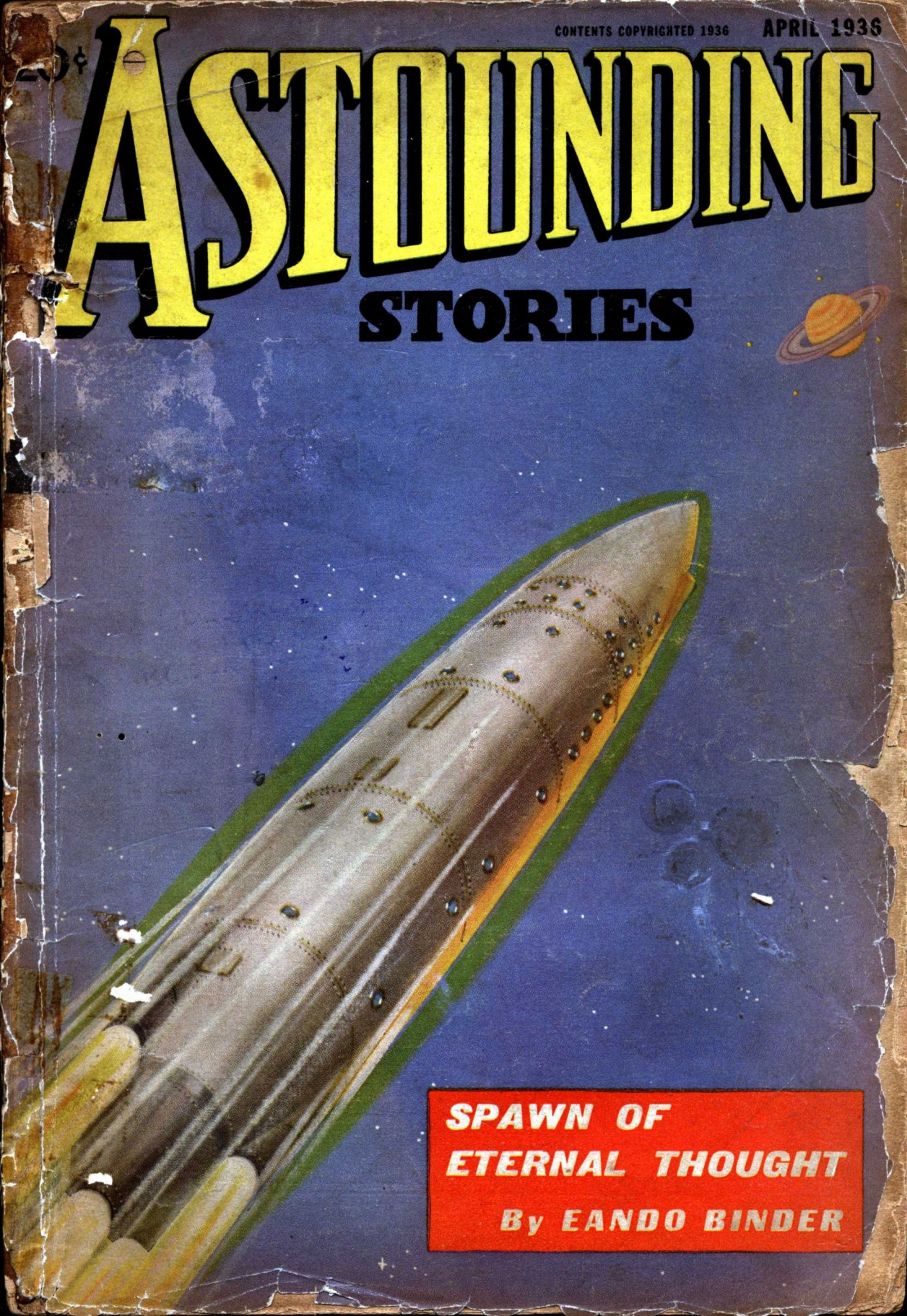
APRIL 1936

20¢

ASTOUNDING STORIES



SPAWN OF ETERNAL THOUGHT

By EANDO BINDER

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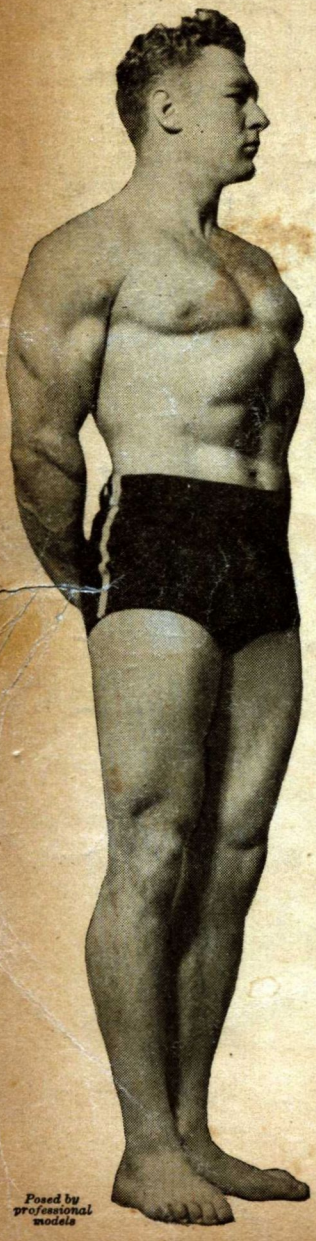
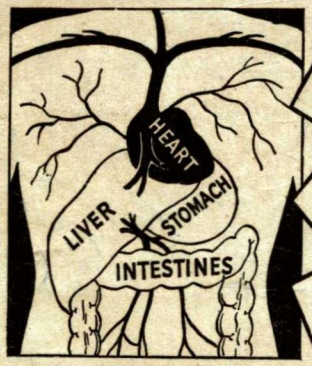


Posed by professional models



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VOLUME XVII
Number 2

ASTOUNDING STORIES

APRIL
1936

