work for thousands of workers and made millions of dollars for hundreds of millionaires. Everybody was busily employed and had no time to think of crazy happenings reported from crazier republics. Only a few scientists from the Smithsonian and other institutes went down to South America to investigate and wrote back long reports which were read with foreboding by a few learned men and ignored by everybody else. The papers they wrote —the records of those days—are preserved in our library."

"But the Master Ants," asked the Professor, "where did they come from, and how did they overwhelm the United States?"

Soltano waved his hand. "I am coming to that. The Master Ants were first noticed six years after the depredations of the white ants commenced. How they came nobody knows. Only in the nests of the termites, in the little galleries and chambers underground, something stupendous was taking place, something fraught with disaster for the human race. During thousands of years the white ants had undoubtedly been changing, evolving, acquiring, God only knows, what knowledge. It is all speculation, of course, but you doubtless recollect how the bees, by feeding their larvae different foods, will produce at will a queen, a drone, or a worker. Well, the white ants had discovered how to make such food—and to feed it to their larvae. At any rate, the Master Ants appeared. No one had ever seen them before. They swarmed down from the jungles by the hundreds of thousands, and wherever they went the people were stricken and fell in the fields and the streets. We now know that the termites bit them, injecting a subtle poison into their systems which induced a species of paralysis; but at the time it was only known that of every three that fell, two were devoured, and that the third one recovered, stupid, beast-like, to become the creature of the Master Ants. In vain the southern republics sent their soldiers to battle the insects. Guns crumbled to pieces in their hands. Armies lay on the ground to bivouac and only one soldier out of every three ever rose again—and he rose to bear an ant on his shoulders and chase his fleeing countrymen. Panic spread. Natives fled to the seashore and put to sea in all kinds of unseaworthy crafts—only to drown by the thousands. When the Master Ants finally occupied the crumbling ruins of Rio de Janeiro, the whole world was forced to realize that something terrible was happening in South America; and when fifteen years later, all South America having come under their sway, the termites were reported to be making inroads on the Canal Zone, a feeling of uneasiness swept through the people of the United States. Still it seemed impossible that the mighty northern nation could be invaded and flouted by such an insignificant thing as an ant. Newspapers ran articles written by government experts, pointing out how absurd it was to even entertain the thought. South America had succumbed, said the experts,

because she had been a tropical wilderness without proper chemical defense. Elaborate plans were drawn up, showing how the border states were protected from invasion by systems of pipes and sprays; showing how fleets of airships were prepared to drop tons of chemicals and explosives. Only the scientists who had studied the tactics and methods of the ants knew how futile these preparations were; but they and their suggestions were ignored by the petty politicians and nincompoops who were directing the affairs of the country."

Soltano paused. I stared at him, wide-eyed.

"And the ants came," breathed the Professor.

"Yes, the ants came. Millions of them were killed with explosives, with gases and poisonous chemicals, but their numbers seemed as exhaustless as the sands on the seashore. In the space of a year they ate up the pipes and put the sprays out of commission. But you will have to read the history of those times for a more detailed account. Then you will learn how the United States soldiers marched against the invaders and met the same fate as had previously befallen the armed forces of South America and Mexico. The scientists had suggested that the soldiers go mailed in a composite metal they had made from the blend of three other metals, comprehensive experiments having shown it to be the only substance the ants could not devour. Guns, pipes, everything possible, they said, should be protected with a casing of this metal. No one paid any attention to them. Rebuffed, a group of them interested financial backing and retired to this hill. Here they congregated machines and workers and started building the castle you now see. It was intended at first for an observation base, merely; an outpost, as it were, from which to spy on and study the habits of the insects. But as the years passed, and it become increasingly clear that the country was doomed, the place became thought of as a permanent home and refuge. Commenced in 1975, it was not finished until the year 2000. For some reason the ants were, comparatively speaking, slow in infesting North America. Perhaps the cooler climate had something to do with this. For instance, they swept through south Texas and all of the southern states before they fared further north. When their coming finally drove the inhabitants of this vicinity panic sticken before them, the scientists—those of them who still lived—entered the Castle, accompanied by the workers and their families, and we, whom you see today, are their descendants."

"But the rest of the people!" cried the Professor. "What became of them?"

"They went crazy with fear," replied Soltano. "For fifty years the United States was increasingly the habitat of terrified mobs. The economic life of the country became disrupted. Citizens, white and black, fled from the southern states and added to the congested panic of northern cities. Famine raised its gaunt head; crime became prevalent. Hundreds of thousands died of hunger, of disease epidemics. Those who could beg, borrow or steal a passage abroad, fled to Europe, to Asia. Out of what was estimated to be a population of a hundred and fifty millions in 1950, only seven millions were living in America when the ants turned north."

"And now?" asked the Professor.

"In the whole western hemisphere there are probably a few hundred thousand beast men bred by the Master Ants for food and transportation."

I stared at the Professor with horror. Only yesterday, it seemed, we had left a populous, thriving America. Great industrial cities had sent their smoke and ash into the sky; giant locomotives had carried thousands of people on two ribbons of steel over thousands of miles of country; and now . . . now . . . it was all as if it had never been. Could it be possible that five hundred years had dissipated an empire? Five hundred years!

"Come," said Soltano; "enough of such matters for the nonce. You will learn more of us as the days pass, as you become better acquainted with us individually."

He led the way down into the plaza where we were immediately surrounded by the crowd and warmly greeted.

When I stepped down from the rostrum on that first day in Science Castle, it was to meet the girl who had rescued the Professor and myself from the Master Ants. Her name was Theda. If anything, she looked more beautiful than she did the day before.

"You have gone through much danger, Raymond," she said shyly.

"It was worth it, if it brought me to you," I replied; and meant it.

She did not seem displeased.

"It is the hour for bathing. Let us go to the pool."

I looked around for the Professor; but he was walking away with a group of elderly Scientians, who were evidently bent on entertaining him.

"Very well," I said.

The pool was an artificial pond perhaps fifty yards square. I plunged after her into the pool. When I drew myself, panting, out of the water at the other end of the pond, it was to find myself sprawling beside the handsome lad who had called me to breakfast. His name, I learned, was Servus, and he was Theda's twin brother. Their parents, he informed me, were both dead. Theda and he were enthralled with my accounts of the life and customs of 1926. By the time we were ready to dress for lunch, the three of us were firm friends.

In the days that followed, I learned a great deal about Science Castle and its inhabitants. With Theda and Servus I walked the parapets which circled the roof of the Castle and looked down the steep sides that fell a sheer eight hundred feet before they touched earth. From the foot of the Castle, the hill sloped away. To the east, as far as the eye could see, stretched a level waste; and to the northwest lay a range of somber hills. On the plain, twenty-five hundred feet below, grew nothing green. The sight reminded me of something about which I had wondered more than once.

"How do you get water?" I asked Servus.

"In the early days," he replied, "we relied on wells, boring as deep as four thousand feet; but two hundred years ago they began to fail us. There was a terrible time, I believe, when we were faced with a water famine. Efforts were made to bring water from distant lakes, but without success. Then just in time, our chemists discovered how to make water."

"Make water!" I exclaimed.

"Yes, from hydrogen and oxygen, you know. Now all the water we use is manufactured and stored in great tanks far down in the depths of the Castle, from whence it is raised by means of force pumps."

"Wonderful," I said, marveling at such ingenuity. But wonderful things were what one learned to expect at Science Castle. For instance, the Professor and I were invited one day to be present at a history review to be given to the children of the Castle. The walls of the classrooms were made transparent by means of the ray and there was all the illusion of being outdoors. Highly perfected projecting devices showed moving pictures depicting the building of the Castle. It made me gasp with awe when I realized that the opening reels of this stupendous picture had been taken five hundred and fifteen years before. One saw the motor caravan of scientists and workers coming to the hill and watched breathlessly as the earth was broken by great steam-shovels. One saw the vast walls of the Castle growing upward foot by foot, and finally the finished structure being furnished and stored with all the myriad inventions and devices of the twentieth and twenty-first centuries. In the same manner we were shown how the Castle was enlarged in 2075. Workers sheathed in protecting metal armor labored to raise walls. When these walls were finished and floors installed, they were scoured with flaming rays which hardened the metal and destroyed whatever insect life might have gotten inside them. So inch by inch we watched the pictured story of how the Castle had grown to its present proportions.

"Some moving picture," I breathed to the Professor. "What a knockout that would be for Cecil B. DeMille! Did you notice the scene where the panic stricken people rushed by pursued by the ants?" I shuddered. "And the one where the scientists and workers were hoisted up the walls into the Castle? What I can't understand is why the ants couldn't have swarmed over the walls and wiped everyone of them out."

Soltano overhead me. "Because," he replied, "the walls were electrified. Nothing could have lived on them after the current was turned on."

About a week after this the Professor and I were taken into the body of the Castle proper. Far down under the fairy-like buildings and blooming gardens on its roof, were the machine-shops, the laboratories which made possible the pulsing life above. Here we saw great dynamos and whirring machines at whose functions I could not even guess. In one vast room men were putting the finishing touches to what were evidently a number of airships; in another, workers were manufacturing crude oils and thick greases. Whole floors were given over to experimental and research work of too complicated a nature for me to attempt to describe. The Professor was enthralled. He was in his element here and hated to go on.

"What do you do for metal?" he asked suddenly. "Iron, tin, zinc?"

"Hemmed in as we are," replied Soltano, "sufficient metal has always been difficult to obtain. However, we have managed it. A great deal of our tanks, wheels, shafts, and so forth, are made from pulp, from trees grown in the gardens above, and even from vegetable tops, leaves and vines which, treated by a chemical process we have discovered, serve our purpose very well. Iron

is the one metal, however, for which we must mine. In those hills north-west of us are old mines which we still work when ore is needed. The work is hard and dangerous. The men engaged at it must go clothed in protecting metal and be constantly protected with flaming rays. However, some day when ore is needed, you may go with us in the airships and see the whole process for yourself."

He dismissed the subject hastily, evidently having something of further interest to show us.

"That," he said, pointing to great metal tanks and a mass of complicated pipes and whirring wheels, "is where the water is made."

He pressed a button. The walls surrounding us became transparent, and looking out we could see the brown slope of the hill. Suddenly I focussed my gaze. About twenty feet from where we stood was a small mound. Something behind it stirred. I caught a glimpse of a metallic body, of waving antennae. "Yes," said Soltano, "it is a Master Ant; they are all around us. But I did not bring you down to show you them; I am going to show you something far more deadly." He guided us into a large lift. "Under us, the foundations of the Castle sink into the ground for a hundred feet. It is where we manufacture the composite metal when needed." The lift sank silently into blackness; the noise of clanging machinery above grew fainter, seemed farther away, almost ceased. We stepped forth into a wilderness of massive columns. Soltano pressed the now familiar button and the walls faded. We could see the black earth beyond them, and even, it seemed, a foot or two into it. Something gray out there was moving and turning along little runways and tunnels. Millions and millions of tiny things were ceaselessly burrowing and gnawing. For a moment I did not understand, then Soltano spoke and enlightenment came to me. There were the termites—the white ants.

"Behold the enemies we fight," said Soltano solemnly. "The insects out there are far more dangerous to us than the Master Ants, whose creators they are. Those termites are seeking to demolish the very foundations on which the castle rests by eating away the earth from under them."

I felt the gooseflesh rise on my skin.

"Three times in the last one hundred years have we had to sink our foundations further into the earth. Originally, this basement was only fifty feet deep. Now it is a hundred. In a few years it will be more than that."

"But good God!" I cried; "can't you do something to stop them?"

He shrugged his shoulders. "So far—no! However, our chemists, our various scientists, are busy experimenting night and day. It is hoped that we may perfect a poison, a ray that will kill them off, prevent them from coming near the castle walls."

"And if you cannot?" asked the Professor.

"If we cannot," replied Soltano; "then some day . . ." He made a fatal gesture with his hand.

I thought of the busy, joyful life far above, of the green gardens and the

laughing women and children. I thought of Theda, and I suddenly realized how much she had grown to mean to me.

"Professor," I said that night when we had retired to our room, "with all those machines and tools at your command, couldn't you make another Time Machine?"

"I possibly could," replied the Professor.

"Then why don't you?"

"Perhaps I shall. Soltano has promised to put a laboratory at my disposal, you know."

Much relieved, I turned away. Here was a way out for Theda and myself. I fell asleep and dreamed I had taken her back on a time machine to 1926 and was showing her the University campus and pointing out the time on the campanile clock. At breakfast, Theda stood behind the counter and filled my tray with cereal, fruit, toast and eggs. That was one thing I had early noticed: there were no idlers tolerated in Science Castle. All worked at something useful. One week Servus, for instance, washed dishes three hours a day; the next he would be tending to the vegetable gardens; bringing in the fresh heads of cabbage and lettuce, gathering the firm, red carrots, or digging potatoes. At my own request, I was given such work. I was amazed at the fertility of those gardens, amazed that fruit trees would grow at all under such conditions.

"Is the soil renewed very often?" I asked Servus.

He shook his head. "It is never renewed."

"Then you must have good fertilizers?"

"We have—electricity."

"Electricity!" I exclaimed.

"Why, yes. Taken from the air by means of magnetism. But you shouldn't marvel at that so much. Didn't a German engineer do as much in your day? But whereas he got two crops from sandy soil, we get seven."

So it went. I had noticed no animals of any sort in Science Castle, not even cows, yet there was no lack of eggs, butter, milk or meat. Servus again explained the mystery. "Milk is made from turnips and potatoes," he explained. "I believe a man named Ford did that in 1926. Eggs and meat are manufactured synthetically." He went into technical details which there is no need to set down here.

Truly a wonderful place, this Science Castle. It was difficult to realize that its brilliant inhabitants were chained to a hill-top by insects which for centuries had been man's hopeless inferiors. But were they so chained! Hadn't Theda rescued the Professor and me by means of an aircraft? And hadn't Soltano shown us others in the process of being built? And hadn't we been invited to take trips in them? One night while I sat with her on the parapet in the moonlight, I asked Theda about it. "Yes," she replied, "we have air vessels; but save for mining ore they do not do us much good."

"Why not?" I asked.

"Because outside of Science Castle there is hardly a spot they dare land."

"But there is Europe and Asia," I exclaimed. "Perhaps the ants do not control there."

"On the average of once in every ten years," she replied, "expeditions have left here for over the seas—and never returned. My father commanded the last aircraft to attempt the flight. That was five years ago," she added softly. I pressed her hand.

"But they seem to be wonderfully well-controlled machines," I said. "What drives them?"

"Radio power. Waves are sent from a controlling center in the Castle here and received by a device incorporated in the airships themselves. Complete control of the machine is invested in the driver by means of a lever which operates a very simple mechanical arrangement. For a radius of several hundred miles, and in fair weather, the aircraft are absolutely safe and easily handled. Many of us use them for pleasure rides. But beyond that—" She shook her head. "Perhaps atmospheric conditions interfere with the waves when sent over too great a distance; perhaps the receiving apparatus fails to operate beyond a certain point, though theoretically they should pick up power waves four thousand miles from the sending station. All we know, however, is that those who venture too far—vanish. Perhaps they fall into the sea and are drowned. Or worse still, on the plains, and the Master Ants. . . ." Her voice shivered to silence. For comfort against a black spectre which took on the hideous form of an insect, we drew together.

"Theda," I said unsteadily. "O Theda! Would you . . . will you . . ."

In answer she kissed me.

Under the thin metal roof which is all that shuts away from us the hordes of conquering ants, I am seated, putting the finishing touches to this manuscript. Of the terrible catastrophe which has occurred, I can hardly write. We were standing one day by the parapet when a young Scientian who had gone on a pleasure spin, planed down from the sky and landed on the plaza. His face was ashen-grey.

"What is it?" demanded Soltano sharply.

"The ants!" gasped the breathless youth. "The ants have taken to the air!"

"To the air! What do you mean?"

"That they have mounted the back of insects, of wasps a yard long, and are flying!"

Instantly the Castle was in an uproar. From every direction the Scientians came rushing; from the depths of the Castle, from the gardens and the pool. They assembled in the plaza and listened to the tale the youth had to tell. Attracted by strange activities among the mounds, he had flown nearer the ground than usual, when great insects had spread gossamer wings and pursued him. Fortunately, the speed of the airship had outdistanced them, though at first it had been a close chase! When he finished speaking, Soltano mounted the rostrum and addressed the gathering.

"Fellow Scientians," he said, "if what we have just heard be true, then Science Castle is in immediate and grave danger. You will remember that we have often discussed the possibility of an alliance between the Master Ants and other insects. Now it seems they have enslaved or enlisted a winged insect, probably of the bee family. Not only that, they have evidently

fed them with special foods until monsters, capable of bearing a Master Ant aloft, have been produced. Sooner or later we shall be attacked. The great cone must be manned at once; the chemical pumps made ready. Let everyone hasten to his post, for we are facing the gravest crisis in our history."

I stared at the Professor with fear. He stared back at me grimly.

"What do you think?" I asked with dry lips.

"That the situation is desperate."

"But the ray cones, the acids!"

"My boy," he said solemnly, "if those insects have really taken to the air, then God help us!"

I sank nervelessly into a seat; then sprang up again as the remembrance of something sent a thrill of hope through my heart.

"The Time Machine!" I cried. "Surely you have finished it by this time!"

The Professor nodded. "Yes," he said, "it is ready."

"Then we can make our escape by means of it."

He looked at me pityingly. "I'm afraid not."

"What's the matter with it?"

"Nothing. Only you forget something."

"Forget what?"

"How we aged when we travelled in it before."

"Well!"

"Don't you see? It would have the same effect on us again."

For a moment I did not understand; then the appalling truth staggered me like a bolt from the blue. The Professor read the dawning comprehension on my face.

"Yes," he said slowly, "yes. If age is caused by the action of environment, then the same friction would be encountered by the body whether it traveled forward in time or backward. In returning to 1926, we would be subjected to the same resistance, the same wear and tear, as we were in coming from it. That would mean annihilation for me, death. For yourself and Theda, would it be much better? You could expect to find yourself an old man of eighty or ninety, penniless, unknown, in charge of a middle-aged woman. What good would that do either you or Theda? Besides, there is something else to consider. Do you realize that it was only a miracle we escaped death when our Time Machine fell to pieces on the plain out there? Yet there is no way of returning a machine to 1926, save by hurling it back in time until it, too, disintegrates from old age!"

As I stood glaring at him in horror, there came the terrified clamor of hundreds of voices.

"Look!" cried a woman's shrill voice. "Look!"

Far out on the plain had risen what seemed an eddying cloud. Even as we gazed, petrified, there rose another, and yet another, until the sky was black with them. The Master Ants were coming to the attack!

Of the ghastly fight which took place on the roof, there is little to say. The millions of insects, with their winged steeds, simply fell upon the giant ray cone and smothered it to ineffectiveness with their charred bodies. Nearly two hundred of the Scientians fell in battle, stung to death by the sword-

like stings of the flying insects. The remainder fled panic-stricken from the roof into the interior of the Castle and sealed up the entrance with impregnable composite metal. By means of the transparent ray it is possible to look through the walls and ceiling. The once fair garden is being eaten and destroyed. The fruit trees are crumbling into dust. All that is vulnerable is a decaying wreck. As I look at the scene of unutterable desolation, despair grips my heart, and a wild desire to strap myself in the Time Machine and quit this terrible future for the past, almost overwhelms me. But that is impossible. There is nothing to do but stay and face whatever the future holds in store for us. Soltano maintains that our situation is not yet hopeless. Those Scientians amaze me. Their courage and optimism in the face of disaster are wonderful. Now I know what their religion is: It is an abiding faith in the power of their science to aid and uphold them. The Professor tells me of an intricate arrangement for supplying us with air; I do not understand it yet very well, but it is made clear to me that we can live in the interior of the Castle indefinitely. Water and synthetic foods can be made. Meantime, in the splendidly equipped laboratories and machine shops, the scientists and inventors are rushing forward experiments which may release, they say, the energy in the atom and give us possession of weapons which will destroy the ants and return the lordship of America to man. But as to this, I do not know; I hardly dare hope. Theda leans over me and presses her soft cheek against mine, and though I do not feel at all heroic, I am comforted and made stronger by her love.

Escape or help seems impossible. Nevertheless, I am going to tie this manuscript in the Time Machine, which stands ready at my side, and send it back to the period I have left forever. I repeat my hope that it will fall into the hands of intelligent people and that its contents will be made known to the public. It may be that we shall overcome the ants in the inevitable final conflict between men and insects. In that case we will try to communicate with the twentieth century again. If not, then we bid a final farewell to the people of 1926.

Signed: Professor John Reubens,
Raymond Bent.

The nationally known lawyer laid down the incredible document. For a moment there was complete silence in the room. Finally the President of the University spoke.

"I suppose you wish our advice as to what disposition to make of this . . . this . . ."

"Exactly," returned the lawyer. "I am positive it is a hoax; and yet . . ."

"And yet," finished the Doctor of Science, "'there are more things in heaven and earth, Horatio, than are dreamt of in your philosophy!' as Hamlet said!"

The ordinary M. D. coughed. "There is something fishy about this whole affair," he said, "casting no reflections on our host, whose account of how the manuscript came into his possession I believe absolutely. Perhaps someone is trying to cover up the fact that twenty thousand dollars disappeared.

But that doesn't sound plausible either. My advice is to lock the manuscript up in a safe. Time enough to publish its contents to the world if any queer happenings should occur—in South America, for instance."

The five other men gave hearty approval to this plan, and there the matter rests, except that there are at least three men in Berkeley, California, who carefully scan the press every day for any strange news from Latin America.

THE END

In the Walls of Eryx

by Kenneth Sterling and H. P. Lovecraft

Although many of Lovecraft's weird epics may be described as science-fiction by the manner in which he made his horrors credible, he never once laid a story on the surface of another world. This tale would seem to be the exception. Laid on the planet Venus and involving space-borne explorers it was originally drafted by Kenneth Sterling, at that time a student in Providence, Lovecraft's home city. Sterling persuaded Lovecraft to revise his short story and so thoroughly did the master do so, that the young author insisted that the tale should carry both by-lines. Thus we have the one and only planet story to bear the signature of the master of eerie lore. The young student of those days is incidentally now a full-fledged M.D. engaged in cancer research.

BEFORE I try to rest I will set down these notes in preparation for the report I must make. What I have found is so singular, and so contrary to all past experience and expectations, that it deserves a very careful description.

I reached the main landing on Venus March 18, terrestrial time; VI-9 of the planet's calendar. Being put in the main group under Miller, I received my equipment—watch tuned to Venus's slightly quicker rotation—and went through the usual mask drill. After two days I was pronounced fit for duty.