A STREET & SMITH PUBLICATION

Table of Contents

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29x5.25-19	2.60	1.15
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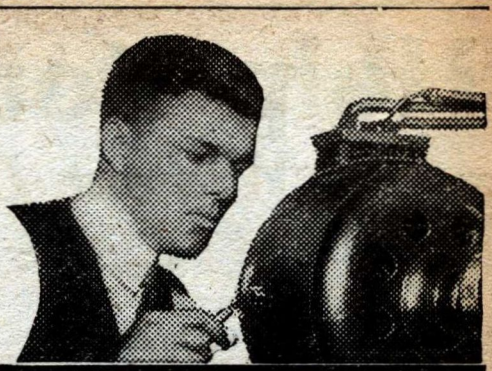

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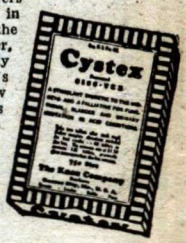

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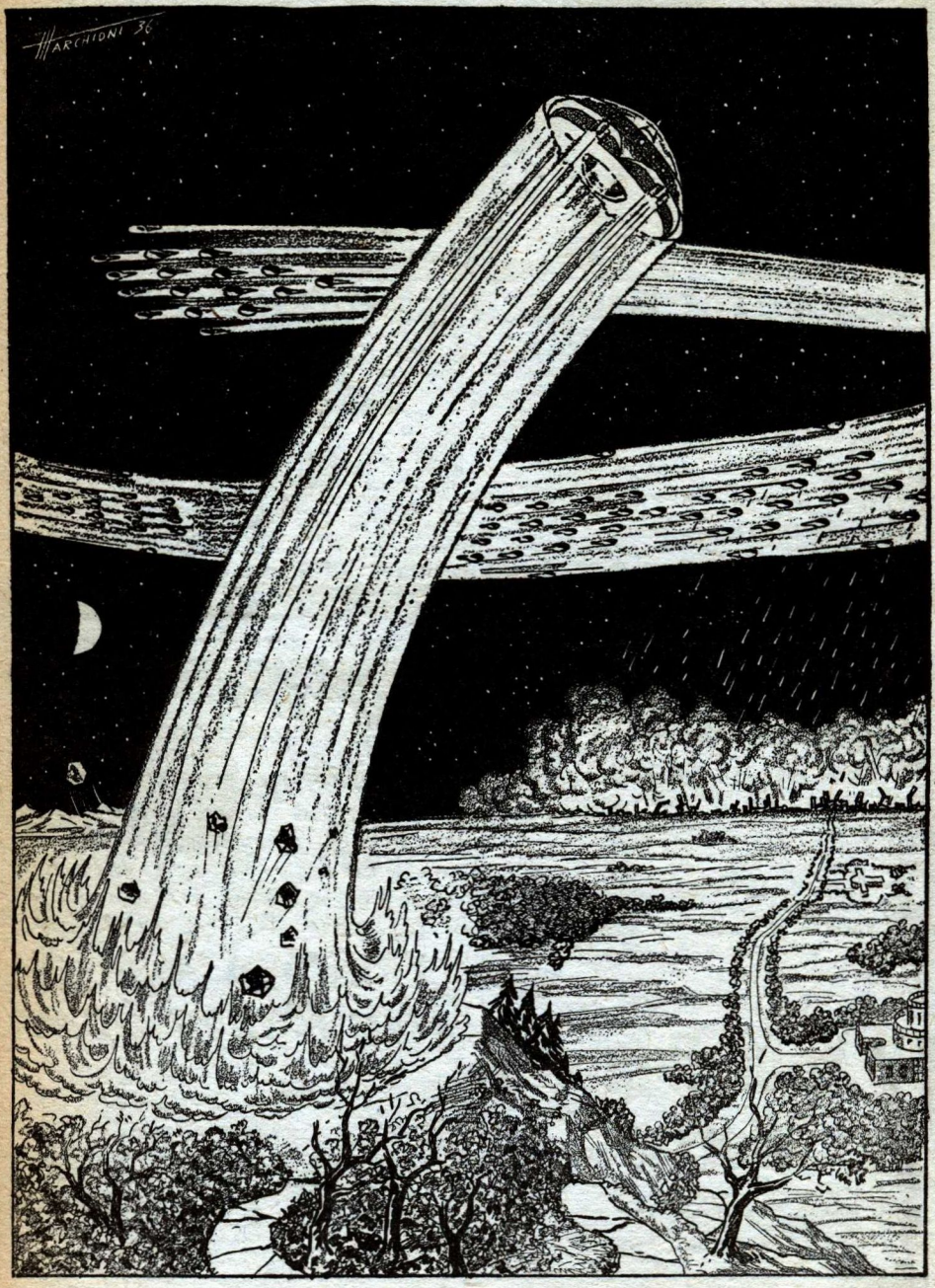