Leaving the Crystal Company's post at Terra Nova around dawn, VI-12, I followed the southerly route which Anderson had mapped out from the air. The going was bad, for these jungles are always half impassable after a rain. It must be the moisture that gives the tangled vines and creepers that leathery toughness; a toughness so great that a knife has to work ten minutes on some of them. By noon it was dryer—the vegetation getting soft and rubbery so that the knife went through it easily, but even then I could not make much speed. These Carter oxygen masks are too heavy —just carrying one half wears an ordinary man out. A Dubois mask with sponge-reservoir instead of tubes would give just as good air at half the weight.

The crystal detector seemed to function well, pointing in a direction verifying Anderson's report. It is curious how that principle of affinity works, without any of the fakery of the old divining-rods back home. There must be a great deposit of crystals within a thousand miles, though I suppose those damnable man-lizards always watch and guard it. Possibly

they think we are just as foolish for coming to Venus to hunt the stuff as we think they are for groveling in the mud whenever they see a piece of it, or for keeping the great mass on a pedestal in their temple.

I wish they'd get a new religion, for they have no use for the crystals except to pray to them. Barring theology, they would let us take all we want; and even if they learned to tap them for power there'd be more than enough for their planet and the earth besides. I for one am tired of passing up the main deposits and merely seeking separate crystals out of jungle river-beds. Sometime I'll urge the wiping out of these scaly beggars by a good stiff army from home. About twenty ships could bring enough troops across to turn the trick. One can't call the damned things men, for all their "cities" and towers. They haven't any skill except building —and using swords and poison darts—and I don't believe their so-called "cities" mean much more than ant-hills or beaver-dams. I doubt if they even have a real language—all the talk about psychological communication through those tentacles down their chests strikes me as bunk. What misleads people is their upright posture; just an accidental physical resemblance to terrestrial man.

I'd like to go through a Venus jungle for once without having to watch out for skulking groups of them or dodge their cursed darts. They may have been all right before we began to take the crystals, but they're certainly a bad enough nuisance now, with their dart-shooting and their cutting of our water pipes. More and more I come to believe that they have a special sense like our crystal detectors. No one ever knew them to bother a man—apart from long-distance sniping—who didn't have crystals on him.

Around 1 p.m. a dart nearly took my helmet off, and I thought for a second one of my oxygen tubes was punctured. The sly devils hadn't made a sound, but three of them were closing in on me. I got them all by sweeping in a circle with my flame-pistol, for even though their color blended with the jungle, I could spot the moving creepers. One of them was fully eight feet tall, with a snout like a tapir's. The other two were average seven-footers. All that makes them hold their own is sheer numbers —even a single regiment of flame-gunners could raise hell with them. It is curious, though, how they've come to be dominant on the planet. Not another living thing higher than the wriggling akmans and skorahs, or the flying tukahs of the other continent—unless of course those holes in the Dionean Plateau hide something.

About two o'clock my detector veered westward, indicating isolated crystals ahead on the right. This checked up with Anderson, and I turned my course accordingly. It was harder going—not only because the ground was rising, but because the animal life and carnivorous plants were thicker. I was always slashing ugrats and stepping on skorahs, and my leather suit was all speckled from the bursting darohs which struck it from all sides. The sunlight was all the worse because of the mist, and did not seem to dry up the mud in the least. Every time I stepped my feet sank down five or six inches, and there was a sucking sort of *blup*

every time I pulled them out. I wish somebody would invent a safe kind of suiting other than leather for this climate. Cloth of course would rot; but some thin metallic tissue that couldn't tear—like the surface of this revolving decay-proof record scroll—ought to be feasible sometime.

I ate about 3:30, if slipping these wretched food tablets through my mask can be called eating. Soon after that I noticed a decided change in the landscape—the bright, poisonous-looking flowers shifting in color and getting wraith-like. The outlines of everything shimmered rhythmically, and bright points of light appeared and danced in the same slow, steady tempo. After that the temperature seemed to fluctuate in unison with a peculiar rhythmic drumming.

The whole universe seemed to be throbbing in deep, regular pulsations that filled every corner of space and flowed through my body and mind alike. I lost all sense of equilibrium and staggered dizzily, nor did it change things in the least when I shut my eyes and covered my ears with my hands. However, my mind was still clear, and in a very few minutes I realized what had happened.

I had encountered at last one of those curious mirage-plants about which so many of our men told stories. Anderson had warned me of them, and described their appearance very closely—the shaggy stalk, the spiky leaves, and the mottled blossoms whose gaseous, dream-breeding exhalations penetrate every existing make of mask.

Recalling what happened to Bailey three years ago, I fell into a momentary panic, and began to dash and stagger about in the crazy, chaotic world which the plant's exhalations had woven around me. Then good sense came back, and I realized all I need do was retreat from the dangerous blossoms, heading away from the source of the pulsations and cutting a path blindly, regardless of what might seem to swirl around me, until safely out of the plant's effective radius.

Although everything was spinning perilously, I tried to start in the right direction and hack my way ahead. My route must have been far from straight, for it seemed hours before I was free of the mirage-plant's pervasive influence. Gradually the dancing lights began to disappear, and the shimmering spectral scenery began to assume the aspect of solidity. When I did get wholly clear I looked at my watch and was astonished to find that the time was only 4:20. Though eternities had seemed to pass, the whole experience could have consumed little more than a half-hour.

Every delay, however, was irksome, and I had lost ground in my retreat from the plant. I now pushed ahead in the uphill direction indicated by the crystal detector, bending every energy toward making better time. The jungle was still thick, though there was less animal life. Once a carnivorous blossom engulfed my right foot and held it so tightly that I had to hack it free with my knife, reducing the flower to strips before it let go.

In less than an hour I saw that the jungle growths were thinning out, and by five o'clock, after passing through a belt of tree-ferns with very little underbrush, I emerged on a broad mossy plateau. My progress now

became rapid, and I saw by the wavering of my detector-needle that I was getting relatively close to the crystal I sought. This was odd, for most of the scattered, egg-like spheroids occurred in jungle streams of a sort not likely to be found on this treeless upland.

The terrain sloped upward, ending in a definite crest. I reached the top about 5:30, and saw ahead of me a very extensive plain with forests in the distance. This, without question, was the plateau mapped by Matsugawa from the air fifty years ago, and called on our maps "Eryx" or the "Erycinian Highland." But what made my heart leap was a smaller detail, whose position could not have been far from the plain's exact center. It was a single point of light, blazing through the mist and seeming to draw a piercing concentrated luminescence from the yellowish, vapor-dulled sunbeams. This, without doubt, was the crystal I sought—a thing possibly no larger than a hen's egg, yet containing enough power to keep a city warm for a year. I could hardly wonder, as I glimpsed the distant glow, that those miserable man-lizards worship such crystals. And yet they have not the least notion of the powers they contain.

Breaking into a rapid run, I tried to reach the unexpected prize as soon as possible; and was annoyed when the firm moss gave place to a thin, singularly detestable mud studded with occasional patches of weeds and creepers. But I splashed on heedlessly, scarcely thinking to look around for any of the skulking man-lizards. In this open space I was not very likely to be waylaid. As I advanced, the light ahead seemed to grow in size and brilliancy, and I began to notice some peculiarity in its situation. Clearly, this was a crystal of the very finest quality, and my elation grew with every spattering step.

It is now that I must begin to be careful in making my report, since what I shall henceforth have to say involves unprecedented—though fortunately verifiable—matters. I was racing ahead with mounting eagerness, and had come within a hundred yards or so of the crystal—whose position on a sort of raised place in the omnipresent slime seemed very odd—when a sudden, overpowering force struck my chest and the knuckles of my clenched fists and knocked me over backward into the mud. The splash of my fall was terrific, nor did the softness of the ground and the presence of some slimy weeds and creepers save my head from a bewildering jarring. For a moment I lay supine, too utterly startled to think. Then I half mechanically stumbled to my feet and began to scrape the worst of the mud and scum from my leather suit.

Of what I had encountered I could not form the faintest idea. I had seen nothing which could have caused the shock, and I saw nothing now. Had I, after all, merely slipped in the mud? My sore knuckles and aching chest forbade me to think so. Or was this whole incident an illusion brought on by some hidden mirage-plant? It hardly seemed probable, since I had none of the usual symptoms, and since there was no place near by where so vivid and typical a growth could lurk unseen. Had I been on the earth, I would have suspected a barrier of N-force laid down by

some government to mark a forbidden zone, but in this humanless region such a notion would have been absurd.

Finally pulling myself together, I decided to investigate in a cautious way. Holding my knife as far as possible ahead of me, so that it might be first to feel the strange force, I started once more for the shining crystal, preparing to advance step by step with the greatest deliberation. At the third step I was brought up short by the impact of the knife-point on apparently solid surface—a solid surface where my eyes saw nothing.

After a moment's recoil I gained boldness. Extending my gloved left hand, I verified the presence of invisible solid matter—or a tactile illusion of solid matter—ahead of me. Upon moving my hand I found that the barrier was of substantial extent, and of an almost glassy smoothness, with no evidence of the joining of separate blocks. Nerving myself for further experiments, I removed a glove and tested the thing with my bare hand. It was indeed hard and glassy, and of a curious coldness as contrasted with the air around. I strained my eyesight to the utmost in an effort to glimpse some trace of the obstructing substance, but could discern nothing whatsoever. There was not even any evidence of refractive power as judged by the aspect of the landscape ahead. Absence of reflective power was proved by the lack of a glowing image of the sun at any point.

Burning curiosity began to displace all other feelings, and I enlarged my investigations as best I could. Exploring with my hands, I found that the barrier extended from the ground to some level higher than I could reach, and that it stretched off indefinitely on both sides. It was, then, a *wall* of some kind—though all guesses as to its materials and its purpose were beyond me. Again I thought of the mirage-plant and the dreams it induced, but a moment's reasoning put this out of my head.

Knocking sharply on the barrier with the hilt of my knife, and kicking at it with my heavy boots, I tried to interpret the sounds thus made. There was something suggestive of cement or concrete in these reverberations, though my hands had found the surface more glassy or metallic in feel. Certainly, I was confronting something strange beyond all previous experience.

The next logical move was to get some idea of the wall's dimensions. The height problem would be hard if not insoluble, but the length and shape problem could perhaps be sooner dealt with. Stretching out my arms and pressing close to the barrier, I began to edge gradually to the left—keeping very careful track of the way I faced. After several steps I concluded that the wall was not straight, but that I was following part of some vast circle or ellipse. And then my attention was distracted by something wholly different—something connected with the still-distant crystal which had formed the object of my quest.

I have said that even from a greater distance the shining object's position seemed indefinably queer—on a slight mound rising from the slime. Now, at about a hundred yards, I could see plainly despite the engulfing mist just what that mound was. It was the body of a man in one of the Crystal Company's leather suits, lying on his back, and with his oxygen

mask half buried in the mud a few inches away. In his right hand, crushed convulsively against his chest, was the crystal which had led me here—a spheroid of incredible size, so large that the dead fingers could scarcely close over it. Even at the given distance I could see that the body was a recent one. There was little visible decay, and I reflected that in this climate such a thing meant death not more than a day before. Soon the hateful farnoth-flies would begin to cluster about the corpse.

I wondered who the man was. Surely no one I had seen on this trip. It must have been one of the old-timers absent on a long roving commission, who had come to this special region independently of Anderson's survey. There he lay, past all trouble, and with the rays of the great crystal streaming out from between his stiffened fingers.

For fully five minutes I stood there staring in bewilderment and apprehension. A curious dread assailed me, and I had an unreasonable impulse to run away. It could not have been done by those slinking man-lizards, for he still held the crystal he had found. Was there any connection with the invisible wall? Where had he found the crystal? Anderson's instrument had indicated one in this quarter well before this man could have perished. I now began to regard the unseen barrier as something sinister, and recoiled from it with a shudder. Yet I knew I must probe the mystery all the more quickly and thoroughly because of this recent tragedy.

Suddenly, wrenching my mind back to the problem I faced, I thought of a possible means of testing the wall's height, or at least of finding whether or not it extended indefinitely upward. Seizing a handful of mud, I let it drain until it gained some coherence and then flung it high in the air toward the utterly transparent barrier. At a height of perhaps fourteen feet it struck the invisible surface with a resounding splash, disintegrating at once and oozing downward in disappearing streams with surprising rapidity. Plainly, the wall was a lofty one. A second handful, hurled at an even sharper angle, hit the surface about eighteen feet from the ground and disappeared as quickly as the first.

I now summoned up all my strength and prepared to throw a third handful as high as I possibly could. Letting the mud drain, and squeezing it to maximum dryness, I flung it up so steeply that I feared it might not reach the obstructing surface at all. It did, however, and this time it crossed the barrier and fell in the mud beyond with a violent spattering. At last I had a rough idea of the height of the wall, for the crossing had evidently occurred some twenty or twenty-one feet aloft.

With a nineteen- or twenty-foot vertical wall of glassy flatness, ascent was clearly impossible. I must, then, continue to circle the barrier in the hope of finding a gate, an ending or some sort of interruption. Did the obstacle form a complete round or other closed figure, or was it merely an arc or semicircle? Acting on my decision, I resumed my slow leftward circling, moving my hands up and down over the unseen surface on the chance of finding some window or other small aperture. Before starting, I tried to mark my position by kicking a hole in the mud, but found the slime

too thin to hold any impression. I did, though, gage the place approximately by noting a tall cycad in the distant forest which seemed just on a line with the gleaming crystal a hundred yards away. If no gate or break existed I could now tell when I had completely circumnavigated the wall.

I had not progressed far before I decided that the curvature indicated a circular enclosure of about a hundred yards' diameter—provided the outline was regular. This would mean that the dead man lay near the wall at a point almost opposite to the region where I had started. Was he just inside or just outside the enclosure? This I would soon ascertain.

As I slowly rounded the barrier without finding any gate, window, or other break, I decided that the body was lying within. On closer view, the features of the dead man seemed vaguely disturbing. I found something alarming in his expression, and in the way the glassy eyes stared. By the time I was very near I believed I recognized him as Dwight, a veteran whom I had never known, but who was pointed out to me at the post last year. The crystal he clutched was certainly a prize, the largest single specimen I had ever seen.

I was so near the body that I could, but for the barrier, have touched it, when my exploring left hand encountered a corner in the unseen surface. In a second I had learned that there was an opening about three feet wide, extending from the ground to a height greater than I could reach. There was no door, nor any evidence of hinge-marks bespeaking a former door. Without a moment's hesitation I stepped through and advanced two paces to the prostrate body, which lay at right angles to the hallway I had entered, in what seemed to be an intersecting doorless corridor. It gave me a fresh curiosity to find that the interior of this vast enclosure was divided by partitions.

Bending to examine the corpse, I discovered that it bore no wounds. This scarcely surprised me, since the continued presence of the crystal argued against the pseudo-reptilian natives. Looking about for some possible cause of death, my eyes lit upon the oxygen mask lying close to the body's feet. Here, indeed, was something significant. Without this device no human being could breathe the air of Venus for more than thirty seconds, and Dwight—if it were he—had obviously lost his. Probably it had been carelessly buckled, so that the weight of the tubes worked the straps loose —a thing which could not happen with a Dubois sponge-reservoir mask. The half-minute of grace had been too short to allow the man to stoop and recover his protection, or else the cyanogen content of the atmosphere was abnormally high at the time. Probably he had been busy admiring the crystal, wherever he may have found it. He had, apparently, just taken it from the pouch of his suit, for the flap was unbuttoned.

I now proceeded to extricate the huge crystal from the dead prospector's fingers—a task which the body's stiffness made very difficult. The spheroid was larger than a man's fist, and glowed as if alive in the reddish rays of the westerly sun. As I touched the gleaming surface I shuddered involuntarily, as if by taking this precious object I had transferred to myself the doom which had overtaken its earlier bearer. However, my qualms soon

passed, and I carefully buttoned the crystal into the pouch of my leather suit. Superstition has never been one of my failings.

Placing the man's helmet over his dead, staring face, I straightened up and stepped back through the unseen doorway to the entrance hall of the great enclosure. All my curiosity about the strange edifice now returned, and I racked my brain with speculations regarding its material, origin, and purpose. That the hands of men had reared it I could not for a moment believe. Our ships first reached Venus only seventy-two years ago, and the only human beings on the planet have been those at Terra Nova. Nor does human knowledge include any perfectly transparent, non-refractive solid such as the substance of this building. Pre-historic human invasions of Venus can be pretty well ruled out, so that one must turn to the idea of native construction. Did a forgotten race of highly evolved beings precede the man-lizards as masters of Venus? Despite their elaborately built cities, it seemed hard to credit the pseudo-reptiles with anything of this kind. There must have been another race eons ago, of which this is perhaps the last relic. Or will other ruins of kindred origin be found by future expeditions? The *purpose* of such a structure passes all conjecture, but its strange and seemingly non-practical material suggests a religious use.

Realizing my inability to solve these problems, I decided that all I could do was to explore the invisible structure itself. That various rooms and corridors extended over the seemingly unbroken plain of mud I felt convinced, and I believed that a knowledge of their plan might lead to something significant. So, feeling my way back through the doorway and edging past the body, I began to advance along the corridor toward those interior regions whence the dead man had presumably come. Later on I would investigate the hallway I had left.

Groping like a blind man despite the misty sunlight, I moved slowly onward. Soon the corridor turned sharply and began to spiral in toward the center in ever-diminishing curves. Now and then my touch would reveal a doorless intersecting passage, and I several times encountered junctions with two, three, and four diverging avenues. In these latter cases I always followed the inmost route, which seemed to form a continuation of the one I had been traversing. There would be plenty of time to examine the branches after I had reached and returned from the main regions. I can scarcely describe the strangeness of the experience—threading the unseen ways of an invisible structure reared by forgotten hands on an alien planet!

At last, still stumbling and groping, I felt the corridor end in a sizable open space. Fumbling about, I found I was in a circular chamber about ten feet across; and from the position of the dead man against certain distant forest landmarks I judged that this chamber lay at or near the center of the edifice. Out of it opened five corridors besides the one through which I had entered, but I kept the latter in mind by sighting very carefully past the body to a particular tree on the horizon as I stood just within the entrance.

There was nothing in this room to distinguish it—merely the floor of thin mud which was everywhere present. Wondering whether this part of the building had any roof, I repeated my experiment with an upward-flung handful of mud, and found at once that no covering existed. If there had ever been one, it must have fallen long ago, for not a trace of debris or scattered blocks ever halted my feet. As I reflected, it struck me as distinctly odd that this apparently primordial structure should be so devoid of tumbled masonry, gaps in the walls, and other common attributes of dilapidation.

What was it? What had it ever been? Of what was it made? Why was there no evidence of separate blocks in the glassy, bafflingly homogeneous walls? Why were there no traces of doors, either interior or exterior? I knew only that I was in a round, roofless, doorless edifice of some hard, smooth, perfectly transparent, non-refractive and non-reflective material, a hundred yards in diameter, with many corridors, and with a small circular room at the center. More than this I could never learn from a direct investigation.

I now observed that the sun was sinking very low, a golden-ruddy disk floating in a pool of scarlet and orange above the mist-coloured trees of the horizon. Plainly, I would have to hurry if I expected to choose a sleeping-spot on dry ground before dark. I had long before decided to camp for the night on the firm, mossy rim of the plateau near the crest whence I had first spied the shining crystal, trusting to my usual luck to save me from an attack by the man-lizards. It has always been my contention that we ought to travel in parties of two or more, so that someone can be on guard during sleeping-hours, but the really small number of night attacks makes the Company careless about such things. Those scaly wretches seem to have difficulty in seeing at night, even with their curious glow-torches.

Having picked out again the hallway through which I had come, I started to return to the structure's entrance. Additional exploration could wait for another day. Groping a course as best I could through the spiral corridor, with only general sense, memory, and a vague recognition of some of the ill-defined weed patches on the plain as guides, I soon found myself once more in close proximity to the corpse. There were now one or two farnoth-flies swooping over the helmet-covered face, and I knew that decay was setting in. With a futile but instinctive loathing I raised my hand to brush away this vanguard of the scavengers, when a strange and astonishing thing became manifest. An invisible wall, checking the sweep of my arm, told me that, notwithstanding my careful retracing of the way, I had not indeed returned to the corridor in which the body lay. Instead, I was in a parallel hallway, having no doubt taken some wrong turn or fork among the intricate passages behind.

Hoping to find a doorway to the exit hall ahead, I continued my advance, but presently came to a blank wall. I would, then, have to return to the central chamber and steer my course anew. Exactly where I had made my mistake I could not tell. I glanced at the ground to see if by any

miracle guiding footprints had remained, but at once realized that the thin mud held impressions only for a few moments. There was little difficulty in finding my way to the center again, and once there I carefully reflected on the proper outward course. I had kept too far to the right before. This time I must take a more leftward fork somewhere—just where, I could decide as I went.

As I groped ahead a second time I felt quite confident of my correctness, and diverged to the left at a junction I was sure I remembered. The spiraling continued, and I was careful not to stray into any intersecting passages. Soon, however, I saw to my disgust that I was passing the body at a considerable distance; this passage evidently reached the outer wall at a point much beyond it. In the hope that another exit might exist in the half of the wall I had not yet explored, I pressed forward for several paces, but eventually came once more to a solid barrier. Clearly, the plan of the building was even more complicated than I had thought.

I now debated whether to return to the center again or whether to try some of the lateral corridors extending toward the body. If I chose this second alternative I would run the risk of breaking my mental pattern of where I was; hence I had better not attempt it unless I could think of some way of leaving a visible trail behind me. Just how to leave a trail would be quite a problem, and I ransacked my mind for a solution. There seemed to be nothing about my person which could leave a mark on anything, nor any material which I could scatter.

My pen had no effect on the invisible wall, and I could not lay a trail of my precious food tablets. Even had I been willing to spare the latter, there would not have been even nearly enough; besides which, the small pellets would have instantly sunk from sight in the thin mud. I searched my pockets for an old-fashioned note-book—often used unofficially on Venus despite the quick rotting-rate of paper in the planet's atmosphere—whose pages I could tear up and scatter, but could find none. It was obviously impossible to tear the tough, thin metal of this revolving decay-proof record scroll, nor did my clothing offer any possibilities. In Venus's peculiar atmosphere I could not safely spare my stout leather suit, and underwear had been eliminated because of the climate.

I tried to smear mud on the smooth, invisible walls after squeezing it as dry as possible, but found that it slipped from sight as quickly as did the height-testing handfuls I had previously thrown. Finally I drew out my knife and attempted to scratch a line on the glassy, phantom surface—something I could recognize with my hand, even though I would not have the advantage of seeing it from afar. It was useless, however, for the blade made not the slightest impression on the baffling, unknown material.

Frustrated in all attempts to blaze a trail, I again sought the round central chamber through memory. It seemed easier to get back to this room than to steer a definite, predetermined course away from it, and I had little difficulty in finding it anew. This time I listed on my record scroll every turn I made, drawing a crude hypothetical diagram of my route, and marking

all diverging corridors. It was, of course, maddeningly slow work when everything had to be determined by touch, and the possibilities of error were infinite; but I believed it would pay in the long run.

The long twilight of Venus was thick when I reached the central room, but I still had hopes of gaining the outside before dark. Comparing my fresh diagram with previous recollections, I believed I had located my original mistake, so once more set out confidently along the invisible hallways. I veered further to the left than during my previous attempts, and tried to keep track of my turnings on the record scroll in case I was still mistaken. In the gathering dusk I could see the dim line of the corpse, now the center of a loathsome cloud of farnoth-flies. Before long, no doubt, the mud-dwelling sificlighs would be oozing in from the plain to complete the ghastly work. Approaching the body with some reluctance, I was preparing to step past it when a sudden collision with a wall told me I was again astray.

I now realized plainly that I was lost. The complications of this building were too much for offhand solution, and I would probably have to do some careful checking before I could hope to emerge. Still, I was eager to get to dry ground before total darkness set in; hence I returned once more to the center and began a rather aimless series of trials and errors—making notes by the light of my electric lamp. When I used this device I noticed with interest that it produced no reflection, not even the faintest glistening, in the transparent walls around me.

I was still groping about when the dusk became total. A heavy mist obscured most of the stars and planets, but the earth was plainly visible as a glowing, bluish-green point in the southeast. It was just past opposition, and would have been a glorious sight in a telescope. I could even make out the moon beside it whenever the vapors momentarily thinned. It was now impossible to see the corpse—my only landmark—so I blundered back to the central chamber after a few false turns. After all, I would have to give up hope of sleeping on dry ground. Nothing could be done till daylight, and I might as well make the best of it here. Lying down in the mud would not be pleasant, but in my leather suit it could be done. On former expeditions I had slept under even worse conditions, and now sheer exhaustion would help to conquer repugnance.

So here I am, squatting in the slime of the central room and taking these notes on my record scroll by the light of the electric lamp. There is something almost humorous in my strange, unprecedented plight. Lost in a building without doors—a building which I cannot see! I shall doubtless get out early in the morning, and ought to be back at Terra Nova with the crystal by late afternoon. It certainly is a beauty, with surprising luster even in the feeble light of this lamp. I have just had it out examining it. Despite my fatigue, sleep is slow in coming: so I find myself writing at great length. I must stop now. Not much danger of being bothered by those cursed natives in this place. The thing I like least is the corpse, but fortunately my oxygen mask saves me from the worst effects. I am using the chlorate tubes very sparingly. Will take a couple of food tablets now and turn in. More later.

Later—Afternoon, VI-13. There has been more trouble than I expected. I am still in the building, and will have to work quickly and wisely if I expect to rest on dry ground tonight. It took me a long time to get to sleep, and I did not wake till almost noon today. As it was, I would have slept longer but for the glare of the sun through the haze. The corpse was a rather bad sight, wriggling with sificlighs, and with a cloud of farnoth-flies around it. Something had pushed the helmet away from the face, and it was better not to look at it. I was doubly glad of my oxygen mask when I thought of the situation.

At length I shook and brushed myself dry, took a couple of food tablets, and put a new potassium chlorate cube in the electrolyzer of the mask. I am using these cubes slowly, but wish I had a larger supply. I felt much better after my sleep, and expected to get out of the building very shortly.

Consulting the notes and sketches I had jotted down, I was impressed with the complexity of the hallways, and the possibility that I had made a fundamental error. Of the six openings leading out of the central space, I had chosen a certain one as that by which I had entered—using a sighting-arrangement as a guide. When I stood just within the opening, the corpse fifty yards away was exactly in line with a particular lepidodendron in the far-off forest. Now it occurred to me that this sighting might not have been of sufficient accuracy, the distance of the corpse making its difference of direction in relation to the horizon comparatively slight when viewed from the openings next to that of my first ingress. Moreover, the tree did not differ as distinctly as it might from other lepidodendra on the horizon.

Putting the matter to a test, I found to my chagrin that I could not be sure which of three openings was the right one. Had I traversed a different set of windings at each attempted exit? This time I would be sure. It struck me that despite the impossibility of trail-blazing there was one marker I could leave. Though I could not spare my suit, I could—because of my thick head of hair—spare my helmet; and this was large and light enough to remain visible above the thin mud. Accordingly I removed the roughly hemispherical device and laid it at the entrance of one of the corridors—the right-hand one of the three I must try.

I would follow this corridor on the assumption that it was correct, repeating what I seemed to recall as the proper turns, and constantly consulting and making notes. If I did not get out, I would systematically exhaust all possible variations; and if these failed, I would proceed to cover the avenues extending from the next opening the same way, continuing to the third opening if necessary. Sooner or later I could not avoid hitting the right path to the exit, but I must use patience. Even at worst, I could scarcely fail to reach the open plain in time for a dry night's sleep.

Immediate results were rather discouraging, though they helped me eliminate the right-hand opening in little more than an hour. Only a succession of blind alleys, each ending at a great distance from the corpse, seemed to branch from this hallway; and I saw very soon that it had not figured at all in the previous afternoon's wanderings. As before, however, I always found it relatively easy to grope back to the central chamber.

About 1 p. m. I shifted my helmet marker to the next opening and began to explore the hallways beyond it. At first I thought I recognized the turnings, but soon found myself in a wholly unfamiliar set of corridors. I could not get near the corpse, and this time seemed cut off from the central chamber as well, even though I thought I had recorded every move I made. There seemed to be tricky twists and crossings too subtle for me to capture in my crude diagrams, and I began to develop a kind of mixed anger and discouragement. While patience would of course win in the end, I saw that my searching would have to be minute and tireless.

Two o'clock found me still wandering vainly through strange corridors, constantly feeling my way, looking alternately at my helmet and at the corpse, and jotting data on my scroll with decreasing confidence. I cursed the stupidity and idle curiosity which had drawn me into this tangle of unseen walls—reflecting that if I had let the thing alone and headed back as soon as I had taken the crystal from the body, I would even now be safe at Terra Nova.

Suddenly it occurred to me that I might be able to tunnel under the invisible walls with my knife, and thus effect a short-cut to the outside, or to some outward-leading corridor. I had no means of knowing how deep the building's foundations were, but the omnipresent mud argued the absence of any floor save the earth. Facing the distant and increasingly horrible corpse, I began a course of feverish digging with the broad, sharp blade.

There was about six inches of semi-liquid mud, below which the density of the soil increased sharply. This lower soil seemed to be of a different color, a grayish clay rather like the formations near Venus's north pole. As I continued downward close to the unseen barrier I saw that the ground was getting harder and harder. Watery mud rushed into the excavation as fast as I removed the clay, but I reached through it and kept on working. If I could bore any kind of a passage beneath the wall, the mud would not stop my wriggling out.

About three feet down, however, the hardness of the soil halted my digging seriously. Its tenacity was beyond anything I had encountered before, even on this planet, and was linked with an anomalous heaviness. My knife had to split and chip the tightly packed clay, and the fragments I brought up were like solid stones or bits of metal. Finally even this splitting and chipping became impossible, and I had to cease my work with no lower edge of the wall in reach.

The hour-long attempt was a wasteful as well as futile one, for it used up great stores of my energy and forced me both to take an extra food tablet, and to put an additional chlorate cube in the oxygen mask. It has also brought a pause in the day's gropings, for I am still much too exhausted to walk. After cleaning my hands and arms of the worst of the mud I sat down to write these notes—leaning against an invisible wall and facing away from the corpse.

That body is simply a writhing mass of vermin now—the odor has begun to draw some of the slimy akmans from the faroff jungle. I notice that many

of the efjeh-weeds on the plain are reaching out necrophagous feelers toward the thing; but I doubt if any are long enough to reach it. I wish some really carnivorous organisms like the skorahs would appear, for then they might scent me and wriggle a course through the building toward me. Things like that have an odd sense of direction. I could watch them as they came, and jot down their approximate route if they failed to form a continuous line. Even that would be a great help. When I met any, the pistol would make short work of them.

But I can hardly hope for as much as that. Now that these notes are made I shall rest a while longer, and later will do some more groping. As soon as I get back to the central chamber—which ought to be fairly easy—I shall try the extreme left-hand opening. Perhaps I can get outside by dusk after all.

Night—VI-13. New trouble. My escape will be tremendously difficult, for there are elements I had not suspected. Another night here in the mud, and a fight on my hands tomorrow. I cut my rest short and was up and groping again by four o'clock. After about fifteen minutes I reached the central chamber and moved my helmet to mark the last of the three possible doorways. Starting through this opening, I seemed to find the going more familiar, but was brought up short in less than five minutes by a sight that jolted me more than I can describe.

It was a group of four or five of those detestable man-lizards emerging from the forest far off across the plain. I could not see them distinctly at that distance, but thought they paused and turned toward the trees to gesticulate, after which they were joined by fully a dozen more. The augmented party now began to advance directly toward the invisible building, and as they approached I studied them carefully. I had never before had a close view of the things outside the steamy shadows of the jungle.

The resemblance to reptiles was perceptible, though I knew it was only an apparent one, since these beings have no point of contact with terrestrial life. When they drew nearer they seemed less truly reptilian, only the flat head and the green, slimy, frog-like skin carrying out the idea. They walked erect on their odd, thick stumps, and their suction-disks made curious noises in the mud. These were average specimens, about seven feet in height, and with four long, ropy pectoral tentacles. The motions of those tentacles—if the theories of Fogg, Ekberg, and Janat are right, which I formerly doubted but now am more ready to believe—indicated that the things were in animated conversation.

I drew my flame-pistol and was ready for a hard fight. The odds were bad, but the weapon gave me a certain advantage. If the things knew this building they would come through it after me, and in this way would form a key to getting out, just as carnivorous skorahs might have done. That they would attack me seemed certain; for even though they could not see the crystal in my pouch, they could divine its presence through that special sense of theirs.

Yet, surprisingly enough, they did not attack me. Instead they scattered and formed a vast circle around me, at a distance which indicated that they

were pressing close to the unseen wall. Standing there in a ring, the beings stared silently and inquisitively at me, waving their tentacles and sometimes nodding their heads and gesturing with their upper limbs. After a while I saw others issue from the forest, and these advanced and joined the curious crowd. Those near the corpse looked briefly at it but made no move to disturb it. It was a horrible sight, yet the man-lizards seemed quite unconcerned. Now and then one of them would brush away the farnoth-flies with its limbs or tentacles, or crush a wriggling sificligh or akman, or an outreaching efjeh-weed with the suction disks on its stumps.

Staring back at these grotesque and unexpected intruders, and wondering uneasily why they did not attack me at once, I lost for the time being the will-power and nervous energy to continue my search for a way out. Instead I leaned limply against the invisible wall of the passage where I stood, letting my wonder merge gradually into a chain of the wildest speculations. A hundred mysteries which had previously baffled me seemed all at once to take on a new and sinister significance, and I trembled with an acute fear unlike anything I had experienced before.

I believed I knew why these repulsive beings were hovering expectantly around me. I believed, too, that I had the secret of the transparent structure at last. The alluring crystal which I had seized, the body of the man who had seized it before me—all these things began to acquire a dark and threatening meaning.

It was no common series of mischances which had made me lose my way in this roofless, unseen tangle of corridors. Far from it. Beyond doubt, the place was a genuine maze, a labyrinth deliberately built by these hellish beings whose craft and mentality I had so badly underestimated. Might I not have suspected this before, knowing of their uncanny architectural skill? The purpose was all too plain. It was a trap—a trap set to catch human beings, and with the crystal spheroid as bait. These reptilian things, in their war on the takers of crystals, had turned to strategy and were using our own cupidity against us.

Dwight—if this rotting corpse were indeed he—was a victim. He must have been trapped some time ago, and had failed to find his way out. Lack of water had doubtless maddened him, and perhaps he had run out of chlorate cubes as well. Probably his mask had not slipped accidentally after all. Suicide was a likelier thing. Rather than face a lingering death he had solved the issue by removing the mask deliberately and letting the lethal atmosphere do its work at once. The horrible irony of his fate lay in his position—only a few feet from the saving exit he had failed to find. One minute more of searching, and he would have been safe.

And now I was trapped as he had been; trapped, and with this circling herd of curious starers to mock at my predicament. The thought was maddening, and as it sank in I was seized with a sudden flash of panic which set me running aimlessly through the unseen hallways. For several moments I was essentially a maniac—stumbling, tripping, bruising myself on the invisible walls, and finally collapsing in the mud as a panting, lacerated heap of mindless, bleeding flesh.

The fall sobered me a bit, so that when I slowly struggled to my feet I could notice things and exercise my reason. The circling watchers were swaying their tentacles in an odd, irregular way suggestive of sly, alien laughter, and I shook my fist savagely at them as I rose. My gesture seemed to increase their hideous mirth—a few of them clumsily imitating it with their greenish upper limbs. Shamed into sense, I tried to collect my faculties and take stock of the situation.

After all, I was not as badly off as Dwight had been. Unlike him, I knew what the situation was—and forewarned is forearmed. I had proof that the exit was attainable in the end, and would not repeat his tragic act of impatient despair. The body—or skeleton, as it would soon be—was constantly before me as a guide to the sought-for aperture, and dogged patience would certainly take me to it if I worked long and intelligently enough.

I had, however, the disadvantage of being surrounded by these reptilian devils. Now that I realized the nature of the trap—whose invisible material argued a science and technology beyond anything on earth—I could no longer discount the mentality and resources of my enemies. Even with my flame-pistol I would have a bad time getting away, though boldness and quickness would doubtless see me through in the long run.

But first I must reach the exterior, unless I could lure or provoke some of the creatures to advance toward me. As I prepared my pistol for action and counted over my generous supply of ammunition it occurred to me to try the effect of its blasts on the invisible walls. Had I overlooked a feasible means of escape? There was no clue to the chemical composition of the transparent barrier, and conceivably it might be something which a tongue of fire could cut like cheese. Choosing a section facing the corpse, I carefully discharged the pistol at close range and felt with my knife where the blast had been aimed. Nothing was changed. I had seen the flame spread when it struck the surface, and now realized that my hope had been vain. Only a long, tedious search for the exit would ever bring me to the outside.

So, swallowing another food tablet and putting another cube in the electrolyzer of my mask, I recommenced the long quest, retracing my steps to the central chamber and starting out anew. I constantly consulted my notes and sketches, and made fresh ones, taking one false turn after another, but staggering on in desperation till the afternoon light grew very dim. As I persisted in my quest I looked from time to time at the silent circle of mocking starers, and noticed a gradual replacement in their ranks. Every now and then a few would return to the forest, while others would arrive to take their places. The more I thought of their tactics the less I liked them, for they gave me a hint of the creatures' possible motives. At any time these devils could have advanced and fought me, but they seemed to prefer watching my struggles to escape. I could not but infer that they enjoyed the spectacle—and this made me shrink with double force from the prospect of falling into their hands.

With the dark I ceased my searching, and sat down in the mud to rest. Now I am writing in the light of my lamp, and will soon try to get some sleep. I hope tomorrow will see me out; for my canteen is low, and lacol

tablets are a poor substitute for water. I would hardly dare try the moisture in this slime, for none of the water in the mud-regions is potable except when distilled. That is why we run such long pipe-lines to the yellow clay regions, or depend on rain-water when those devils find and cut our pipes. I have none too many chlorate cubes either, and must try to cut down my oxygen consumption as much as I can. My tunneling attempt of the early afternoon, and my later panic flight, burned up a perilous amount of air. Tomorrow I will reduce physical exertion to the barest minimum until I meet the reptiles and have to deal with them. I must save a good cube supply for the journey back to Terra Nova. My enemies are still on hand; I can see a circle of their feeble glow-torches around me. There is a horror about those lights which will keep me awake.

Night—VI-14. Another full day of searching and still no way out! I am beginning to be worried about the water problem, for my canteen went dry at noon. In the afternoon there was a burst of rain, and I went back to the central chamber for the helmet which I had left as a marker—using this as a bowl, and getting about two cupfuls of water. I drank most of it, but have put the slight remainder in my canteen.

Lacol tablets make little headway against real thirst, and I hope there will be more rain in the night. I am leaving my helmet bottom-up to catch any that falls. Food tablets are none too plentiful, but not dangerously low. I shall halve my rations from now on. The chlorate cubes are my real worry, for even without violent exercise the day's endless tramping burned a dangerous number. I feel weak from my forced economies in oxygen, and from my constantly mounting thirst. When I reduce my food I suppose I shall feel still weaker.

There is something damnable—something uncanny—about this labyrinth. I could swear that I had eliminated certain turns through charting, and yet each new trial belies some assumption I had thought established. Never before did I realize how lost we are without visual landmarks. A blind man might do better, but for most of us sight is the king of the senses. The effect of all these fruitless wanderings is one of profound discouragement. I can understand how poor Dwight must have felt. His corpse is now just a skeleton, and the sificlighs and akmans and farnoth-flies are gone. The efjeh-weeds are nipping the leather clothing to pieces, for they were longer and faster-growing than I had expected. And all the while those relays of tentacled starers stand gloatingly around the barrier laughing at me and enjoying my misery. Another day and I shall go mad if I do not drop dead from exhaustion.

However, there is nothing to do but persevere. Dwight would have got out if he had kept on a minute longer. It is just possible that somebody from Terra Nova will come looking for me before long, although this is only my third day out. My muscles ache horribly, and I can't seem to rest at all lying down in this loathsome mud. Last night, despite my terrific fatigue, I slept only fitfully, and tonight I fear will be no better. I live in an endless nightmare—poised between waking and sleeping, yet neither truly awake nor

truly asleep. My hand shakes, and I can write no more for the time being. That circle of feeble glow-torches is hideous.

Late afternoon—VI-15. Substantial progress! Looks good. Very weak, and did not sleep much till daylight. Then I dozed till noon, though without being at all rested. No rain, and thirst leaves me very weak. Ate an extra food tablet to keep me going, but without water it didn't help much. I dared to try a little of the slime water just once, but it made me violently sick and left me even thirstier than before. Must save chlorate cubes, so am nearly suffocating for lack of oxygen. Can't walk much of the time, but manage to crawl in the mud. About 2 p. m. I thought I recognized some passages, and got substantially nearer to the corpse—or skeleton—than I had been since the first day's trials. I was sidetracked once in a blind alley, but recovered the main trail with the aid of my chart and notes. The trouble with these jottings is that there are so many of them. They must cover three feet of the record-scroll, and I have to stop for long periods to untangle them. My head is weak from thirst, suffocation, and exhaustion, and I cannot understand all I have set down. Those damnable green things keep staring and laughing with their tentacles, and sometimes they gesticulate in a way that makes me think they share some terrible joke just beyond my perception.

It was three o'clock when I really struck my stride. There was a doorway which, according to my notes, I had not traversed before; and when I tried it I found I could crawl circuitously toward the weed-twined skeleton. The route was a sort of spiral, much like that by which I had first reached the central chamber. Whenever I came to a lateral doorway or junction I would keep to the course which seemed best to repeat that original journey. As I circled nearer and nearer to my gruesome landmark, the watchers outside intensified their cryptic gesticulations and sardonic silent laughter. Evidently they saw something grimly amusing in my progress, perceiving no doubt how helpless I would be in any encounter with them. I was content to leave them to their mirth; for although I realized my extreme weakness, I counted on the flame pistol and its numerous extra magazines to get me through the vile reptilian phalanx.

Hope now soared high, but I did not attempt to rise to my feet. Better to crawl now, and save my strength for the coming encounter with the man-lizards. My advance was very slow, and the danger of straying into some blind alley very great, but none the less I seemed to curve steadily toward my osseous goal. The prospect gave me new strength and for the nonce I ceased to worry about my pain, my thirst, and my scant supply of cubes. The creatures were now all massing around the entrance, gesturing, leaping, and laughing with their tentacles. Soon, I reflected, I would have to face the entire horde, and perhaps such reinforcements as they would receive from the forest.

I am now only a few yards from the skeleton, and am pausing to make this entry before emerging and breaking through the noxious band of entities. I feel confident that with my last ounce of strength I can put them

to flight despite their numbers, for the range of this pistol is tremendous. Then a camp on the dry moss at the plateau's edge, and in the morning a weary trip through the jungle to Terra Nova. I shall be glad to see living men and the buildings of human beings again. The teeth of that skull gleam and grin horribly.

Toward night—VI-15. Horror and despair. Baffled again! After making the previous entry I approached still closer to the skeleton, but suddenly encountered an intervening wall. I had been deceived once more, and was apparently back where I had been three days before, on my first futile attempt to leave the labyrinth. Whether I screamed aloud I do not know—perhaps I was too weak to utter a sound. I merely lay dazed in the mud for a long period, while the greenish things outside leaped and laughed and gestured.

After a time I became more fully conscious. My thirst and weakness and suffocation were fast gaining on me, and with my last bit of strength I put a new cube in the electrolyzer, recklessly, and without regard for the needs of my journey to Terra Nova. The fresh oxygen revived me slightly, and enabled me to look about more alertly.

It seemed as if I were slightly more distant from poor Dwight than I had been at that first disappointment, and I dully wondered if I could be in some other corridor a trifle more remote. With this faint shadow of hope I laboriously dragged myself forward, but after a few feet encountered a dead end as I had on the former occasion.

This, then, was the end. Three days had taken me nowhere, and my strength was gone. I would soon go mad from thirst, and I could no longer count on cubes enough to get me back. I feebly wondered why the nightmare things had gathered so thickly around the entrance as they mocked me. Probably this was part of the mockery—to make me think I was approaching an egress which they knew did not exist.

I shall not last long, though I am resolved not to hasten matters as Dwight did. His grinning skull has just turned toward me, shifted by the groping of one of the elfeh-weeds that are devouring his leather suit. The ghoulish stare of those empty eye-sockets is worse than the staring of those lizard horrors. It lends a hideous meaning to that dead, white-toothed grin.

I shall lie very still in the mud and save all the strength I can. This record, which I hope may reach and warn those who come after me, will soon be done. After I stop writing I shall rest a long while. Then, when it is too dark for those frightful creatures to see, I shall muster up my last reserves of strength and try to toss the record-scroll over the wall and the intervening corridor to the plain outside. I shall take care to send it toward the left, where it will not hit the leaping band of mocking beleaguerers. Perhaps it will be lost forever in the thin mud—but perhaps it will land in some widespread clump of weeds and ultimately reach the hands of men.