The ship shot upward—madly—like a cork borne on a geyser of golden light.

STARS

A gripping Sequel to "The Son of Old Faithful"

by RAYMOND Z. GALLUN

IT ADVANCED with methodical stealth, where the moonlight of the garden blurred into dense and fragrant shadow. Now it paused as if to listen, the metal parts of it glinting with slumberous reflections. Illy defined as it was, a man might easily have imagined it the central figure of some grotesque dream.

The monster stood motionless, as if to give this world called Earth a final, respectful salute before departure.

Suddenly the three metal limbs that supported the thing stiffened. Gleaming arms, controlled by the lump of gray flesh beneath the crystal dome at its top, slid out of their sockets. Delicate mechanical ears had detected the patter of feet, approaching from along the walk which led to the house.

Tense and expectant, the monster waited, the great, living eyes behind the glass of its protecting dome, glowing like sullen witch fires.

A little girl came into view, and glanced searchingly about. She saw the bizarre watcher, where it loomed in the shadow of a tree.

And, strangely, the discovery aroused no fear in her, for this demoniac baroque of another world was an old and trusted friend whom she had known through all her nine years of life.

Voicing a pleased gurgle, she ran forward, her yellow curls streaming awry over her shoulders.

"Nun Sen!" she burst out. "You tried to hide from me, but you couldn't! I saw you! I saw you from the window, Nun Sen!"

Number 775 of Mars was silent for a moment. Then his tactile tendrils, projecting around his flat body, darted toward a maze of tiny levers within the dome of his automaton. His voice machine rasped with mathematical and soulless precision: "You should not have come, Thalia Cantrill."

"Why?" she demanded wonderingly, her pixy face puckered into a frown of puzzlement and annoyance. "Why, Nun Sen? Don't you like me any more?"

And Number 775, schooled in the ways of men by nine years of residence on Earth, still found the question difficult to answer. His form was completely inhuman; the air under the dome that protected him was not of the same density as that which the inhabitants of the Third Planet breathed.

He had no natural ears, and his vocal organs were not suitable for speech. His methods of reasoning, and his conceptions of right and wrong, of beauty and horror, and of fear and courage, were different from those of men in many respects. How, then, could he reply to this little Earth girl's query, so that she would grasp all the fine but essential shades of his meaning? Even an adult of her own kind might have felt a trifle uncertain, while attempting to make her understand.

INDEED, some may wonder why Number 775, a Martian, should trouble himself to offer her any explanation at all. But he had his reasons. Buried within the unfathomable being of him were emotions which are perhaps the common possession of all intelligent creatures, regardless of what sphere, among the myriads that sprinkle the universe, may be their home.

The friendliness of Thalia Cantrill had been woven indelibly into the fabric of those emotions. She had called him Nun Sen since, in her first baby prattle, she had tried to pronounce the only vocal name he possessed—Number 775. He had come to accept her presence as part of his life—a fragile, trustful part. And so he wanted her to understand him.

Study had enabled him to follow the thought processes of men, and to mimic their expressions, almost to perfection. As a result, when he spoke, his words had a human quality that was deceptive.

"You should not have come, Thalia Cantrill, because, though we are friends, still we are not friends," he said quaintly. "Mars and Earth have become enemies. They wish to ruin each other, because each wants the planets Jupiter and Venus; and neither will yield without a struggle. This is not my fault, nor yours, nor your father's; but before it is over there may be much death and destruction. I think that when it is over you may not want Number 775 or any of his people near you again. That is all. I am going away from Earth now."

The voice machine ceased to rasp. Thalia studied the weirdly glowing orbs of the Martian. To her he was like some hideous and omnipotent brownie whom she could always believe. There was much in Number 775's explanation that was beyond her grasp, but she sensed intuitively the tense dangers he referred to. She knew what death was. If you stepped on a butterfly and crushed it, it lost its beauty and never moved again. That was death. Death was unpleasant. Thalia did not wish to think of it.

"Where are you going, Nun Sen?" she demanded.

"I do not know," was the Martian's hesitant response.

"And you won't take me along," she complained.

"No, Thalia Cantrill," he confirmed.

"And you don't even want to say good-by to mother and daddy!" Thalia guessed.

"It is better that I do not," the 775th descendant of a historic Martian line, whose totem was a circle and bar, replied.

"You're mean, Nun Sen!"

"No, Thalia Cantrill."

"Then come and talk with mother and daddy!"

"No."

"Please!"

THERE the argument ended. Number 775's broad, boneless body, reminiscent of that of a starfish, stirred uneasily beneath the dome of his automaton. Slender tentacles, fine and pink as the stamens of a flower, coiled and uncoiled in a restless expression of cryptic emotions. Yet he capitulated. He had seldom been able to resist the pleas of his little mistress.

There was almost a caress in his mechanical voice when he spoke again: "O. K., Thalia." And there was something almost humorous in his oddly human expression of submission.

With a faint clicking sound his robot mount swung forward along the path. The child ran beside him.

Number 775 cast a glance in the direction of the red glow shining through the trees from the southern horizon; and his great eyes, supported on their tentacular stalks, gleamed with an expression that might have been a mixture of hatred and awe. Beneath that glow, miles distant, lay Chicago, whose belching atomic furnaces were turning out hell stuff to dump on Mars.

Several minutes later he stood in a green-lighted laboratory room. Jack Cantrill and his wife, Yvonne, were there. It had been they who, years ago, had leaped spaceward in the first craft to journey from Earth to Mars.

With them was Dr. Waters, Yvonne's father, who, for several years before that, had exchanged light signals with Old Faithful, Number 775's sire, in the hope of sometime establishing an intelligible means of communication between Earth and Mars. Only Myron Radeau was absent; the fat, jovial astronomer was stationed in an observatory in California.

"I bid you farewell, people of Earth," Number 775 said simply.

There was a long pause before any of his audience ventured to speak. Their hearts and minds were full; but pride and regret, and perhaps suspicion, impeded the words of friendship that tried to come to their lips.

FINALLY, Jack Cantrill, slender, bronzed, serious, with the rugged stamp of the adventurer apparent about him in spite of his immaculate evening dress, essayed a reply: "It was rather glorious, wasn't it, man of Mars?" he asked with a grin of rueful good nature.

"Perhaps," the monster he addressed, responded.

All present knew to what Jack Cantrill referred. It was the epic of the solar system. Dr. Waters and Number 774—Old Faithful—had begun it with their exchange of flashing light signals across space. Old Faithful had managed to learn a few English words, spelled in Morse code. Then, facing a death sentence because his astronomical activities were considered impractical and useless by his frugal people, he had built a projectile, and had hurled himself into the gravitational grip of a comet, which had dragged him almost all the way to Earth, allowing him to make a journey otherwise still a scientific impossibility.