If it does survive to be read, I hope it may do more than merely warn men of this trap. I hope it may teach our race to let those shining crystals stay where they are. They belong to Venus alone. Our planet does not truly

need them, and I believe we have violated some obscure and mysterious law —some law buried deep in the arcana of the cosmos—in our attempts to take them. Who can tell what dark, potent and widespread forces spur on these reptilian things who guard their treasure so strangely? Dwight and I have paid, as others have paid and will pay. But it may be that these scattered deaths are only the prelude of greater horrors to come. Let us leave to Venus that which belongs only to Venus.

* * *

I am very near death now, and fear I may not be able to throw the scroll when dusk comes. If I cannot, I suppose the man-lizards will seize it, for they will probably realize what it is. They will not wish anyone to be warned of the labyrinth—and they will not know that my message holds a plea in their own behalf. As the end approaches I feel more kindly toward the things. In the scale of cosmic entity who can say which species stands higher, or more nearly approaches a space-wide organic norm—theirs or mine?

* * *

I have just taken the great crystal out of my pouch to look at it in my last moments. It shines fiercely and menacingly in the red rays of the dying day. The leaping horde have noticed it, and their gestures have changed in a way I cannot understand. I wonder why they keep clustered around the entrance instead of concentrating at a still closer point in the transparent wall.

* * *

I am growing numb and cannot write much more. Things whirl around me, yet I do not lose consciousness. Can I throw this over the wall? That crystal glows so, yet the twilight is deepening.

* * *

Dark. Very weak. They are still laughing and leaping around the doorway, and have started those hellish glow-torches.

* * *

Are they going away? I dreamed I heard a sound . . . light in the sky. . . .

Report of Wesley P. Miller, Supt. Group A, Venus Crystal Co.
(Terra Nova on Venus—VI-16)

Our Operative A-49, Kenton J. Stanfield of 531 Marshall Street, Richmond, Va., left Terra Nova early on VI-12 for a short-term trip indicated by detector. Due back 13th or 14th. Did not appear by evening of 15th, so Scouting Plane FR-58 with five men under my command set out at 8 p.m. to follow route with detector. Needle showed no change from earlier readings.

Followed needle to Erycinian Highland, playing strong searchlights all the way. Triple-range flame-guns and D-radiation cylinders could have dis-

persed any ordinary hostile forces of natives, or any dangerous aggregation of carnivorous skorahs.

When over the open plain on Eryx we saw a group of moving lights which we knew were native glow-torches. As we approached, they scattered into the forest. Probably seventy-five to a hundred in all. Detector indicated crystal on spot where they had been. Sailing low over this spot, our lights picked out objects on the ground. Skeleton tangled in efjeh-weeds, and complete body ten feet from it. Brought plane down near bodies, and corner of wing crashed on unseen obstruction.

Approaching bodies on foot, we came up short against a smooth, invisible barrier which puzzled us enormously. Feeling along it near the skeleton. we struck an opening, beyond which was a space with another opening leading to the skeleton. The latter, though robbed of clothing by weeds, had one of the company's numbered metal helmets beside it. It was Operative B-9, Frederick N. Dwight of Koenig's division, who had been out of Terra Nova for two months on a long commission.

Between this skeleton and the complete body there seemed to be another wall, but we could easily identify the second man as Stanfield. He had a record-scroll in his left hand and a pen in his right, and seemed to have been writing when he died. No crystal was visible, but the detector indicated a huge specimen near Stanfield's body.

We had great difficulty in getting at Stanfield, but finally succeeded. The body was still warm, and a great crystal lay beside it, covered by the shallow mud. We at once studied the record-scroll in the left hand, and prepared to take certain steps based on its data. The contents of the scroll forms the long narrative prefixed to this report; a narrative whose main descriptions we have verified, and which we append as an explanation of what was found. The latter parts of this account show mental decay, but there is no reason to doubt the bulk of it. Stanfield obviously died of a combination of thirst, suffocation, cardiac strain and psychological depression. His mask was in place, and freely generating oxygen despite an alarmingly low cube supply.

Our plane being damaged, we sent a wireless and called out Anderson with Repair Plane FG-7, a crew of wreckers, and a set of blasting-materials. By morning FH-58 was fixed, and went back under Anderson carrying the two bodies and the crystal. We shall bury Dwight and Stanfield in the company graveyard, and ship the crystal to Chicago on the next earth-bound liner. Later we shall adopt Stanfield's suggestion—the sound one in the saner, earlier part of his report—and bring across enough troops to wipe out the natives altogether. With a clear field, there will be scarcely any limit to the amount of crystal we can secure.

In the afternoon we studied the invisible building or trap with great care, exploring it with the aid of long guiding cords, and preparing a complete chart for our archives. We were much impressed by the design, and shall keep specimens of the substance for chemical analysis. All such knowledge will be useful when we take over the various cities of the natives. Our type C diamond drills were able to bite into the unseen material, and the wreckers are now planting dynamite preparatory to a thorough blasting. Nothing will

be left when we are done. The edifice forms a distinct menace to aerial and other possible traffic.

In considering the plan of the labyrinth one is impressed not only with the irony of Dwight's fate, but with that of Stanfield's as well. When trying to reach the second body from the skeleton, we could find no access on the right, but Markheim found a doorway from the first inner space some fifteen feet past Dwight and four or five past Stanfield. Beyond this was a long hall which we did not explore till later, but on the right-hand side of that hall was another doorway leading directly to the body. Stanfield could have reached the outside entrance by walking twenty-two or twenty-three feet if he had found the opening which lay directly *behind* him—an opening which he overlooked in his exhaustion and despair.

The Black Stone Statue

by Mary Elizabeth Counselman

Must a statue be lifelike? The ancient Greeks and Romans thought so, and strove to make their carvings resemble the persons who posed for them. The ideal persisted through the Middle Ages and after. But lately we have had a trend that a statue may merely represent an emotion or an impression of the subject, that the lifelike statue is no longer an objective to be eagerly sought by sculptors. Now here is a story of a sculptor who agreed with the ancients, and who turned out some statuary that was the ultimate in life studies. The eerie story of how he did it is a neat little shocker.

DIRECTORS,
Museum of Fine Arts,
Boston, Mass.

Gentlemen:

Today I have just received aboard the *S. S. Madrigal* your most kind cable, praising my work and asking—humbly, as one might ask it of a true genius!—if I would do a statue of myself to be placed among the great in your illustrious museum. Ah, gentlemen, that cablegram was to me the last turn of the screw!

I despise myself for what I have done in the name of art. Greed for money and acclaim, weariness with poverty and the contempt of my inferiors, hatred for a world that refused to see any merit in my work: these things have driven me to commit a series of strange and terrible crimes.

In these days I have thought often of suicide as a way out—a coward's way, leaving me the fame I do not deserve. But since receiving your cablegram, lauding me for what I am not and never could be, I am determined to write this letter for the world to read. It will explain everything. And having written it, I shall then atone for my sin in (to you, perhaps) a horribly ironic manner but (to me) one that is most fitting.

Let me go back to that miserable sleet-lashed afternoon as I came into the hall of Mrs. Bates's rooming-house—a crawling, filthy hovel for the poverty-stricken, like myself, who were too proud to go on relief. When I stumbled in, drenched and dizzy with hunger, our landlady's ample figure was blocking the hallway. She was arguing with a tall, shabbily dressed young man whose face I was certain I had seen somewhere before.

"Just a week," his deep, pleasant voice was beseeching the old harridan.

"I'll pay you double at the end of that time, just as soon as I can put over a deal I have in mind."

I paused, staring at him covertly while I shook the sleet from my hat-brim. Fine gray eyes met mine across the landlady's head—haggard now, and overbright with suppressed excitement. There was strength, character, in that face under its stubble of mahogany-brown beard. There was, too, a firm set to the man's shoulders and beautifully formed head. Here, I told myself, was someone who had lived all his life with dangerous adventure, someone whose clean-cut features, even under that growth of beard, seemed vaguely familiar to my sculptor's eye for detail.

"Not one day, no sirree!" Mrs. Bates had folded her arms stubbornly. "A week's rent in advance, or ye don't step foot into one o' *my* rooms!"

On impulse I moved forward, digging into my pocket. I smiled at the young man and thrust almost my last two dollars into the landlady's hand. Smirking, she bobbed off and left me alone with the stranger.

"You shouldn't have done that," he sighed, and gripped my hand hard. "Thanks, old man. I'll repay you next week, though. Next week," he whispered, and his eyes took on a glow of anticipation, "I'll write you a check for a thousand dollars. Two thousand!"

He laughed delightedly at my quizzical expression and plunged out into the storm again, whistling.

In that moment his identity struck me like a blow. Paul Kennicott—the young aviator whose picture had been on the front page of every newspaper in the country a few months ago! His plane had crashed somewhere in the Brazilian wilds, and the nation mourned him and his co-pilot for dead. Why was he sneaking back into New York like a criminal—penniless, almost hysterical with excitement, with an air of secrecy about him—to hide himself here in the slum district?

I climbed the rickety stairs to my shabby room and was plying the chisel half-heartedly on my *Dancing Group,* when suddenly I became aware of a peculiar buzzing sound, like an angry bee shut up in a jar. I slapped my ears several times, annoyed, believing the noise to be in my own head. But it kept on, growing louder by the moment.

It seemed to come from the hall; and simultaneously I heard the stair-steps creak just outside my room.

Striding to the door, I jerked it open—to see Paul Kennicott tiptoeing up the stairs in stealthy haste. He started violently at sight of me and attempted to hide under his coat an odd black box he was carrying.

But it was too large: almost two feet square, roughly fashioned of wood and the canvas off an airplane wing. But this was not immediately apparent, for the whole thing seemed to be covered with a coat of shiny black enamel. When it bumped against the balustrade, however, it gave a solid metallic sound, unlike cloth-covered wood. That humming noise, I was sharply aware, came from inside the box.

I stepped out into the hall and stood blocking the passage rather grimly.

"Look here," I snapped. "I know who you are, Kennicott, but I don't

know why you're hiding out like this. What's it all about? You'll tell me, or I'll turn you over to the police!"

Panic leaped into his eyes. They pleaded with me silently for an instant, and then we heard the plodding footsteps of Mrs. Bates come upstairs.

"Who's got that raddio?" her querulous voice preceded her. "I hear it hummin'! Get it right out of here if you don't wanta pay me extry for the 'lectricity it's burnin'."

"Oh, ye gods!" Kennicott groaned frantically. "Stall her! Don't let that gabby old fool find out about this—it'll ruin everything! Help me, and I'll tell you the whole story."

He darted past me without waiting for my answer and slammed the door after him. The droning noise subsided and then was swiftly muffled so that it was no longer audible.

Mrs. Bates puffed up the stairs and eyed me accusingly. "So it's you that's got that raddio? I told you the day you come——"

"All right," I said, pretending annoyance. "I've turned it off, and anyhow it goes out tomorrow. I was just keeping it for a friend."

"Eh? Well——" She eyed me sourly, then sniffed and went on back downstairs, muttering under her breath.

I strode to Kennicott's door and rapped softly. A key grated in the lock and I was admitted by my wild-eyed neighbor. On the bed, muffled by pillows, lay the black box humming softly on a shrill note.

"I n—n n—ng—ng!" it went, exactly like a radio tuned to a station that is temporarily off the air.

Curiosity was gnawing at my vitals. Impatiently I watched Kennicott striding up and down the little attic room, striking one fist against the other palm.

"Well?" I demanded.

And with obvious reluctance, in a voice jerky with excitement, he began to unfold the secret of the thing inside that onyx-like box. I sat on the bed beside it, my eyes riveted on Kennicott's face, spellbound by what he was saying.

"Our plane," he began, "was demolished. We made a forced landing in the center of a dense jungle. If you know Brazil at all, you'll know what it was like. Trees, trees, trees! Crawling insects as big as your fist. A hot sickening smell of rotting vegetation, and now and then the screech of some animal or bird eery enough to make your hair stand on end. We cracked up right in the middle of nowhere.

"I crawled out of the wreckage with only a sprained wrist and a few minor cuts, but McCrea—my co-pilot, you know—got a broken leg and a couple of bashed ribs. He was in a bad way, poor devil! Fat little guy, bald, scared of women, and always cracking wise about something. A swell sport."

The aviator's face convulsed briefly, and he stared at the box on the bed beside me with a peculiar expression of loathing.

"McCrea's dead, then?" I prompted.

Kennicott nodded his head dully, and shrugged. "God only knows! I guess you'd call it death. But let me get on with it.

"We slashed and sweated our way through an almost impenetrable wall of undergrowth for two days, carrying what food and cigarets we had in that make-shift box there."

A thumb-jerk indicated the square black thing beside me, droning softly without a break on the same high note.

"McCrea was running a fever, though, so we made camp and I struck out to find water. When I came back——"

Kennicott choked. I stared at him, waiting until his hoarse voice went on doggedly:

"When I came back, McCrea was gone. I called and called. No answer. Then, thinking he might have wandered away delirious, I picked out his trail and followed it into the jungle. It wasn't hard to do, because he had to break a path through that wall of undergrowth, and now and then I'd find blood on a bramble or maybe a scrap of torn cloth from his khaki shirt.

"Not more than a hundred yards south of our camp I suddenly became aware of a queer humming sound in my ears. Positive that this had drawn McCrea, I followed it. It got louder and louder, like the drone of a powerful dynamo. It seemed to fill the air and set all the trees to quivering. My teeth were on edge with the monotony of it, but I kept on, and unexpectedly found myself walking into a patch of jungle that was *all black!* Not burnt in a forest fire, as I first thought, but dead-black in every detail. Not a spot of color anywhere; and in that jungle with all its vivid foliage, the effect really slapped you in the face! It was as though somebody had turned out the lights and yet you could still distinguish the formation of every object around you. It was uncanny!

"There was black sand on the ground as far as I could see. Not soft jungle-soil, damp and fertile. This stuff was as hard and dry as emery, and it glittered like soft coal. All the trees were black and shiny like anthracite, and not a leaf stirred anywhere, not an insect crawled. I almost fainted as I realized why.

"It was a petrified forest!

"Those trees, leaves and all, had turned into a shiny black kind of stone that looked like coal but was much harder. It wouldn't chip when I struck it with a fallen limb of the same stuff. It wouldn't bend; I simply had to squeeze through holes in underbrush more rigid than cast iron. And all black, mind you—a jungle of fuliginous rock like something out of Dante's *Inferno.*

"Once I stumbled over an object and stopped to pick it up. It was McCrea's canteen—the only thing in sight, besides myself, that was not made of that queer black stone. He had come this way, then. Relieved, I started shouting his name again, but the sound of my voice frightened me. The silence of that place fairly pressed against my eardrums, broken only by that steady droning sound. But, you see, I'd become so used to it, like the constant ticking of a clock, that I hardly heard it.

"Panic swept over me all at once, an unreasonable fear, as the sound of my own voice banged against the trees and came back in a thousand echoes, borne on that humming sound that never changed its tone. I don't know why; maybe it was the grinding monotony of it and the unrelieved black of that stone forest. But my nerve snapped and I bolted back along the way I had come, sobbing like a kid.

"I must have run in a circle, though, tripping and cutting myself on that rock-underbrush. In my terror I forgot the direction of our camp. I was lost—abruptly I realized it—lost in that hell of coal-black stone, without food or any chance of getting it, with McCrea's empty canteen in my hand and no idea where he had wandered in his fever.

"For hours I plunged on, forgetting to back-track, and cursing aloud because McCrea wouldn't answer me. That humming noise had got on my nerves now, droning on that one shrill note until I thought I would go mad. Exhausted, I sank down on that emery-sand, crouched against the trunk of a black stone tree. McCrea had deserted me, I thought crazily. Someone had rescued him and he had left me here to die—which should give you an idea of my state of mind.

"I huddled there, letting my eyes rove in a sort of helpless stupor. On the sand beside me was a tiny rock that resembled a butterfly delicately carved out of onyx. I picked it up dazedly, staring at its hard little legs and feelers like wire that would neither bend nor break off. And then my gaze started wandering again.

"It fastened on something a few dozen paces to my right—and I was sure then that I had gone mad. At first it seeemed to be a stump of that same dark mineral. But it wasn't a stump. I crawled over to it and sat there, gaping at it with my senses reeling, while that humming noise rang louder and louder in my ears.

"It was a black stone statue of McCrea, perfect in every detail!

"He was depicted stooping over, with one hand holding out his automatic gripped by the barrel. His stocky figure, aviator's helmet, his makeshift crutch, and even the splints on his broken leg were shiny black stone. And his face, to the last hair of his eyelashes, was a perfect mask of black rock set in an expression of puzzled curiosity.

"I got to my feet and walked around the figure, then gave it a push. It toppled over, just like a statue, and the sound of its fall was deafening in that silent forest. Hefting it, I was amazed to find that it weighed less than twenty pounds. I hacked at it with a file we had brought from the plane in lieu of a machete, but only succeeded in snapping the tool in half. Not a chip flew off the statue. Not a dent appeared in its polished surface.

"The thing was so unspeakably weird that I did not even try to explain it to myself, but started calling McCrea again. If it was a gag of some kind, he could explain it. But there was no answer to my shouts other than the monotonous hum of that unseen dynamo.

"Instead of frightening me more, this weird discovery seemed to jerk me up short. Collecting my scattered wits, I started back-trailing myself to the camp, thinking McCrea might have returned in my absence. The

droning noise was so loud now, it pained my eardrums unless I kept my hands over my ears. This I did, stumbling along with my eyes glued to my own footprints in the hard dry sand.

"And suddenly I brought up short. Directly ahead of me, under a black stone bush, lay something that made me gape with my mouth ajar.

"I can't describe it—no one could. It resembled nothing so much as a star-shaped blob of transparent jelly that shimmered and changed color like an opal. It appeared to be some lower form of animal, one-celled, not large, only about a foot in circumference when it stretched those feelers out to full length. It oozed along over the sand like a snail, groping its way with those star-points—*and it hummed!*

"The droning noise ringing in my ears issued from this nightmare creature!

"It was nauseating to watch, and yet beautiful, too, with all those iridescent colors gleaming against that setting of dead-black stone. I approached within a pace of it, started to nudge it with my foot, but couldn't quite bring myself to touch the squashy thing. And I've thanked my stars ever since for being so squeamish!

"Instead, I took off my flying-helmet and tossed the goggles directly in the path of the creature. It did not pause or turn aside, but merely reached out one of those sickening feelers and brushed the goggles very lightly.

"*And they turned to stone!*

"Just that! God be my witness that those leather and glass goggles grew black before my starting eyes. In less than a minute they were petrified into hard fuliginous rock like everything else around me.

"In one hideous moment I realized the meaning of that weirdly life-like statue of McCrea. I knew what he had done. He had prodded this jelly-like Thing with his automatic, and it had turned him—and everything in contact with him—into dark shiny stone.

"Nausea overcame me. I wanted to run, to escape the sight of that oozing horror, but reason came to my rescue. I reminded myself that I was Paul Kennicott, intrepid explorer. Through a horrible experience McCrea and I had stumbled upon something in the Brazilian wilds which would revolutionize the civilized world. McCrea was dead, or in some ghastly suspended form of life, through his efforts to solve the mystery. I owed it to him and to myself not to lose my head now.

"For the practical possibilities of the Thing struck me like a blow. That black stone the creature's touch created from any earth-substance—by rays from its body, by a secretion of its glands, by God knows what strange metamorphosis—was indestructible! Bridges, houses, buildings, roads, could be built of ordinary material and then petrified by the touch of this jelly-like Thing which had surely tumbled from some planet with life-forces diametrically opposed to our own.

"Millions of dollars squandered on construction each year could be diverted to other phases of life, for no cyclone or flood could damage a city built of this hard black rock.

"I said a little prayer for my martyred co-pilot, and then and there resolved to take the creature back to civilization with me.

"It could be trapped, I was sure—though the prospect appealed to me far less than that of caging a hungry leopard! I did not venture to try it until I had studied the problem from every angle, however, and made certain deductions through experiment.

"I found that any substance already petrified was insulated against the thing's power. I tossed my belt on it, saw it freeze into black rock, then put my wrist-watch in contact with the rock belt. My watch remained as it was. Another phenomenon I discovered was that petrifaction also occurred in things in *direct contact* with something the creature touched, if that something was not already petrified.

"Dropping my glove fastened to my signet ring, I let the creature touch only the glove. But both objects were petrified. I tried it again with a chain of three objects, and discovered that the touched object and the one in contact with it turned into black rock, while the third on the chain remained unaffected.

"It took me about three days to trap the thing, although it gave no more actual resistance, of course, than a large snail. McCrea, poor devil, had blundered into the business; but I went at it in a scientific manner, knowing what danger I faced from the creature. I found my way again to our camp and brought back our provision box—yes, the one there on the bed beside you. When the thing's touch had turned it into a perfect stone cage for itself, I scooped it inside with petrified branches. But, Lord! How the sweat stood out on my face at the prospect of a slip that might make me touch the horrible little organism!

"The trip out of that jungle was a nightmare. I spent almost all I had, hiring scared natives to guide me a mile or so before they'd bolt with terror of my humming box. On board a tramp steamer bound for the States, I nearly lost my captive. The first mate thought it was an infernal machine and tried to throw it overboard. My last cent went to shut him up; so I landed in New York flat broke."

Paul Kennicott laughed and spread his hands. "But here I am. I don't dare go to anyone I know just yet. Reporters will run me ragged, and I want plenty of time to make the right contacts. Do you realize what's in that box?" He grinned with boyish delight. "Fame and fortune, that's what! McCrea's family will never know want again. Science will remember our names along with Edison and Bell and all the rest. We've discovered a new force that will rock the world with its possibilities. That's why," he explained, "I've sneaked into the country like an alien. If the wrong people heard of this first, my life wouldn't be worth a dime, understand? There are millions involved in this thing. Billions! Don't you see?"

He stopped, eyeing me anxiously. I stared at him and rose slowly from the bed. Thoughts were seething in my mind—dark ugly thoughts, ebbing and flowing to the sound of that *"i—n n—n n g—n n g!"* that filled the shabby room.

For, I did see the possibilities of that jelly-like thing's power to turn

any object into black stone. But I was thinking as a sculptor. What do I care for roads or buildings? Sculpture is my whole life! To my mind's eye rose the picture of co-pilot McCrea as Kennicott had described him —a figure, perfect to the last detail, done in black stone.

Kennicott was still eyeing me anxiously—perhaps reading the ugly thoughts that flitted like shadows behind my eyes.

"You'll keep mum?" he begged. "Do that for me, old boy, and I'll set you up in a studio beyond your wildest dreams. I'll build up your fame as —what are you?"

His gray eyes fastened on my dirty smock.

"Some kind of an artist? I'll show you how much I appreciate your help. Are you with me?"

Some kind of an artist! Perhaps if he had not said that, flaying my crushed pride and ambition to the quick, I would never have done the awful thing I did. But black jealousy rose in my soul—jealousy of this eager young man who could walk out into the streets now with his achievement and make the world bow at his feet, while I in my own field was no more to the public than what he had called me: "some kind of an artist." At that moment I knew precisely what I wanted to do.

I did not meet his frank gray eyes. Instead, I pinned my gaze on that droning black box as my voice rasped harshly:

"No! Do you really imagine that I believe this idiotic story of yours? You're insane! I'm going to call the police—they'll find out what really happened to McCrea out there in the jungle! There's nothing in that box. It's just a trick."

Kennicott's mouth fell open, then closed in an angry line. The next moment he shrugged and laughed.

"Of course you don't believe me," he nodded. "Who could? unless they had seen what I've seen with my own eyes. Here," he said briskly, "I'll take this book and drop it in the box for you. You'll see the creature, and you'll see this book turned into black stone."

I stepped back, heart pounding, eyes narrowed, Kennicott leaned over the bed, unfastened the box gingerly with a wary expression on his face, and motioned me to approach. Briefly I glanced over his shoulder as he dropped the book inside the open box.

I saw horror—a jelly-like, opalescent thing like a five-pointed star. It pulsed and quivered for an instant, and the room fairly rocked to the unmuffled sound of that vibrant humming.

I also saw the small cloth-bound book Kennicott had dropped inside. It lay half on top of the squirming creature—a book carved out of black stone.

"There! You see?" Kennicott pointed. And those were the last words he ever uttered.

Remembering what he had said about the power of the creature being unable to penetrate to a third object, I snatched at Kennicott's sleeve-covered arm, gave him a violent shove, and saw his muscular hand plunge for

an instant deep into the black box. The sleeve hardened beneath my fingers.

I cowered back, sickened at what I had done.

Paul Kennicott, his arms thrown out and horror stamped on his fine young face, had frozen into a statue of black shiny stone!

Then footsteps were clumping up the stairs again. I realized that Mrs. Bates would surely have heard the violent droning that issued from the open box. I shut it swiftly, muffled it, and shoved it under the bed.

I was at my own doorway when the landlady came puffing up the stairs. My face was calm, my voice contained, and no one but me could hear the furious pounding of my heart.

"Now, you look a-here!" Mrs. Bates burst out. "I told you to turn that raddio off. You take it right out of my room this minute! Runnin' up my bill for 'lectricity!"

I apologized meekly and with a great show carried out a tool-case of mine, saying it was the portable radio I had been testing for a friend. It satisfied her for the moment, but later, as I was carrying the black stone figure of Paul Kennicott to my own room, she caught me at it.

"Why," the old snoop exclaimed. "If that ain't the spittin' image of our new roomer! Friend of yours, is he?"

I thought swiftly and lied jauntily. "A model of mine. I've been working on this statue at night, the reason you haven't seen him going in and out. I thought I would have to rent a room for him here, but as the statue is finished now, it won't be necessary after all. You may keep the rent money, though," I added. "And get me a taxi to haul my masterpiece to the express station. I am ready to submit it to the Museum of Fine Arts."

And that is my story, gentlemen. The black stone statue which, ironically, I chose to call *Fear of the Unknown,* is not a product of my skill. (Small wonder several people have noticed its resemblance to the "lost explorer," Paul Kennicott!) Nor did I do the group of soldiers commissioned by the Anti-War Association. None of my so-called *Symphonies in Black* were wrought by my hand—but I can tell you what became of the models who were unfortunate enough to pose for me!

My real work is perhaps no better than that of a rank novice, although up to that fatal afternoon I had honestly believed myself capable of great work as a sculptor some day.

But I am an impostor. You want a statue of me, you say in your cablegram, done in the mysterious black stone which has made me so famous? Ah, gentlemen, you shall have that statue!

I am writing this confession aboard the *S. S. Madrigal,* and I shall leave it with a steward to be mailed to you at our next port of call.

Tonight I shall take out of my stateroom the hideous thing in its black box which has never left my side. Such a creature, contrary to all nature on this earth of ours, should be exterminated. As soon as darkness falls I shall stand on deck and balance the box on the rail so that it will fall into the sea after my hand has touched what is inside.

I wonder if the process of being turned into that black rock is painful, or if it is accompanied only by a feeling of lethargy? And McCrea, Paul Kennicott, and those unfortunate models whom I have passed off as "my work"—are they dead, as we know death, or are their statues sentient and possessed of nerves? How does that jelly creature feel to the touch? Does it impart a violent electrical shock or a subtle emanation of some force beyond our ken, changing the atom-structure of the flesh it turns into stone?

Many such questions have occurred to me often in the small hours when I lie awake, tortured by remorse for what I have done.

But tonight, gentlemen, I shall know all the answers.

The Planet of Dread

by R. F. Starzl

Stanley G. Weinbaum made his reputation by his descriptions of the bizarre flora and fauna of other planets. His plots and human characters, when laid on interplanetary scenes, were not exceptional—it was his weird Venusian, Martian, and satellite animals that made his stories so fascinating. The following is an interesting forerunner of the Weinbaum tale. Laid on another world, it follows the Weinbaum pattern startlingly closely and features enough unusual beasts to people a couple of that author's adventures. The interesting thing, however, is that it was written several years before, during the first year of Astounding Stories. *It might possibly have served to inspire the school of interplanetary depiction that was to follow.*

THERE was no use hiding from the truth. Somebody had blundered—a fatal blunder—and they were going to pay for it! Mark Forepaugh kicked the pile of hydrogen cylinders. Only a moment ago he had broken the seals—the mendacious seals that certified to the world that the flasks were fully charged. And the flasks were empty! The supply of this precious power gas, which in an emergency should have been sufficient for six years, simply did not exist.

He walked over to the integrating machine, which as early as the year 2031 had begun to replace the older atomic processes, due to the shortage of the radium series metals. It was bulky and heavy compared to the atomic disintegrators, but it was much more economical and very dependable. Dependable—provided some thick-headed stock clerk at a terrestrial supply station did not check in empty hydrogen cylinders instead of full ones. Forepaugh's unwonted curses brought a smile to the stupid, good-natured face of his servant, Gunga—he who had been banished for life from his native Mars for his impiety in closing his single round eye during the sacred Ceremony of the Wells.

The Earthman was at this steaming hot, unhealthful trading station under the very shadow of the South Pole of the minor planet Inra for an entirely different reason. One of the most popular of his set on the Earth, an athletic hero, he had fallen in love, and the devoutly wished-for marriage was only prevented by lack of funds. The opportunity to take charge of this richly paid, though dangerous, outpost of civilization had been no sooner offered than taken. In another week or two the relief ship was due to take him and his valuable collection of exotic Inranian orchids back to the Earth, back to a fat bonus, Constance, and an assured future.

It was a different young man who now stood tragically before the useless power plant. His slim body was bowed, and his clean features were drawn. Grimly he raked the cooling dust that had been forced in the integrating chamber by the electronic rearrangement of the original hydrogen atoms—finely powdered iron and silicon—the "ashes" of the last tank of hydrogen.

Gunga chuckled.

"What's the matter?" Forepaugh barked. "Going crazy already?"

"Me, haw! Me, haw! Me thinkin'," Gunga rumbled. "Haw! We got, haw! plenty hydr'gen." He pointed to the low metal roof of the trading station. Though it was well insulated against sound, the place continually vibrated to the low murmur of the Inranian rains that fell interminably through the perpetual polar day. It was a rain such as is never seen on Earth, even in the tropics. It came in drops as large as a man's fist. It came in streams. It came in large, shattering masses that broke before they fell and filled the air with spray. There was little wind, but the steady green downpour of water and the brilliant continuous flashing of lightning shamed the dull soggy twilight produced by the large, hot, but hidden sun.

"*Your* idea of a joke!" Forepaugh growled in disgust. He understood what Gunga's grim pleasantry referred to. There was indeed an incalculable quantity of hydrogen at hand. If some means could be found to separate the hydrogen atoms from the oxygen in the world of water around them, they would not lack for fuel. He thought of electrolysis, and relaxed with a sigh. There was no power. The generators were dead, the air drier and cooler had ceased its rhythmic pulsing nearly an hour ago. Their lights were gone, and the automatic radio utterly useless.

"This is what comes of putting all your eggs in one basket," he thought, and let his mind dwell vindictively on the engineers who had designed the equipment on which his life depended.

An exclamation from Gunga startled him. The Martian was pointing to the ventilator opening, the only part of this strange building that was not hermetically sealed against the hostile life of Inra. A dark rim had appeared at its margin, a loathsome, black-green rim that was moving, spreading out. It crept over the metal walls like low-lying smoke of a fire, yet it was a solid. From it emanated a strong, miasmatic odor.

"The giant mold!" Forepaugh cried. He rushed to his desk and took out his flash pistol, quickly set the localizer so as to cover a large area. When he turned he saw, to his horror, Gunga about to smash into the mold with his ax. He sent the man spinning with a blow to the ear.

"Want to scatter it and start it growing in a half-dozen places?" he snapped. "Here!"

He pulled the trigger. There was a light, spiteful *ping* and for an instant a cone of white light stood out in the dim room like a solid thing. Then it was gone, and with it was gone the black mold, leaving a circular area of blistered paint on the wall and an acrid odor in the air. Forepaugh leaped to the ventilating louver and closed it tightly.

"It's going to be like this from now on," he remarked to the shaken Gunga. "All these things wouldn't bother us as long as the machinery kept

the building dry and cool. They couldn't live in here. But it's getting damp and hot. Look at the moisture condensing on the ceiling!"

Gunga gave a guttural cry of despair. "It knows, Boss; look!"

Through one of the round, heavily framed ports it could be seen, the lower part of its large, shapeless body half-floating in the lashing water that covered their rocky shelf to a depth of several feet, the upper part spectral and gray. It was a giant amoeba, fully six feet in diameter in its present spheroid form, but capable of assuming any shape that would be useful. It had an envelope of tough, transparent matter, and was filled with a fluid that was now cloudy and then clear. Near the center there was a mass of darker matter, and this was undoubtedly the seat of its intelligence.

The Earthman recoiled in horror! A single cell with a brain! It was unthinkable. It was a biological nightmare. Never before had he seen one—had, in fact, dismissed the stories of the Inranian natives as a bit of primitive superstition, had laughed at these gentle, stupid amphibians with whom he traded when they, in their imperfect language, tried to tell him of it.

They had called it the Ul-lul. Well, let it be so. It was an amoeba, and it was watching him. It floated in the downpour and watched him. With what? It had no eyes. No matter, it was watching him. And then it suddenly flowed outward until it became a disc rocking on the waves. Again its fluid form changed, and by a series of elongations and contractions it flowed through the water at an incredible speed. It came straight for the window, struck the thick, unbreakable glass with a shock that could be felt by the men inside. It flowed over the glass and over the building. It was trying to eat them, building and all! The part of its body over the port became so thin that it was almost invisible. At last, its absolute limit reached, it dropped away, baffled, vanishing amid the glare of the lightning and the frothing waters like the shadows of a nightmare.

The heat was intolerable and the air was bad.

"Haw, we have to open vent'lator, Boss!" gasped the Martian.

Forepaugh nodded grimly. It wouldn't do to smother either. Though to open the ventilator would be to invite another invasion by the black mold, not to mention the amoebae and other fabulous monsters that had up to now been kept at a safe distance by the repeller zone, a simple adaptation of a very old discovery. A zone of mechanical vibrations, of a frequency of 500,000 cycles per second, was created by a large quartz crystal in the water, which was electrically operated. Without power, the protective zone had vanished.

"We watch?" asked Gunga.

"You bet we watch. Every minute of the 'day' and 'night.'"

He examined the two chronometers, assuring himself that they were well wound, and congratulated himself that they were not dependent on the defunct power plant for energy. They were his only means of measuring the passage of time. The sun, which theoretically would seem to travel round and round the horizon, rarely succeeded in making its exact location known,

but appeared to shift strangely from side to side at the whim of the fog and water.

"The fellas," Gunga remarked, coming out of a study. "Why not come?" He referred to the Inranians.

"Probably know something's wrong. They can tell the quartz oscillator is stopped. Afraid of the Ul-lul, I suppose."

" 'Squeer," demurred the Martian. "Ul-lul not bother fellas."

"You mean it doesn't follow them into the underbrush. But it would find tough going there. Not enough water; trees there, four hundred feet high with thorny roots and rough bark—they wouldn't like that. Oh no, these natives ought to be pretty snug in their dens. Why, they're as hard to catch as a muskrat! Don't know what a muskrat is, huh? Well, it's the same as the Inranians, only different, and not so ugly."

For the next six days they existed in their straitened quarters, one guarding while the other slept, but such alarms as they experienced were of a minor nature, easily disposed of by their flash pistol. It had not been intended for continuous service, and under the frequent drains it showed an alarming loss of power. Forepaugh repeatedly warned Gunga to be more sparing in its use, but that worthy persisted in his practice of using it against every trifling invasion of the poisonous Inranian cave moss that threatened them, or the warm, soggy water-spiders that hopefully explored the ventilator shaft in search of living food.

"Bash 'em with a broom, or something! Never mind if it isn't nice. Save our flash gun for something bigger."

Gunga only looked distressed.

On the seventh day their position became untenable. Some kind of sea creature, hidden under the ever-replenished storm waters, had found the concrete emplacements of their trading post to its liking. Just how it was done was never learned. It is doubtful that the creatures could gnaw away the solid stone—more likely the process was chemical, but none the less it was effective. The foundations crumbled; the metal shell subsided, rolled half over so that silty water leaked in through the straining seams, and threatened at any moment to be buffeted and urged away on the surface of the flood toward that distant vast sea which covers nine-tenths of the area of Inra.

"Time to mush for the mountains," Forepaugh decided.

Gunga grinned. The Mountains of Perdition were to his point of view, the only part of Inra even remotely inhabitable. They were sometimes fairly cool, and though perpetually pelted with rain, blazing with lightning and reverberating with thunder, they had caves that were fairly dry and too cool for the black mold. Sometimes, under favorable circumstances on their rugged peaks, one could get the full benefit of the enormous hot sun for whose actinic rays the Martian's starved system yearned.

"Better pack a few cans of the food tablets," the white man ordered. "Take a couple of waterproof sleeping bags for us, and a few hundred fire pellets. You can have the flash pistol; it may have a few more charges in it."

Forepaugh broke the glass case marked "Emergency Only" and removed

two more flash pistols. Well he knew that he would need them after passing beyond the trading area—perhaps sooner. His eyes fell on his personal chest, and he opened it for a brief examination. None of the contents seemed of any value, and he was about to pass when he dragged out a long, heavy, .45 caliber six-shooter in a holster, and a cartridged belt filled with shells. The Martian stared.

"Know what it is?" his master asked, handing him the weapon.

"Gunga not know." He took it and examined it curiously. It was a fine museum piece in an excellent state of preservation, the metal overlaid with the patina of age, but free from rust and corrosion.

"It's a weapon of the Ancients," Forepaugh explained. "It was a sort of family heirloom and is over 300 years old. One of my grandfathers used it in the famous Northwest Mounted Police. Wonder if it'll still shoot."

He leveled the weapon at a fat, sightless wriggler that came squirming through a seam, squinting unaccustomed eyes along the barrel. There was a violent explosion, and the wriggler disappeared in a smear of dirty green. Gunga nearly fell over backward in fright, and even Forepaugh was shaken. He was surprised that the ancient cartridge had exploded at all, though he knew powder making had reached a high level of perfection before explosive chemical weapons had yielded to the newer, lighter, and infinitely more powerful ray weapons. The gun would impede their progress. It would be of very little use against the giant Carnivora of Inra. Yet something —perhaps a sentimental attachment, perhaps what his ancestors would have called a "hunch"—compelled him to strap it around his waist. He carefully packed a few essentials in his knapsack, together with one chronometer and a tiny gyroscopic compass. So equipped, they could travel with a fair degree of precision toward the mountains some hundred miles on the other side of a steaming forest, a-crawl with feral life, and hot with bloodlust.

Man and Martian descended into the warm waters and, without a backward glance, left the trading post to its fate. There was not even any use in leaving a note. Their relief ship, soon due, would never find the station without radio direction.

The current was strong, but the water gradually became shallower as they ascended the sloping rock. After half an hour they saw ahead of them the loom of the forest, and with some trepidation they entered the gloom cast by the towering, fernlike trees, whose tops disappeared in murky fog. Tangled vines impeded their progress. Quagmires lay in wait for them, and tough weeds tripped them, sometimes throwing one or another into the mud among squirming small reptiles that lashed at them with spiked, poisonous feet and then fell to pieces, each piece to lie in the bubbling ooze until it grew again into a whole animal.

Several times they almost walked under the bodies of great spheroidal creatures with massive short legs, whose tremendously long, sinuous necks disappeared in the leafy murk above, swaying gently like long-stalked lilies in a terrestrial pond. These were szornacks, mild-tempered vegetarians whose only defense lay in their thick, blubbery hides. Filled with parasites, stinking

and rancid, their decaying covering of fat effectively concealed the tender flesh underneath, protecting them from fangs and rending claws.

Deeper in the forest, the battering of the rain was mitigated. Giant neopalm leaves formed a roof that shut out not only most of the weak daylight, but also the fury of the downpour. The water collected in cataracts, ran down the boles of the trees, and roared through the semi-circular canals of the snake trees, so named by early explorers for their waving, rubbery tentacles, multiplied a millionfold, that performed the duties of leaves. Water gurgled and chuckled everywhere, spread in vast dim ponds and lakes writhing with tormented roots, upheaved by unseen, uncatalogued leviathans, rippled by translucent discs of loathsome, luminescent jelly that quivered from place to place in pursuit of microscopic prey.

Yet the impression was one of calm and quiet, and the waifs from other worlds felt a surcease of nervous tension. Unconsciously they relaxed. Taking their bearings, they changed their course slightly for the nesting place of the nearest tribe of Inranians where they hoped to get food and at least partial shelter; for their food tablets had mysteriously turned to an unpleasant viscous liquid, and their sleeping bags were alive with giant bacteria easily visible to the eye.

They were doomed to disappointment. After nearly twelve hours of desperate struggling through the morass, through gloomy aisles, and countless narrow escapes from prowling beasts of prey in which only the speed and tremendous power of their flash pistols saved them from instant death, they reached a rocky outcropping which led to the comparatively dry rise of land on which a tribe of Inranians made its home. Their faces were covered with welts made by the hanging filaments of bloodsucking trees as fine as spider webs, and their senses reeled with the oppressive stench of the abysmal jungle. If the pampered ladies of the Inner Planets only knew where their thousand-dollar orchids sprang from?

Converging runways showed the opening of one of the underground dens, almost hidden from view by a bewildering maze of roots, rendered more formidable by long, sharp stakes made from the iron-hard thigh-bones of the flying kabo.

Forepaugh cupped his hands over his mouth and gave the call.

"Ouf! Ouf! Ouf! Ouf! Ouf!"

He repeated it over and over, the jungle giving back his voice in a muffled echo, while Gunga held a spare flash pistol and kept a sharp lookout for a carnivore intent on getting an unwary Inranian.

There was no answer. These timid creatures, who are often rated the most intelligent life native to primitive Inra, had sensed disaster and had fled.

Forepaugh and Gunga slept in one of the foul, poorly ventilated dens, ate of the hard, woody tubers that had not been worth taking along, and wished they had a certain stock clerk at that place at that time. They were awakened out of deep slumber by the threshing of an evil-looking creature which had become entangled among the sharpened spikes. Its tremendous maw, splitting it almost in half, was opened in roars of pain that showed great yellow fangs eight inches in length. Its heavy flippers battered the stout roots and

lacerated themselves in the beast's insensate rage. It was quickly dispatched with a flash pistol and Gunga cooked himself some of the meat, using a fire pellet; but despite his hunger, Forepaugh did not dare eat any of it, knowing that this species, strange to him, might easily be one of the many on Inra that are poisonous to Terrestrials.

They resumed their march toward the distant invisible mountains, and were fortunate in finding somewhat better footing. They made about 25 miles on that "day," without untoward incident. Their ray pistols gave them an insuperable advantage over the largest and most ferocious beasts they could expect to meet, so that they became more and more confident, despite the knowledge that they were rapidly using up the energy stored in their weapons. The first one had long ago been discarded, and the charge indicators of the other two were approaching zero at a disquieting rate. Forepaugh took them both, and from that time on he was careful never to waste a discharge except in case of a direct and unavoidable attack. This forced many detours through sucking mud, and came near to ending both their lives.

The Earthman was in the lead when it happened. Seeking an uncertain footing through a tangle of low-growing, thick, ghastly white vegetation, he placed a foot on what seemed to be a broad, flat rock projecting slightly above the ooze. Instantly there was a violent upheaval of mud; the seeming rock flew up like a trap-door, disclosing a cavernous mouth some seven feet across, and a thick, triangular tentacle flew up from its concealment in the mud in a vicious arc. Forepaugh leaped back barely in time to escape being swept in and engulfed. The end of the tentacle struck him a heavy blow on the chest, throwing him back with such force as to bowl Gunga over, and whirling the pistols out of his hands into a slimy, bulbous growth nearby, where they stuck in the phosphorescent cavities the force of their impact had made.

There was no time to recover the weapons. With a bellow of rage, the beast was out of its bed and rushing at them. Nothing stayed its progress. Tough, heavily scaled trees thicker than a man's body shuddered and fell as its bulk brushed by them. But it was momentarily confused, and its first rush carried it past its dodging quarry. This respite saved their lives.

Rearing its plumed head to awesome heights, its knobby bark running with brown rivulets of water, a giant tree, even for that world of giants, offered refuge. The men scrambled up the rough trunk easily, finding plenty of hand and footholds. They came to rest on one of the shelflike circumvoluting rings, some twenty-five feet above the ground. Soon the blunt brown tentacles slithered in search of them, but failed to reach their refuge by inches.

And now began the most terrible siege that interlopers in that primitive world can endure. From that cavernous, distended throat came a tremendous, world-shaking noise.

"HOOM! HOOM! HOOM! HOOM! HOOM!"

Forepaugh put his hand to his head. It made him dizzy. He had not believed that such noise could be. He knew that no creature could long live

amidst it. He tore strips from his shredded clothing and stuffed his ears, but felt no relief.

"HOOM! HOOM! HOOM! HOOM! HOOM!"

It throbbed in his brain.

Gunga lay a-sprawl, staring with fascinated eye into the pulsating scarlet gullet that was blasting the world with sound. Slowly, slowly he was slipping. His master hauled him back. The Martian grinned at him stupidly, slid again to the edge.

Once more Forepaugh pulled him back. The Martian seemed to acquiesce. His single eye closed to a mere slit. He moved to a position between Forepaugh and the tree trunk, braced his feet.

"No, you don't!" The Earthman laughed uproariously. The din was making him light-headed. It was so funny! Just in time he had caught that cunning expression and prepared for the outlashing of feet designed to plunge him into the red cavern below and to stop that hellish racket.

"And now—"

He swung his fist heavily, slamming the Martian against the tree. The red eye closed wearily. He was unconscious, and lucky.

Hungrily the Earthman stared at his distant flash pistols, plainly visible in the luminescence of their fungus bedding. He began a slow, cautious creep along the top of a vine some eight inches thick. If he could reach them. . . .

Crash! He was almost knocked to the ground by the thud of a frantic tentacle against the vine. His movement had been seen. Again the tentacle struck with crushing force. The great vine swayed. He managed to reach the shelf again in the very nick of time.

"HOOM! HOOM! HOOM! HOOM! HOOM!"

A bolt of lightning struck a giant fern some distance away. The crash of thunder was hardly noticeable. Forepaugh wondered if his tree would be struck. Perhaps it might even start a fire, giving him a flaming brand with which to torment his tormenter. Vain hope! The wood was saturated with moisture. Even the fire pellets could not make it burn.

"HOOM! HOOM! HOOM! HOOM! HOOM! HOOM! HOOM!"

The six-shooter! He had forgotten it. He jerked it from its holster and pointed it at the red throat, emptied all the chambers. He saw the flash of yellow flame, felt the recoil, but the sound of the discharges was drowned in the Brobdignagian tumult. He drew back his arm to throw the useless toy from him. But again that unexplainable, senseless "hunch" restrained him. He reloaded the gun and returned it to its holster.

"HOOM! HOOM! HOOM! HOOM! HOOM! HOOM! HOOM!"

A thought had been struggling to reach his consciousness against the pressure of the unbearable noise. The fire pellets! Couldn't they be used in some way? These small chemical spheres, no larger than the end of his little finger, had long ago supplanted actual fire along the frontiers, where electricity was not available for cooking. In contact with moisture they emitted terrific heat, a radiant heat which penetrated meat, bone, and even metal. One such pellet would cook a meal in ten minutes with no sign of scorching

or burning. And they had several hundred in one of the standard moisture-proof containers.

As fast as his fingers could work the trigger of the dispenser Forepaugh dropped the potent little pellets down the bellowing throat. He managed to release about thirty before the bellowing stopped. A veritable tornado of energy broke loose at the foot of the tree. The giant maw was closed, and the shocking silence was broken only by the thrashing of a giant body in its death agonies. The radiant heat, penetrating through and through the beast's body, withered nearby vegetation and could be easily felt on the perch up the tree.

Gunga was slowly recovering. His iron constitution helped him to rally from the powerful blow he had received, and by the time the jungle was still he was sitting up mumbling apologies.

"Never mind," said his master. "Shin down there and cut us off a good helping of roast tongue, if it has a tongue, before something else comes along and beats us out of a feast."

"Him poison, maybe," Gunga demurred. They had killed a specimen new to zoologists.

"Might as well die of poison as starvation," Forepaugh countered.

Without more ado the Martian descended, cut out some large, juicy chunks as his fancy dictated, and brought his loot back up the tree. The meat was delicious and apparently wholesome. They gorged themselves and threw away what they could not eat, for food spoils very quickly in the Inranian jungles and uneaten meat would only serve to attract hordes of the gauzy-winged, gluttonous Inranian swamp flies. As they sank into slumber they could hear the beginning of a bedlam of snarling and fighting as the lesser Carnivora fed on the body of the fallen giant.

When they awoke the chronometer recorded the passing of twelve hours, and they had to tear a network of strong fibers with which the tree had invested them preparatory to absorbing their bodies as food. For so keen is the competition for life on Inra that practically all vegetation is capable of absorbing animal food directly. Many an Inranian explorer can tell tales of specialized flesh-eating plants; but they are now so well known that they are easily avoided.

A clean-picked framework of crushed and broken giant bones was all that was left of the late bellowing monster. Six-legged water dogs were polishing them hopefully, or delving into them with their long, sinuous snouts for the marrow. The Earthman fired a few shots with his six-shooter, and they scattered, dragging the bodies of their fallen companions to a safe distance to be eaten.

Only one of the flash pistols was in working order. The other had been trampled by heavy hoofs and was useless. A heavy handicap under which to traverse fifty miles of abysmal jungle. They started with nothing for breakfast except water, of which they had plenty.

Fortunately the outcroppings of rocks and gravel washes were becoming more and more frequent, and they were able to travel at much better speed. As they left the low-lying jungle land they entered a zone which was faintly

reminiscent of a Terrestrial jungle. It was still hot, soggy and fetid, but gradually the most primitive aspects of the scene were modified. The overarching trees were less closely packed, and they came across occasional rock clearings which were bare of vegetation except for a dense carpet of brown, lichenlike vegetation that secreted an astonishing amount of juice. They slipped and sloshed through this, rousing swarms of odd, toothed birds, which darted angrily around their heads and slashed at them with the razor-sharp saw edges on the back of their legs. Annoying as they were, they could be kept away with branches torn from trees, and their presence connoted an absence of the deadly jungle flesh-eaters, permitting a temporary relaxation of vigilance and saving the resources of the last flash gun.

They camped that "night" on the edge of one of these rock clearings. For the first time in weeks it had stopped raining, although the sun was still obscured. Dimly on the horizon could be seen the first of the foothills. Here they gathered some of the giant, oblong fungus that early explorers had taken for blocks of porous stone because of their size and weight, and, by dint of the plentiful application of fire pellets, managed to set it ablaze. The heat added nothing to their comfort, but it dried them out and allowed them to sleep unmolested.

An unwary winged eel served as their breakfast, and soon they were on their way to those beckoning hills. It had started to rain again, but the worst part of their journey was over. If they could reach the top of one of the mountains there was a good chance that they would be seen and rescued by their relief ship, provided they did not starve first. The flyer would use the mountains as a base from which to search for the trading station, and it was conceivable that the skipper might actually have anticipated their desperate adventure and would look for them in the Mountains of Perdition.

They had crossed several ranges of the foothills and were beginning to congratulate themselves when the diffused light from above was suddenly blotted out. It was raining again, and above the echo-augmented thunder they heard a shrill screeching.

"A web serpent!" Gunga cried, throwing himself flat on the ground.

Forepaugh eased into a rock cleft at his side. Just in time. A great grotesque head bore down upon him, many-fanged as a medieval dragon. Between obsidian eyes was a fissure whence emanated a wailing and a foul odor. Hundreds of short, clawed legs slithered on the rocks under a long sinuous body. Then it seemed to leap into the air again. Webs grew taut between the legs, strumming as they caught a strong uphill wind. Again it turned to the attack, and missed them. This time Forepaugh was ready for it. He shot at it with his flash pistol.

Nothing happened. The fog made accurate shooting impossible, and the gun lacked its former power. The web serpent continued to course back and forth over their heads.

"Guess we'd better run for it," Forepaugh murmured.

"Go 'head!"

They cautiously left their places of concealment. Instantly the serpent

was down again, persistent if inaccurate. It struck the place of their first concealment and missed them.

"Run!"

They extended their weary muscles to the utmost, but it was soon apparent that they could not escape long. A rock wall in their path saved them.

"Hole!" the Martian gasped.

Forepaugh followed him into the rocky cleft. There was a strong draft of dry air, and it would have been next to impossible to hold the Martian back, so Forepaugh allowed him to lead on toward the source of the draft. As long as it led into the mountains he didn't care.

The natural passageway was untenanted. Evidently its coolness and dryness made it untenable for most of Inra's humidity and heat loving life. Yet the floor was so smooth that it must have been artificially leveled. Faint illumination was provided by the rocks themselves. They appeared to be covered by some microscopic phosphorescent vegetation.

After hundreds of twists and turns and interminable straight galleries the cleft turned more sharply upward, and they had a period of stiff climbing. They must have gone several miles and climbed at least 20,000 feet. The air became noticeably thin, which only exhilarated Gunga, but slowed the Earthman down. But at last they came to the end of the cleft. They could go no further, but above them, at least 500 feet higher, they saw a round patch of sky, miraculously bright blue sky!

"A pipe!" Forepaugh cried.

He had often heard of these mysterious, almost fabulous structures sometimes reported by passing travelers. Straight and true, smooth as glass and apparently immune to the elements, they had been occasionally seen standing on the very tops of the highest mountains—seen for a few moments only before they were hidden again by the clouds. Were they observatories of some ancient race, placed thus to pierce the mysteries of outer space? They would find out.

The inside of the pipe had zigzagging rings of metal, conveniently spaced for easy climbing. With Gunga leading, they soon reached the top. But not quite.

"Eh?" said Forepaugh.

"Uh?" said Gunga.

There had not been a sound, but a distinct, definite command had registered on their minds.

"Stop!"

They tried to climb higher, but could not unclasp their hands. They tried to descend, but could not lower their feet.

The light was by now relatively bright, and as by command their eyes sought the opposite wall. What they saw gave their jaded nerves an unpleasant thrill—a mass of doughy matter of a blue-green color about three feet in diameter, with something that resembled a cyst filled with transparent liquid near its center.

And this thing began to flow along the rods, much as tar flows. From the mass extended a pseudopod; touched Gunga on the arm. Instantly the

arm was raw and bleeding. Terrified, immovable, he writhed in agony. The pseudopod returned to the main mass, disappearing into its interior with the strip of bloody skin.

Its attention was centered so much on the luckless Martian that its control slipped from Forepaugh. Seizing his flash pistol, he set the localizer for a small area and aimed it at the thing, intent on burning it into nothingness. But again his hand was stayed. Against the utmost of his will-power his fingers opened, letting the pistol drop. The liquid in the cyst danced and bubbled. Was it laughing at him? It had read his mind—thwarted his will again.

Again a pseudopod stretched out and a strip of raw, red flesh adhered to it and was consumed. Mad rage convulsed the Earthman. Should he throw himself tooth and nail on the monster? And be engulfed?

He thought of the six-shooter. It thrilled him.

But wouldn't it make him drop that too?

A flash of atavistic cunning came to him.

He began to reiterate in his mind a certain thought.

"This thing is so I can see you better—this thing is so I can see you better."

He said it over and over, with all the passion and devotion of a celibate's prayer over a uranium fountain.

"This thing is harmless—but it will make me see you better!"

Slowly he drew the six-shooter. In some occult way he knew it was watching him.

"Oh, this is harmless! This is an instrument to aid my weak eyes! It will help me realize your mastery. This will enable me to know your true greatness. This will enable me to know you as a god!"

Was it complacence or suspicion that stirred the liquid in the cyst so smoothly? Was it susceptible to flattery? He sighted along the barrel.

"In another moment your great intelligence will overwhelm me," proclaimed his surface mind desperately, while the subconscious tensed the trigger. And at that the clear liquid burst into a turmoil of alarm. Too late. Forepaugh went limp, but not before he had loosed a steel-jacketed bullet that shattered the mind cyst of the pipe denizen. A horrible pain coursed through his every fibre and nerve. He was safe in the arms of Gunga, being carried to the top of the pipe to the clean dry air, and the blessed, blistering sun.

The pipe denizen was dying. A viscous, inert mass, it dropped lower and lower, lost contact at last, shattered into slime at the bottom.

Miraculous sun! For a luxurious fifteen minutes they roasted there on the top of the pipe, the only solid thing in a sea of clouds as far as the eye could reach. But no! That was a circular spot against the brilliant white of the clouds, and it was rapidly coming closer. In a few minutes it resolved itself into the *Comet,* fast relief ship of the Terrestrial, Inranian, Genidian, and Zydian Lines, Inc. With a low buzz of her repulsion motors she drew alongside. Hooks were attached and ports opened. A petty officer and a crew of roustabouts made her fast.

"What the hell's going on here?" asked the cocky little Terrestrial who

was skipper, stepping out and surveying the castaways. "We've been looking for you ever since your directional wave failed. But come on in—come on in!"

He led the way to his stateroom, while the ship's surgeon took Gunga in charge. Closing the door carefully, he delved into the bottom of his locker and brought out a flask.

"Can't be too careful," he remarked, filling a small tumbler for himself and another for his guest. "Always apt to be some snooper to report me. But say—you're wanted in the radio room."

"Radio room nothing! When do we eat?"

"Right away, but you'd better see him. Fellow from the Interplanetary News Agency wants you to broadcast a copyrighted story. Good for about three years' salary, old boy."

"All right. I'll see him"—with a happy sigh—"just as soon as I put through a personal message."

The Alien Vibration

by Hannes Bok

Hannes Bok is one of the favorite artists of modern fantasy periodicals. His work, which is noted for the delicacy of his shadings, the whimsicality of his monsters, the high artistic value of his design, is prized highly by readers. Like many talented persons, Bok is gifted in more ways than one. For instance, he writes stories which reflect in their own way the same delicate and vivid imagery. A devotee of A. Merritt —in fact we would call him an outstanding authority on that author— his style tends to follow that master's work very closely. The Alien Vibration *is an example. A story that reads like a Bok illustration looks —gemlike.*

FRANK ROGERS heard the tortured wailing on a night in scarlet autumn, when he was sitting alone in his cottage, cosily woolgathering before a dying fire. Instinctively he glanced around, then chuckled—for of course he was alone. Sparks snapped in the fire. Had he been dreaming? He relaxed again. The wind's whispering around the eaves soothed him. And perhaps what he had heard had been—only the wind.

Perhaps!

All that day he had roamed the woodland surrounding his home, his eyes dazzled by the gaudy frost-tinted foliage, his ears charmed by the sighing music of the wind as it stripped the trees. His nostrils had dilated to the spicy sweetness of the deep-drifted dry leaves through which he had waded as though through rustling dry water spattering him with flakes of fragrant foam.

And he had stood solitary on the hilltop, stretching up his hands to the infinite blue of the heavens, had flung wide the gates of his senses to welcome the beauty of this day. Then, in the dim afterglow, he had returned home content. The house had been but a shadow in the dusk—entering it, he had lit a fire, dined, and gone to sit by the hearth. And now—that phantom outcry, dismissed as mere imagination.

But the whimpering began again—not petulant, but despairing, rather—as if the being from whom it came was no longer able to restrain itself. And it was the kind of cry which nobody could possibly ignore.

Rogers reached out, touched nothing, stood up and looked around, still seeing—nobody. He went over to the wall, and snapped on a light, banishing the flickering shadows set in motion by the fire. The only living thing in the room was himself.

The sad sounds had ceased when he had arisen, but now, as he shook his head in puzzlement, they resumed.

Rogers groped around the area from which the crying seemed to come, and though he touched nothing tangible, the sounds slurred to a pleased gurgling as when a baby's tears give way to happy prattle because of some maternal attention. Then came a pause followed by a rapid flow of light little notes. Words? If so, they were in a tongue unknown to Rogers—though as he listened they seemed oddly familiar, as if he had memorized them long before and forgotten them.

Plainly they questioned—he stepped back uncertainly. They repeated themselves, this time more slowly, to give him every chance of understanding them.

But he shrugged, baffled. If he were not dreaming, this thing must be a ghost . . .

Ghost? Or an alien presence? He rejected the supernatural. Most of his life had been spent in crowded cities, where the atmosphere was too confused by conflicting currents of thought for any delicate otherworld apperceptions—but here in the forest the air was clearer, less tainted. And in opening his senses to the day's wondrous loveliness, might he not also have opened them to—something else?

The inquiry was repeated a third time—and impatiently! Rogers could not quite bring himself to answer it—words were stirring in his mind, but uttering them was tantamount to talking to himself. Then there came a burst of exclamation from the unseen intruder, and a coy pleading, a wheedling. Rogers gave tongue.

"Go away, will you! I don't know who or what you are, and you make me nervous. Try bothering somebody else, please."

An upward inflection of surprise answered him. He peered from this side to that, seeing nobody.

"You may as well run along. I can't understand what you're saying."

Now the murmur began at his side and moved across the room toward the door—as if the speaker had walked, talking, from Roger's side across the room to the entrance. The last notes were insistent, urgent.

"No use," Rogers said. "I don't fathom you."

Again the response arose at his side and carried to the door. He followed it curiously. At once it passed through the door and called triumphantly from outside. For a clock's tick, Rogers hesitated, then stepped out into the rustling night. The voice immediately sped ahead, pleased and promising. He went after it.

Stage by stage the sounds summoned him and he pursued them until he was deep in the whispering woods. Over the tissue-paper crackle of trampled leaves the voice gradually subsided from a continuous stream of words to an occasional evocative hoot—now on one side of Rogers and again on the other, guiding him.

He knew the woods well, but so did the garrulous presence, for it steered

him carefully from gullies and tangled underbrush. Not even a low-hanging branch barred the way.

They reached the summit of the hill, and the presence was silent. The cold breeze plucked at Rogers' garments and riffled his hair like a teasing hand. Overhead curved the blue-black sky, powdered with stars.

Rogers thought: *I almost believe that, if I stretched my arms wide, I could launch off into infinity . . .*

The longer he looked up at the endless stretch of sky and stars, the less he was conscious of himself—he was far too insignificant a speck against the magnitude of the universe. He seemed weightless, almost as if indeed he were flying—he lost all sense of direction, was aware only of peace, the calm of Eternity—a mesmeric sensation of restful serenity . . .

Then he heard the muted babble of many childish voices. The one which had summoned him was murmuring: "It is all right now. He can hear us and understand what we say—his eyes will see us."

And as though the words were a command, he did see. At first there was only a diffused mellow glow filled with drifting splotches of brighter effulgence. Then he perceived that the moving lights were blurred mirthful faces like those of half-remembered children.

The gentle glimmers issued in all directions from a landscape of light, from prismatic hills and trees. The nearest objects were clearest—those farther away merged into the gleaming haze. The variations of hue and intensity blended into a splendid ambrous harmony.

Rogers discerned, scattered about, fragile pavilions rising out of rainbow glamors. Every glance disclosed something until then unseen.

Abruptly he was startled. While he was admiring a clump of diversely colored flowers—he could have sworn that the petals were tiny flames—it dimmed and vanished, like a fadeout on a cinema screen!

One of the hills dissolved into nothingness—in its place foamed an amethyst sea whereon magic islands appeared and disintegrated. The sea rolled away beyond ken. Rogers was looking into a canyon of malachite . . .

"Mirage," he murmured, and heard laughter. The drifting faces concentrated around him. Misty wide eyes, blue and amber, dwelt amusedly on him. Slender hands lifted in graceful gestures of disdain out of trailing half-visible lilac draperies.

"He thinks it's not real!" the faces gibed. "Let's prove to him that he's wrong!"

Fingers weightless as thistledown prodded him forward. Little wispy forms raced ahead of him, beckoning. Somnambulantly he allowed himself to be goaded along. He stumbled over a shrub which sprouted suddenly in front of him and disappeared when he awoke from his trance to glance disapproval at it. The little beings tittered.

A voice cautioned: "Remember, our mother is waiting! We mustn't detain him too long!"

The speaker was a little ruby wraith spangled with brassy glints. It danced tantalizingly close to Rogers, eluding his clumsy attempts to grasp it.

"You are—?" he asked, and it replied: "Shi-Voysieh, child of Yarra, The Woman."

"Yarra?" Rogers asked.

"You will see her very soon."

Rogers indicated the other child-faces. "And these?"

"They too are Yarra's children," Shi-Voysieh answered. "Our brothers . . . and sisters."

Now at every phantasmagorial manifestation, Rogers noted that the children pointed three fingers in its direction.

"And why do you do this?" he asked of Shi-Voysieh.

"In worship of their maker."

"Who is—"

"B'Kuth, our father—The Man." Again, at mention of the name, Shi-Voysieh reverently performed the ceremonial salute.

Rogers had no opportunity for further inquiry, for just then the ground was swept from under his feet. He found himself tumbling on the surface of a tempestuous lake which tossed him about violently. The waves looked like water but felt like rubber and were perfectly dry. After a hasty ritual of homage, the children scampered nimbly from the crest of one gigantic comber to another, shrieking delightedly if a sudden billow tumbled them. They clustered about Rogers, giggling at his confusion.

Then, in a breath, the waves whisked away, leaving an endless azure sky in which the children darted about joyously, uttering glad cries, like birds. There was nothing but the clear blue of sheer atmosphere. Rogers did not realize at the moment that all these disconcerting phenomena were being intelligently produced. And the children preferred frisking about to explaining the cause of Rogers' plight—perhaps they deemed explication unnecessary.

Only Rogers' struggles to breathe in an uprush of air, and the dwindling forms of the children, told him that he was falling. He shouted with panic—and discovered that he was quite safe in a hammock swinging among treetops, while above him the children were cavorting enthusiastically on puffs of cloud:

"These're ice-floes, and I'll be a bloodhound and chase you, if you want to be Eliza!"

Even while Rogers relaxed, panting, the hammock dissolved. He was seated on pavement at the foot of a tremendous white stairway. At its summit the children were hailing him impatiently. Beyond them loomed a marvelous edifice of translucent milky stone—its spires faded into mists of sky, and nebulous forms were discernible moving within it.

Rogers had undergone more than enough of the whirlwind changes.

"Come up! Come up!" the children shouted from the top of the stair.

"And have it turn into a chute-the-chute? No, thanks!" he said, and stayed comfortably as he was.

"Nothing will happen! We promise!"

He started up, but with misgivings. High he climbed, and higher. Whiffs

of white vapor puffed up from the snowy steps, enveloping him like languorously blown veils. They thickened, obliterating everything. He paused in white blindness. The children's hands patted him reassuringly.

Then long pale fingers drew the mist aside as though parting a pair of curtains, and Rogers looked up into the somber eyes of Yarra, The Woman.

She was seated on a throne of the white stone, and was as indistinct as though seen through waxed glass. All of twenty feet tall, she was robed in clinging cloudy white which trailed into the mist and merged with it.

Her oval face was margined with sleek yellow tresses that flowed over her shoulders. For eyes she had dark stars. Her slender nose was negligible, her mouth a rosy pucker. Her flesh had the sheen of pearl, and the veins pulsing at her temples, throat and wrists were like weak blue shadows of roots . . .

She reached down and lifted Rogers to her lap as though he were a kitten. Involuntarily he nestled against her warm bosom, breathing the delicious femininity which scented her clothing—then drew away in embarrassment. He sat tensely erect. There had been something suggestive about the pervasive whiteness, the— the *milkiness*—and the indistinctness of objects which somehow had sent him back to childhood. And Yarra seemed the mother of all mothers, the essence of maternity. . . .

Her eyes were soft on him. She was smiling understandingly.

"So you're the one whom Shi-Voysieh has been following," she murmured, her voice a soft woodwind melody.

At the mention of his name, the ruby-swathed presence flitted up to the pair and perched on The Woman's forearm. Rogers shared his gaze with them both—there was a certain sameness about them which he dismissed as family resemblance, not suspecting the truth.

Shi-Voysieh said earnestly: "For a very long time I have watched you—but you never saw, never heard me. I told this-our-mother about you, and asked whether I could not bring you to her, since you seemed so appreciative of beauty. For a time she would not consent. She said that you would be confused away from your own scheme of things—and she said that if you were aware of this world of ours, you could enter it unaided."

The Woman broke in: "I said that each living thing is a world unto itself and bound to that world."

Rogers, who had read metaphysical literature, said: "Solipsism—the belief that only oneself exists."

"I look into your mind," the mother said gravely, "and I see many shocking things. I would that I could look more deeply, but there is a curtain that hides very much from me . . . and it disturbs me. I see that you think yourself one of a great throng of people, and that you dare not accept as reality what others have not already accepted. Yours is the quaint backward belief that you cannot exist except as others exist—"

There was meaning, and profound meaning, in what she was saying, but Shi-Voysieh cut in petulantly:

"In the red woods I caught you with all your senses receptive—but I could not make my weak self known above the day's strong wonder. So I

followed you to your dwelling-place and waited—but it seemed too late—you could neither feel nor hear me. In my despair, I cried out aloud—and you heard me! But poorly. So I have led you here and asked our-mother-Yarra's help—and it is by her strength of will that you are kept with us."

"You led me here—but why?" Rogers asked, forgetting that the ruby wraith had already told him.

Shi-Voysieh gave another reason. "Because I knew somehow that you belong here, are one of us—"

The mother cried warningly: "Shi-Voysieh!" Both she and the ruby wraith were red-faced. They had let something slip.

Rogers thought: *Shi-Voysieh mentioned a Man . . . if this is The Woman, what must The Man be like?*

As if he had spoken, Shi-Voysieh shrank away from him. The Woman's face hardened as if at a bitter remembrance, then became gentle again. All around Rogers was a flutter and scurry of agitated children.

He asked: "Was it such a dreadful thing to think?"

The Woman's gaze was reproachful.

"When you are aware of Him—do honor to Him." She herself made the ceremonial salute which the children had used.

"It's a strange custom—I didn't understand." The children exchanged worried glances at this.

The Woman's long fingers stroked him in a caress.

"I know, and I forgive. You ask of The Man. His name is B'Kuth." She pointed three fingers upward. "He is a mystery—to know B'Kuth and for what he stands would be to comprehend the riddle of Life itself."

She was eyeing Rogers as if he knew all this, and that she was merely reminding him. "No mere mind such as yours could understand such an intensity of knowledge as B'Kuth. To understand The Man is to have become—The Man! In your world's terms—can fire understand water without being extinguished?"

"But—you," Rogers said.

"I?" She threw back her head. At her sudden horrible laughter the children screamed, scattering wildly into the mists, leaving her and Rogers alone. "I am only one whom He has exalted—!"

For a moment she looked away, her face a cold mask. Then quickly she set Rogers down on his feet and arose, turning from him to go.

He put up his hands to stay her.

"Don't go! Please!"

She did not look at him, and he was afraid that she had not heard, that she had forgotten him. But after a pause she said: "I cannot take you with me, for I go now in search of—Him. I sense him calling, and—I am His mate, you know."

Again her terrible laughter rolled.

She suppressed her emotion, and bent more calmly over Rogers. "Do as you wish until I return. Create whatever you desire. That is the law here, you know—to create, to imitate B'Kuth. You don't know what I mean?

Why, look—suppose you desire food. Imagine then its qualities! Describe its appearance in the air with your hands—visualize it until you are almost certain you see it before you, and lo—"

Rogers shook his head helplessly. "I can't make something from nothing."

Her eyes plumbed his. "In that part of your mind which is open to me, I read a definition—that matter is composed of whirling nothingness, its nature dependent on the velocity of its motion. Well, Thought is velocity, too."

But he still did not understand. She bit her underlip impatiently and knelt before him.

"Now watch," she said. "I will make a fruit. It must be round, transparent, purple and pithy. Neither sweet nor bitter, but with a haunting undertaste of aromatic drowsiness—"

As she spoke, her cupped hands apparently fondled an invisible globe in midair. Suddenly the fruit which she had described materialized between her palms. She dropped it beside her—it fell with a thump—and motioned imperiously to Rogers.

"Now do something like that," she said.

He closed his eyes to concentrate the better.

"I'd like to make a cloth," he said, gesturing. "A very large piece—oh, about so wide. Weightless. Like strands of woven green fire, with little silvery vine-embroideries—"

Something swept his cheek. He lifted his eyelids and beheld The Woman holding up vast folds of fabric. The little damasked designs were vague, wavering. He complained about them to Yarra.

"It is because your conception of them wasn't explicit enough," she said. "Get more practice." She arose. "Now I must go."

"But this cloth—it's a shawl for you!" he cried, thrusting folds of the stuff at her.

"Thank you, my dear." She smiled mischievously. "But let us see how long it is."

She dragged on the cloth, hand over hand. There seemed no end to it—Rogers was practically lost in the accumulating folds. Then Yarra held up the last of it, which wisped away into emptiness. He had forgotten to imagine the end of the cloth!

"It's a very large piece," she commented, smiling. "I'm afraid it's much too large, however weightless, for me to use ever. But thank you, my child . . . I can see that you're wondering what to do with it all. Just walk away and forget it! As soon as you've lost interest in it, it will vanish—that's the way with things here. Now really, I must leave you."

She touched his hand affectionately and stepped into the mist.

Rogers stood gazing after her until she was out of sight. Then the purple globe took his eye. He wondered how it tasted—he had never imagined "aromatic drowsiness"—but it vanished from his hands. The Woman had "lost interest" in it. "The way with things here." When he looked for the green cloth, it too had disappeared.

He thought ruefully: *Too bad things aren't like that in my own world!*

Then he wondered: *Well, aren't they? Isn't Rumor a making of something out of nothing—and doesn't Rumor wreck lives? Don't we build prejudices into destructive forces? What is anything material but an idea expressed in terms of substance?*

He began to see now the truth in the myths of Cadmus, who sowed the dragon's teeth; in Circe, whose wine of gold turned greedy men to beasts. But his thoughts took another direction:

If the law here is to create—then who makes all these changing illusions which harass me so? It's malevolent and damnable!

He thrust up his hands and shouted: "I want to behold whoever is in back of all this!"

Instantly manifestations overwhelmed him. There was a rocketing of sound, a crash of Cosmos shattering. Mad seas lurched in and out of shrieking blackness—whirling stars collided in bursts of brilliance. Lightnings raced in chase after each other. Whole landscapes wrenched under Rogers in zigzag marches, lifting and dropping him, painfully knocking him about.

It rained ice, rocks, fire and strange yellow luminaries. Rogers was bounced on an endless sheet of stinking human flesh . . . he was drenched in slime . . . howling winds picked him up, spinning him through a place where strata of colored air boiled like a cauldron of rainbows. Falls of scrap-metal thundered clangourously, and tangled plants of flexible glass grew to monstrous size and exploded. Rogers was stifling in an atmosphere composed of struggling wet worms . . .

All this in the space of ten seconds—so many things—some so multiple—that he could scarcely identify a thousandth of them.

He was lying on a mirror which went on and on, in all directions, into illimitable distance. Overhead was a mournful purple sky with rapidly whirling garlands of yellow moons and stars. One of the stars slipped away from the others and drifted downward, expanding as it approached. It halted beside Rogers, and he recognized Shi-Voysieh.

Rogers said: "When I asked why you made that sanctimonious signal at every new apparition that confronted you—you told me it was in homage to the handiwork of B'Kuth. Well, I don't like being here at the mercy of somebody who's obviously a sadistic maniac. I want to get back to my own world, where things are comparatively coherent and tranquil."

He was not thinking of wars or lynchings, graft and hypocrisy and any of innumerable things he had known.

He said: "But how can I get away from this nightmare! Tell me, or take me back. You brought me here!"

The child eyed him dubiously.

"You will have to recreate your world," he said finally. Then: "But—ah! Don't you see?" His eyebrows were lifted, imploring.

"What do you mean?"

The child pointed down to the mirror-floor. Rogers looked at his reflected self. Only—it was not himself as he was accustomed to seeing himself. It was like Shi-Voysieh, a red-clad, shining-faced immature image!

"Shi-Voysieh!" he cried, clutching the child, who shrank out of his grasp. "But what does it mean?"

He peered at the reflection.

"You really want to know? I'd like to tell—"

The child leaned forward eagerly. Rogers motioned for him to proceed.

"Yarra won't like my telling you, but"—he performed the sacred signal—"I believe that B'Kuth prefers you to know . . .

"You were one of us, long ago. But you were ambitious! B'Kuth, The Man, took delight in you because of the intricate things you shaped. You were proud of His indulgence, and mocked the puny efforts of us others. You went apart from us and created a cosmos all your own out of the thought-material which The Man has given us"—again the reverent rite—"the ether-energy which is manipulated by the impulses of our wills. And you entered this cosmos of yours, forgetting us—and when we searched for you, though we found you, we could not make you remember us, nor in any particular notice us. We were as nothing, because you did not remember us!"

It was the cry of angels to some soul lost in hell.

Shi-Voysieh said: "But Yarra-our-mother assured us that one day you must remember and return, that you could not rival The Man"—again the gesture—"with your inventions. Yet it seemed that you could, or nearly could, for you made it a law of your cosmos that all things must reproduce in more complex forms—you called it evolution—creation, of course. And I . . . I despaired of your return, my brother!"

Shi-Voysieh sighed. "Thus I asked The Woman to let me bring you here if by some ruse I could make myself known to you. She did not wish it, but at last agreed, on the promise that we regard you as a stranger—for were we to tell you, she said, it was probable that you would take offense in your perversity and refuse to believe—and since you had found your place more appealing than ours, you might be frightened back into it, never to return to us again! Refuge in your private universe—shunning the realities of B'Kuth—insanity! Afraid to face the fact of your existence here!"

"Shi-Voysieh!" Rogers cried, horrified, but the ruby wraith had more to say.

"Our-mother-Yarra further warned that though you were enticed back to this region and we could persuade you to destroy your cosmos by forgetting it, still we could not prevent you from rebuilding it—or another equally as strong."

Rogers objected: "There's a flaw in what you say. How can one make something without a model to work from?"

"You mean, what does a creator use as a foundation—as inspiration? Why, he works like any artist. He obtains material from what is around him and enlarges upon it. And B'Kuth gave us the original material!" In his fervor he forgot to make the sacred sign.

"But then it's useless—no purpose at all," Rogers mused, "because to

create you must make a thing which has never existed before in any wise, and you can't do that—you can only embroider upon or rearrange what you've experienced. It's impossible for anyone to conceive something which he has not experienced except in terms of what he has experienced. And that's not creating at all!"

"But—then what of B'Kuth?" Shi-Voysieh trembled as he gestured reverently.

"He too is limited by His own law—He cannot make what is not potentially within Him. And therefore this so-called 'creation' of His is only a silly game to while away the eternities—the fantasies of a lost and frightened child in the dark, babbling gibberish as it pretends it hears a comrade's voice.

"B'Kuth is only like you and me, building dreams from remembered experience, rearranging old patterns into other, perhaps still older, ones. Who's to say where the original Pattern of Patterns came from—some super-universe of which B'Kuth was once an inhabitant—?"

"Stop!" Shi-Voysieh screamed, fluttering several paces away. "Oh, I shouldn't have told you! But I wanted you back with us so much—I had to know if you remembered. And I find you insane, insane! To say such things! Quickly—remake your worlds and depart within them, leaving us as we were before at peace! You frighten me . . . !"

He drifted a few feet above the mirror as though ready to take flight.

"Wait! Don't go! I'll try!" Rogers cried, and shut his eyes, striving to recall the home from which Shi-Voysieh had drawn him. But there was only an indefinite tangle.

"It must be Yarra's will, still holding you here," the child murmured, his voice weighted with guilt. "She will punish me when she learns that I have told . . . I am afraid! . . . I could make myself a universe and hide in it, but that would be insanity, fear of facts, and anyway, I'd want to return to this-my-native-place . . ."

He sighed resignedly, then spoke with reproach: "As for you—you'd better wait here until Yarra returns, and tell her how things stand. Now goodbye—I'll never want to see you again!"

He nodded curtly, then wriggled his shoulders, flirting his scarlet draperies. He flashed upward as if on scarlet wings to the dancing stars. They gathered around him, flickering excitedly as though exchanging gossip of light, then scattered, leaving an absolutely blank sky. The purple deepened to a murky brown.

Rogers sat on his reflection, waiting.

Far off a phosphorescence was gliding his way. As it neared him, he saw that it was Yarra. Her radiance was wan, and the misty glory was ebbing. Her hair was tangled wildly, and her white robe was soiled and rent.

"Ah, I've found you. I searched and searched, and my thought drew me here at last," she sighed. She bent and lifted him to her bosom, then swayed, evidently ill. Rogers hung on to her in terror lest he fall. Her free hand brushed back a golden tress which had fallen athwart her face, and she bent her head over the man.

"I release you, little one. Go back to that world of yours. But—please take me back with you. I don't care whether it is madness—I can endure B'Kuth's tortures no longer!"

"But B'Kuth! Will He allow it?" The Woman had neglected to make the reverent salute, and Rogers forgot it also.

"B'Kuth!" she sneered. "We aren't puppets, are we? Hasn't He given us the power of our wills?"

"He can follow us!"

"Perhaps. But it may be that once we are in your world, he will forget us . . ."

She was asking for suicide, Rogers knew. As for himself, he was willing to risk anything to return to his own place.

She took him impatiently, as one might shake an offending kitten.

"Quickly! Quickly!"

Rogers thought: *But surely I can't have created—my world! I who have looked through a microscope with awe! I couldn't enjoy a sunset or the forest's beauty if I knew that I had fashioned them—unless, of course, I were insane as Shi-Voysich claimed.*

Then, from far and very far, beyond that point where mirror-floor met with the sky, came a rhythmic thud—thud—thud of footsteps, the beat of feet so gigantic that the world on which they strode echoed to them as a drum. Curiously, they were both terrifyingly real and equally terrifyingly unreal—real because they were in unity with everything that Rogers had seen, heard and felt here. They—belonged! And yet unreal, because what sort of monster could be making them? Why, the crash of a dinosaur's walk in comparison with them was but the barely audible scurry of a mouse!

Whoever was making those thunderous footfalls could not live for a moment—the sheer weight of His hugeness could not withstand the pull of gravity. He must come crashing down in a tumble of broken bones!

But the thud of the feet continued, real or unreal . . . too hideously portentous to be real . . .

"B'Kuth!" Yarra sobbed, dropping Rogers despairingly and falling beside him in a sobbing huddle. "B'Kuth! Coming for us! If He has not forgotten us—how can we escape?"

And now where sky met mirror, a golden glow was forming like that which presages sunrise—a type of gold beside which the molten metal itself would seem tarnished dross, a light ineffably bright like the light of realization . . .

Rogers lurched to his feet. Gently he patted the weeping Woman's smooth shoulders. One last look he took toward the brightening light.

I must forget—and remember. Forget this irrational torture-chamber of a world and remember my own sane one!

The forest! The forest! The forest!

He closed his eyes, and even above the steady boom of the nearing footfalls he could hear its murmur. It was a dim, blurred sound. It must become louder if it were to seem real . . . there, that was better . . . now the

drumming footfalls of vengeful B'Kuth were only faint echoes in his imagination . . . unimportant . . . easily forgotten.

Louder grew the sough of the wind in the trees. A blast of cold wind lashed him. Yarra's hand fettered his wrist. He opened his eyes. Yes, they were out of B'Kuth's domain and back in the autumn woods. As he thought of The Man, everything wavered as if it might be dispersed like breeze-blown smoke—well, he wouldn't think of B'Kuth any longer. B'Kuth was only a figment of his imagination . . .

For a moment they rested in the blue-black night, the freezing wind pelting them with flying leaves. Boughs of bare trees rattled like chattering teeth; the high far stars were trembling as though they shivered.

There was a look of peace on The Woman's tired face as she struggled erect and they plodded through the whispering brush toward Rogers' dwelling.

"We're safe now," she exulted, something of her glory returning to her.

Rogers pondered: *There may be other Laws than just those of . . . that non-existent place wherefrom we seemed to come. What is called Substance here in my native place has been conceived as being infinite variations of one primal force. But it doesn't necessarily mean that there is only one such force! There may be millions of them, each with its own set of laws, dwelling harmoniously side by side like the colors in the spectrum—perhaps congruently.*

But if these forces are each distinct from the others, how could I, the creature of one, leave my own vibration to enter another—since if the forces were interpermeable, they'd have blended long ago! Well, it may be that one can enter an alien vibration but not become part of it, merely observe it imperfectly because of senses governed by a set of differing laws . . . my head's whirling . . . a flaw of one force in the enveloping ether of another . . .

They had reached his doorstep. Yarra was standing still, peering up at the stars, her hands crossed on her breast as if embracing a phantom infant.

"They're like my children—like Shi-Voysieh!" she whispered.

Was it her nostalgia which dragged her back? Or the work of B'Kuth? Rogers heard a little rush of wind within the wind. Like a candleflame in a draught, Yarra's nimbus flickered and she dissolved into the night.

Rogers stumbled inside, slammed the door and leaned against it. He stared wide-eyed at nothing, his head bursting with ideas.

Had Yarra deserted him through loneliness for her children? Had B'Kuth snatched her back? Perhaps The Woman had been only B'Kuth's thought, and He had been playing a jest on Rogers. That would make Shi-Voysieh and the others phantoms likewise—and since B'Kuth was only a phantom to begin with, mere phantoms of a phantom.

And suddenly Rogers knew.

He himself was—The Man! Yarra, the children, everything of which he was at all conscious—they were only illusions in the theater of his brain, a theater where he was actor as well as spectator.

If he had stopped thinking then and there, the ultimate would not have happened. But he could not stop thinking.

The wind was still howling ominously outside, and—he recognized it for what it really was.

"Only my imagination!" he said scornfully.

And the howling obediently stopped.

The Ultimate Paradox

by Thorp McClusky

The old idea of atomic structure was one that closely resembled a planetary setup. It naturally followed that science-fiction writers proceeded to go a step further and assert that it was a planetary system—but on an infinitesimal scale rather than an infinite one. What then is size? What is space and by what is it bounded? Whether the infinitely small does resemble a solar structure or not, here is a story which dares to tackle the problem of infinity. Whether the solution is satisfactory we leave our readers to say.

WHEN Beecham, gardener, chauffeur, and man of all work to Dr. Severance, the retired physicist, first saw the crotchety old man standing on the lawn beyond the rose arbor, adjusting a strangely complex machine about his body, he thought nothing of it, but went on with his pruning. In the thirty-odd years he had spent in Dr. Severance's employ he had seen too many strange sights to become immediately interested in every new gadget with which the old man toyed. Cursorily, he noticed that the thing was cumbersome, and that there were many tiny wires and belts connected about it which bothered the master somewhat in the fastening; he noticed a flat, metallic cabinet suspended down Dr. Severance's back, and a composition panel set with a chaos of small dials and switches hung across the aged man's chest. But these details interested Beecham only momentarily, and, after a brief stand-up-and-stretch, during which he wiped a spray of July sweat from his forehead, he bent down again to his work.

Nor did he look up when, five or six minutes later, the shadow first fell across him. The day had been, up to that moment, broilingly cloudless, and his first impression was that the sky was becoming overcast. Thinking that the shadow might be that of his employer, and without looking up, he said, jovially,"I take it the day is fair enough for you, Dr. Severance, sir?"

Silence, intense and unexpected, answered. Beecham, believing that, after all, it had been a cloud, and anxious for rain to freshen his parched gardens, looked up toward the sky, and screamed, stranglingly, in mortal terror!

Before him, in the acre or so of lawn that stretched up to the rear of the house, stood the embodiment of an insane dream: the figure of a man, a thousand feet tall! A mighty metal fabric the size of a battleship was on its back, and its chest was covered with monstrous mechanisms. The nap of its garments was like thickly woven hawsers. The thing's tremendous

feet almost covered the lawn, and as Beecham watched he saw the soles of the shoes spreading out in every direction, as fast as a man might walk. Beecham screamed again, and the sound was like the voice of nothing human. And while he watched, paralyzed with fear, the thing grew skyward.

Suddenly the nightmarish petrification left Beecham's legs, and, howling and frothing, he ran across the gardens toward the road. Other people were running from neighboring houses; Beecham saw them gesticulating and shouting. Some covered their faces with their hands, ostrich-like, cowering where they stood. Others ran, aimlessly, stumbling and falling, getting up to run and stumble and fall again.

The shadow was no longer falling on him. The sun shone again, glaringly hot. Beecham looked back. The figure, grown immeasurably more huge, had stepped from the lawn across a wide expanse of pasture land, and was standing at the edge of a wood.

From far down the road Beecham heard the wail of a siren. A long black touring car raced down the boulevard and with brakes screaming, stopped abruptly beside the hedge a few feet from Beecham. It disgorged a number of policemen.

Police Captain Riley looked across the pasture-land toward the wood.

"My God, what can we do against a thing like that!" He was not afraid, but his voice shook. He carried a submachine gun in the crook of his right arm, but, after a moment's hesitation, he shrugged, turned and put it down on the front seat of the automobile.

Siren after siren wailed as the police came in patrol and radio cars, on motorcycles, in commandeered automobiles. The roadway was jammed. Beecham, feeling less afraid, wormed his way toward Captain Riley.

"My God, are we goin' nuts entirely?" Riley was saying.

"Please, officer," Beecham pleaded, plucking at Riley's sleeve, "I know *him*." He gestured toward the figure. "It's Dr. Severance. I'm his man Beecham, and I'd recognize him anywhere."

"Holy Mother of Mercy!" Riley cried, looking first at Beecham, and then at the silent colossus standing in the wood. He said no more, only stared at the thing that grew there, stared with his mouth hanging slackly open, and a greenish sickliness on his face.

By that time there must have been half a thousand people lined along that road,watching the wood a mile away, and the being that rose, second by second, into the sky. For the most part there was silence. There was an occasional scream, and there were curses that were really prayers, but there was no coherent word spoken in all that first ghastly half-hour. For it occupied no more than a half-hour altogether, that first stage. Watches cannot lie, and cannot be frightened.

A horrible sound of crashing trees and crunching shrubbery came from the wood. The figure did not move; it only grew. And the forest crashed as it grew.

Perhaps twenty minutes had passed since Beecham first noticed the

shadow. The figure at the end of that time was probably *five miles tall!* This estimate cannot be considered accurate, as it is partly based on the testimony of witnesses who were, at the time, half mad with fear. Afterward, however, measurements were made by municipal surveyors which showed fairly definitely the extent of damage to the timber, and from these measurements it would appear that the impressions left in the wood by the feet of the figure were upwards of three thousand feet in length.

From the time it had stepped from the garden to the center of the wood the figure had not moved. It stood as if anxious not to cause any more panic than would be unavoidable by reason of the fear occasioned by its Gargantuan size. In fact, Captain Riley remembered later having remarked that, "It doesn't seem to want to squash anybody, does it?"

All at once, people noticed that the sounds from the forest had ceased. No one was able to recall exactly when they ceased—rather most people remembered that their attention was drawn from the rending of live wood to the more homely sounds about them: the chattering of nerve-wracked voices, the clatter of rifle-butts, and the sickish sucking of tires on sticky macadam. But the forest was silent. No more trees fell.

The figure still grew.

The first fright began to leave the majority of those who watched. They spread out along the hedge beside the road, and waited, looking toward the wood. They moved and talked as though they dreamed, as though their dreams were nightmares which had failed to develop the maximum of horror. This curious mass reaction was no doubt due to a subconscious lessening of fear of the figure, which had not threatened them in any way.

The figure rapidly reached such proportions that any attempt to estimate its actual size by comparing the statements of eye-witnesses becomes absurd. The feet and legs towered out of the wood, which they had almost completely hidden, and the rest of the figure was so foreshortened by the nearness of the people huddling beneath it that the upper part of the body was beyond view.

It was possible to watch, almost foot by foot, the steady growth of the colossus. Rank after rank of treetops disappeared, soundlessly, apparently vanishing within the solid leather of the bootsoles. It was not until the feet, after swelling entirely out of the wood, had begun to advance across the pasture that those watching observed an incredibility.

It was as if the wood and pasture-land became a part of the figure, or, conversely, the figure became a part of the landscape, without harm to either! Amazed, the people watched, and saw that a tree, merging into the colossus, would not tremble even in its tiniest leaf, but, on the contrary, would stand erect as if the monster engulfing it were no more than impalpable fog.

Then a man, more sharp-eyed than most, shouted, "The damned thing's transparent!"

Presently all of those who watched saw that this was so. As the great bootsoles, like monstrous ramparts of leather, advanced over the meadows

they saw that they could discern the outlines of trees and rocks *within* their surface, as though encased in brown ice.

The boot-soles, a thousand feet high, had advanced halfway across the meadows. The police began to clear the road. Captain Riley and his men, spread a mile or so up and down the road, continued to watch the sheer brown mountain that, grown out of all semblance to anything describable, towered into infinity a scant hundred yards away. Their automobiles, drawn up alongside the road, stood with motors idling, ready to speed them to safety.

Two state policemen, as though gripped abruptly by a common impulse, vaulted the hedge and cautiously advanced across the meadow. They approached within a hundred feet of the billowing brown wall. Then one drew his automatic, dubiously emptied its magazine into the advancing mass. Turning, he looked at the policemen scattered along the road, and grinned. Then, waving his hand, he walked directly into the tawny transparent immensity.

For possibly twenty or thirty feet he continued. Once or twice he put his hand before his eyes, as a man, walking in a thick smudge, might do. Then he came out, and held his hands high over his head to show that he was unhurt.

He talked to his companion. They stood close together. The city police clambered over the hedge and came toward them. The brownish wall continued to advance. It filled half the sky, like a great cloud.

The *thing* was becoming colorless, and more and more transparent. It reached the policemen, and crossed the road. There was nothing solid about it. The men walked in it as they might walk in a dirty, fine rain. It had become a faint *brownishness* that tinted faces, houses, trees, the sky and the earth alike, but that had no reality to it.

Within the hour the vanguard of a swarm of reporters and sensation hunters began to arrive. They were disappointed, for there was nothing to see. Except for an unusual brownish tint which hung in the sky, and which made the late afternoon heavens strikingly beautiful, there was nothing, nothing at all.

"What was it?" the papers asked, later. "A hoax? Mass hypnotism? What caused the destruction of the forest? Why the great footprints, etched in splintered trees?"

Captain Riley, seeing that the danger, if any had ever existed, was over, sent his men back to the city. He was about to clamber into his car himself when he saw Beecham. He remembered that Beecham had told him something crazy.

"Hey, you! What's this you said to me about knowing *that?*" He waved an ineffectual arm in a half-circle that took in half the world.

Beecham licked his lips.

"I said it looked like Dr. Severance," he mumbled.

Riley considered. He felt empty, like a child who has seen a bubble

blow up and burst. "Get in," he growled. "We're going over and have a talk with your Dr. Severance."

The car, Riley driving, with Beecham huddled beside him, hurtled savagely down the road and pulled up with a jerk before the Severance estate. Riley, mumbling angrily, gestured to Beecham to precede him up the walk. The screen door was unlatched.

Beecham entered, Riley close behind him. They walked through the library. There was no one in the room. At the far end of the library was a heavy, golden-oak door.

"Where's that go?"

Beecham hesitated. "That's Dr. Severance's study. He never lets me inside."

"You go ahead," Riley snarled. "By God, you open that door."

Beecham's trembling hands pushed open the door . . .

When old Charles Severance, standing on the lawn beside his house, adjusted the straps about his body and threw certain small switches in the panel on his coat, he knew with a fair degree of certainty just what would happen. He knew that the mechanism, or rather the complexity of mechanisms, which he had devised was capable of doing two things. It built up a field, electrical in nature, yet which tapped sources of pure energy which were even more fundamental than electricity, which exerted an explosive force upon every proton and electron, on every fleck of energy, within a certain radius. In non-technical language, it was a repulsive force, universal yet limited to its own boundaries, which caused every electron within those boundaries to recede from its proton, and every proton in turn to repulse every other proton. Thus any matter placed within its field, and acted upon, grew, retaining its original mass, diminishing in density; the apparatus itself, being within the field, also grew, and even the field itself, because its action was cumulative, grew. This entire process was progressive and proportionate.

Many scientists have long known that there is a universal yardstick of energy. Call it by any name—call it electricity, although we know that electricity is only a manifestation of it, as is gravitation—call it pure force—call it God; whatever it is, it is the building material of all the universes. Doctor Severance had discovered a way to pour this energy into his field. He had also observed that this pure force obeyed certain simple laws. It spread uniformly throughout a given space, like water, which seeks a common level, and maintains, within narrow limits, a certain density. Released within the confines of Doctor Severance' field, this force would immediately commence adding energy, or mass, to every proton and electron within the field until, should the process not be halted, the field itself, and everything it contained, would become a ball of pure force. The fundamental energy was apparently available, in limitless quantities, throughout all space.

Doctor Severance was well aware that he could never reverse the action

of his apparatus. Energy once poured into its field could never be withdrawn. Once he subjected his body to its influence there was no going back. . . .

Standing on the lawn and growing, growing—Dr. Severance, with the thoroughness which was second nature with him, mentally recorded his sensations. He had synchronized his apparatus so that his density would increase in correct proportion to his mass.

He felt no bodily sensations whatever, no nausea, no dizziness, nothing. Yet the ground sank away from him on all sides, the houses shrank to doll-like proportions, and the road before his house became a tiny black ribbon. He looked down. The traffic had stopped for a mile or more up and down the road, and one stumbling figure, seemingly an inch tall, in the greenish patch that was his garden, he knew to be Beecham. He smiled, but then, noticing that the lawn on which he stood was growing too small, he stepped into the wood.

Growing, growing, growing—he watched the landscape fall away from all about him and the hills became little ridges across the earth. All at once he noticed that the trees were crumbling beneath his feet, and, afraid that he might unwittingly destroy property and human life, he hurriedly switched off the tremendous surge of pure force which had, until that moment, kept his density constant. He did not know exactly what would happen; he might conceivably die, but it was better that he die than that the world be destroyed.

He looked about. The horizon was sweeping away from him, and hills and mountains climbed into view. Beneath him clouds billowed, and fragments of the earth were obscured.

As the ocean of air above him grew thinner the vault of heaven darkened and became purplish; the clouds beneath him were like the surface of a tumultuous sea, splashed with gold by the sunset.

He noticed that he was becoming dizzy. The sky above him was almost black. He fumbled beneath his shoulder for the nozzle of the oxygen tube, and fastened the mouthpiece across his face. The dizziness left him.

He looked at the sun, a blinding, bluish-white ball, with great vari-colored streamers writhing and tossing on its surface and far out in space. The sky had become completely black, and was spattered with millions of hard, unblinking stars of every color, each piercingly bright, each inconceivably remote.

The earth beneath his feet had become a great ball. Along its eastern edge there lay a belt of purplish darkness. He noticed that he could no longer feel it, as something solid, beneath him. He looked down once more, and saw that, like a great ball a hundred feet in diameter, it was moving slowly away from him. Half of it was bright and shining, like aluminum, while the other half was a blackness against the stars. Across the edge of the earth the moon appeared. He could see it move. Apparently his time-mode was becoming slower. Watching the moon, it seemed for only a few minutes, he saw it come entirely within view. The earth had diminished to a ball the size of a house. The moon moved faster.

Both the earth and the moon were moving away. They became a pretty

little mechanism the size of a dinner plate, the moon, like a white cherry, encircling the earth in the time it takes to draw a breath.

Presently they were lost in the glare of the sun.

He experienced no sensation of either cold or warmth.

Apparently a non-luminous body in free space could not radiate heat. He touched his hands together, and felt the pulse beating in his wrists. Looking downward at his body, he saw half of it bathed in bright sunlight, the other half outlined as a blackness across the stars.

Almost within arm's reach he noticed a ball the size of a small shot. It was vaguely reddish in color, and spinning so rapidly that the surface markings upon it were blurred. It rushed toward him. He knew that it was the planet Mars, and, full of a vast curiosity, he watched it bury itself in his side. He turned his head, and in a second saw it emerge from the small of his back. He chuckled.

Within minutes the solar system swept by. Jupiter passed almost as close as did Mars, but seemed the size of a cherrystone surrounded by whirling motes of light. Saturn, with her rings and galaxy of moons, he picked out against the blinding blanket of stars by her rapid progression across their motionless field. Uranus, Neptune, and Pluto he did not observe. The sun became only another star amid the multitude. For a moment, before he lost sight of it in the swarm, he believed that he saw it surrounded by rushing circles of light, which could only be the planets whirling about it, hundreds of times in each second.

Presently the very stars themselves were moving, at first slowly, and then with the speed of meteors. The little cluster in which he found himself became disk-shaped, and then it was spinning, faster and faster. The individual stars had become indistinguishable, and he only saw them as clusters that, apparently, stretched on without end. A universe lay across his thumbnail; a multitude of universes spangled his body. And still there was no end to them; they merged into each other until even *they* were merely flecks of light surrounding him and extending onward into infinity.

Then a strange thing happened. He noticed that the universes were no longer giving out light. Perhaps they had been slowly dimming for several moments; he was not sure. But, nevertheless, they had become lightless while, paradoxically, it was becoming lighter all about! A faint, almost intangible glow was growing steadily, all about him. The individual universes, even as lightless motes, impalpable as dust, were no longer distinguishable. But in their place he saw vague clusters that seemed to be inanimate matter!

They were gigantic, and they filled his vision like gargantuan mountains. But, like the universes, they became swiftly smaller, and, as their size diminished, their outlines became more plain. At last, and beyond the possibility of doubt, he saw that he stood amid a cluster of huge rocks, apparently of pure quartz, that towered over his head.

He felt no surprise, but only a tremendous exaltation. He knew in that moment that he had successfully stepped upward a plane in the gigantic

cosmic stairway, and that he was on another world! Those quartz-like rocks all about were, he knew, microscopic specks of sand. He stood in their midst and watched them diminish and others like them come marching into his horizon.

Gingerly he turned on his universal force mechanism. He needed mass, the mass of a billion universes!

And still he grew, until he approximated what he believed to be the height of a man. Then he turned off his mechanism.

All about him stretched a wilderness of sand, a desert of limitless expanse, rolling away, lifeless, flat, and heat-tortured, to the horizon. The sky overhead was a deep blackish blue, and no cloud broke the monotony of its vaulted arching. Halfway down the sky hung a dwarfish, blue sun, crackling out the heyday of its youth like an electric flame.

The sun was not old, but the planet was already old and dead, burned to death, most likely, he thought. Without doubt there was no place for him on this sunbaked world. He was already becoming faint from the heat. He glanced at the dial on his oxygen tank, which registered three-fourths capacity, and, with a regretful glance about him, turned on his mechanism.

He had learned so pitifully little about this new universe into which he had cast himself! Able to step upward from universe to universe at will, able to encircle within the confines of his field an entire cosmos, yet, his apparatus at rest, he became, on the surface of any world to which chance brought him, merely a halting, stumbling, defenseless old man.

The sum total of the knowledge he had gathered about this world, this universe, he was leaving, was negligible. He could not know if the desert in which he had stood covered the entire surface of the planet, or was limited in extent. He could not tell if the blue sun blazed fifty million or a billion miles away.

He watched the planet dwindle and vanish, the sun merge amid others that blanketed the black sky with unfamiliar constellations; he watched those constellations themselves fall together into puffs of light that merged into other puffs of light. And presently he felt himself developing into another space.

All about him billowed a sea of intensely crimson light. He could not feel it, because he was impalpable, and it flowed through him without harming him as molten iron flows in a vacuum. He did not dare admit pure force within the atoms of his body until he definitely knew the nature of the substance surrounding him, and that it could not harm him, so, after a brief pause he continued on, growing, growing, growing, while the crimson flow swirled about him and through him.

Presently he felt the red fire washing through and about his eyeballs, thinning above him, giving him the sensation a swimmer might experience while emerging, with opened eyes, from beneath the surface of water. He looked out upon a sea of leaping fire, extending in every direction as had the sandy desert a few moments before. Above his head was a lake of blackness, strewn with stars.

He knew then that he had been within a sun. And so he went on, and that sun shrank within him until it became like a red orange lying within his chest, and the stars and universes moved toward him once more, and became little clouds of energy that passed within his body, and a new space opened about him once again.

He saw that he was enveloped in a grayish fog, lying thick and dark about his feet and legs and up to his waist, but thinning to a dirty darkness about his head and shoulders. He could see no more than a few feet in any direction, and the sliminess in which he stood was agitated, now and again, as if by the passage of some form of life through it. Shuddering, he continued his growth until he stood in the grayness like a man in a limitless puddle. Mist swirled about his face, and he could barely see his shoetops.

He allowed energy greater than that of the universe he had encompassed to flow into him, and watched the dirty slime stir momentarily beneath his feet as the atoms of his body pushed it aside. Then he stepped out briskly and aimlessly, eager to explore this strange world.

He realized that he was in some form of bog which, because of its shallowness, could not be very extensive. He was right, for he had scarcely walked fifty paces when the ground beneath him shelved upward very slightly, and he found himself waist deep in a forest of lush, whitish, fern-like vegetation. He continued struggling onward through the luxuriant growth for another hundred yards, searching for an open space, but the ground, flat and featureless as a dinner plate, remained encumbered with the forestlike growth. He frequently heard the crashing of heavy bodies through the forest, and knew that this young, moisture-drenched planet thronged with life.

At no previous time had he regretted his infirmities so much as now. Here, all about him, stretched a young world, rich in vegetation, rich in atmosphere, rich in animal life. He longed to walk beneath the pallid, gigantic vegetation, but he could not, for he already towered above it! To ensure his safety, he had increased his stature to an extent that prohibited adventure. He was a giant, unable to do more than peer down into a weird, gloomy world.

His old muscles ached from the exertion of walking, and, seeing no sign of an open space where he might sit, he turned on his mechanism again until the great vegetation beneath him was no more than grass, inches high. Then he sat down, and held his forehead in his hands. He was deathly tired.

He made atmospheric tests, for sooner or later he must find a world on which he could live. The atmosphere was rich in oxygen, saturated with water vapor, capable of supporting human life. He recharged his oxygen tanks, and standing erect, looked about him.

The fog was so thick that he could not see the ground beneath his feet. He went on growing, growing, until his head topped the clouds. But there was no break in their ranks. They extended onward, like a mourn-

ful sea, in every direction. He started walking, in three mile strides, and went on until he was tired. Occasionally he felt uneven hummocks beneath his feet, and knew them to be hills and mountains; again he felt water sopping his boots, and knew that he walked in rivers and lakes. But there was no end to the blanket of cloud.

So, again, he looked into the heavens, at the great yellow sun warming this watery world, at the unfamiliar stars that would soon be atoms within his body, and slowly, tiredly, sent himself onward into the infinite.

While he grew, and while universes and yet other universes became pinpoints of light within him, he slept.

When he awoke it was to the same kaleidoscopic change he knew would be. Star clusters all about him leaped into view, diminished and vanished in puffs of light. He craned his head and read the dial of his oxygen tank. He had slept (although it is absurd to speak of time when everywhere, except within his field, time flowed like a millrace) possibly twenty hours. Within a short time he would have to replenish his oxygen, or perish.

Again the stars dimmed about him; the light from overhead strengthened. Once more he was surrounded by mountainous grains of sand, shrinking away from him as he grew, and he knew that he was upon the surface of a world. Here he found air, water, pleasant fields and gentle beasts, and he stayed on this planet many days.

But because there was no life with which he could exchange ideas he became lonely, and presently he went on once more. Beyond time, beyond space, beyond all things except himself, he climbed the awful ladder he had built into infinity. The gray left his hair, and it was white.

He lost count of the worlds he visited, and of the universes shrinking and growing before his eyes. He lost count of the times he slept, and of the food he ate, and of the things he saw. His life was a constant halting, and going on. The prime motive in it was the oxygen tank, which he filled innumerable times.

So years, as his body knew years, passed. . . .

He met and conversed with creatures more perfect than humans, and with creatures of intelligence more abased than devils. He saw holes in space made by suns so great that not even light could go forth from them. He saw living things, without minds, more huge than Betelgeuse; he stood upon a great green planet so vast that, with pure force filling his field until he could barely lift an arm, he remained still so impalpable that he could walk through metals. He met a mighty philosopher on a tiny, dying planet, who preferred to journey on with him. Together they constructed an hermetically sealed cabinet, which, philosopher and all, he could carry within his pocket.

They went on, and they might well enough have gone on together until they died, but for a strange thing.

Once again they saw the universes fading into lightless specks about them, and the brighter light flowing down from above. Once again the bits of inanimate matter became pebbles, and they stood in grass which

towered above them like a great forest. The grass fell away from them, as they grew, and they looked upon a green world, into a blue, cloudless sky. They saw, halfway down the sky, a yellow sun. And they thought, "This world is good."

The forest of grass fell to Doctor Severance's knees, and then to his ankles. Looking about him, he felt that this world reminded him strangely of one he had left long ago. Then a few yards away, he saw the house he had lived in on Earth. . . .

There was no mistaking it. The warm, brownish brick walls, the leaded windows, the sloping, slate roof, the trellised walk leading to the garden, everything was there, as if he had only just stepped out of doors.

Dazedly, he snapped off his mechanism. Another strange thing happened. Everything became black, as though he were blinded. He could still feel the earth beneath his feet, but he could see nothing. He tried to take a step, and found that he could walk. Then, after he had taken a few steps, the sunlight burst upon his eyes again. Feeling slightly bewildered, he stumbled toward the house, a few feet ahead.

Mechanically he tapped upon the glass window in the small cabinet in which the Philosopher lived, and watched that circular transparency begin to revolve, as the Philosopher hastened to come out and join him.

Walking like one confronted by an incredibility, he entered the house, and into his study. Nothing was changed, papers neatly piled beneath paperweights lay on his desk, and a warm midsummer's breeze came into the room from the garden. He sat down at his desk, pillowed his face upon his arms, and tried to think. He lost track of time, but long minutes, a half hour, hours passed. The Philosopher waited.

There was a commotion at the front of the house, voices, footsteps. Beecham came in, followed by a policeman. . . .

Nothing of a dramatic nature occurred. Doctor Severance looked up mildly, and asked Beecham what he wanted, and who the gentleman was, and the utterly bewildered Beecham mumbled something, and Captain Riley, thinking that Beecham was a fool, mumbled something also, and both men left the room.

But before they went out they did not fail to notice the little metallic box on the table, with its circular window, and the many-legged, scaly thing that emerged from it and sat upon it, and watched them through black, bottomless eyes. And Beecham looked suspiciously at the curious harness on the floor just behind the desk, and remembered that it was very like the harness he had seen on the monstrous thing standing in the lawn, earlier in the afternoon.

In a very few days the apparition in the skies was forgotten. Beecham, alone, wondered why, in an afternoon, Doctor Severance's hair had grown completely white.

And in the laboratory, the two beings, the Philosopher and Doctor Severance, studied and planned and wondered. They sought, among other things, to know what had become of the years during which they had

wandered up the infinities. Dimly, they sensed behind that paradox a simple law, and, in the workings of that law, power.

They built a curious globe, and on it they ruled innumerable circles, which they called by many names. And on this globe time was a circle, and a certain energy was another. And they sought to prove that, as Doctor Severance had gone through all matter and through all energy, so had he progressed over all time, from the beginning to the ending of things. And that, continuing along the great circle drawn about the curious globe, representing energy, it necessarily followed that, reaching the point on its length from which he had started, the same point on the time circle would be the juxtaposition. What was time? They knew that our stellar universe had come and gone and come again a trillion times during each second they had lived on those other worlds.

They sought to solve another truth; that in their bodies were all the universes, while yet they remained tiny motes upon one small planet circling a minor sun; that in the heavens were all things and, too, in every speck of dust were all things, that were, and are, and ever shall be.

Now the Philosopher, who, despite his utter ugliness and loathsomeness (as judged by humans) was a great and noble soul, believed that, with more experience, might come a solution of the problems which evaded them. So it was that one evening Beecham, knocking at the study door and failing to receive an answer, went in, and found no one there. The strange harness was gone, and, although Beecham did not know, another like it. . . .

Beecham, looking in the corner, observed the curious box in which he had seen the Philosopher. As yet uncertain whether to call in the police, he picked it up idly, and caught himself wishing, with regret, that he had had a better look, that day, at the creature the master picked up in the garden.

THE END

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305 Stuart — *God Wears a Bow Tie*
306 Thomason — *Gone to Texas*
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311 Anthology — *Saturday Evening Post Western Stories*
313 Lion Feuchtwanger — *The Ugly Duchess*
314 Van Vechten — *Nigger Heaven*
315 Merritt — *The Metal Monster*
316 Christie — *Murder in Three Acts*
318 Juliet Lowell — *Dear Sir*
320 Dwight Babcock — *Gorgeous Ghoul Murder Case*
322 Weidman — *Slipping Beauty*
323 Guy Endore — *The Furies in Her Body*
325 James Hilton — *Ill Wind*
326 Dorlort — *Burial of the Fruit*
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328 Sayers — *Strong Poison*
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331 W. Somerset Maugham — *Trio*
333 R. Maugham — *Line on Ginger*
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