The venture had proved fatal to him, but he had brought models and plans illustrating his theories relative to space flight. Cantrill and Waters had found them helpful, but not sufficiently so to make interplanetary travel at once a reality.

Two years later Number 775, the son of Old Faithful, had flown to his sire's workshop far out in a desert of Mars. In defiance to the economic traditions of his kind, he had gambled with time and death in one reckless toss of chance. And he had won, calling Jack and Yvonne Cantrill across the void by means of a radiolike probe which his parent had taken to Earth.

Using the Moon, whose feeble gravity could retard their rocket ship but little, as a jumping-off place, Jack and Yvonne had set out. By means of the probe, Number 775 had guided them to Mars, preventing them from becoming lost in space.

Mars, skeptical and aloof until then, had been astounded at the arrival of the visitors from Earth. Her people had begun to see how stagnant and routinized their Spartan system had made them. As a result, they had begun to think and plan once more. Commerce between the two worlds had been established. Scientific knowledge had leaped ahead like lightning, advancing in every field. The discovery of atomic energy had made possible a cheap and safe traffic between planets. Colonization of other spheres had been started. It had all seemed a splendid march of progress until—now!

Number 775, the Cantrills, and Dr. Waters, all seemed momentarily at a loss for words. Little Thalia, solemn as a chubby elf, watched the others in silence.

Finally Yvonne spoke. "Are you sorry for your part in bringing interplanetary travel about, man of Mars?" she asked.

"I am not sure," he replied in a cryptic expression of bewilderment.

JACK and his wife were outwardly composed in this strange anticlimax to the thing for which they had all worked

so hard. But Dr. Waters' weathered old face betrayed the pain that ached within him. It was bad to have the dream and inspiration of a lifetime go wrong like this.

"There must be some way to straighten things out!" he muttered unsteadily. "There—there's got to be!"

Jack's features hardened. "Maybe there is!" he burst out. Then he turned toward Number 775. "You know where this mess can end, man of Mars," he said grimly. "Progressive atomic disintegration could destroy not only the people of your world and ours, but the worlds themselves, down to almost the last grain of dust in their composition! We can hope that no one will become crazy enough or foolish enough to start such a conflagration, but we can't be sure. If we ever needed wits, it is now.

"You and I have at least one stunt in our bag of tricks that has never been used. That ship of yours, and my little crate. Maybe before things start to pop we could——" He halted abruptly, and his gaze followed the Martian who had moved across the room to a news-cast device.

An arm of his metal mount set the thing in operation. The spinning kaleidoscope of colors in the view screen cleared, presenting a coherent picture: the hard, cold stars of the void; space ships painted a dull black, spewing fire from their rocket vents. There were hundreds of them at least, and their stubby forms proclaimed them war vessels from Mars.

Because of their black hulls which did not reflect sunlight, and because their rockets were inactive during most of the journey, being used only to build up speed at the outset and to check it when approaching their destination, they had been almost able to reach the atmosphere of Earth without detection. A small spy ship had doubtless just discovered them. It was radioing in the view of the approaching armada.

A calm voice spoke from the diaphragm of the news caster: "Martian fleet settling over North America. Present altitude five thousand miles. Attack on large cities probably a matter of minutes. Strict discipline and prompt response to the orders of military authorities are essential to all civilians. Take it easy, and keep your chins up, friends!"

The speaker's tones died away, and there was a hushed silence in the laboratory. The holocaust had come.

"I think we were a little slow," Dr. Waters said presently, in a very steady voice. "There isn't much we can do now."

Jack Cantrill's body stiffened as if he were preparing to challenge the old scientist's statement. He looked toward Number 775.

THE LATTER seemed to hesitate, as if he were gripped by some inner conflict. Then, with an abrupt movement the glittering thing he rode wheeled, and swung toward the exit. Without a word, he was gone.

Even Thalia was a bit dazed for several seconds. "Nun Sen!" she called, running to the door and struggling with the heavy latch. "Nun Sen!" But by then he must have been out of earshot.

She came back to Yvonne Cantrill and tugged at her hand. "Let me go after Nun Sen, mother!" she begged. "He's going away, and we won't ever see him again. Please, mother!"

Yvonne knelt beside her child and stroked her soft curls. "No, nuisance," she said with a little forced chuckle. "It's your bedtime. Miss Andrews is waiting. Run along!"

II.

NUMBER 775 of Mars, mounted in the cage of the long-limbed mechanism that bore him, swung on through the

flower-scented night. He had less than half a mile to go, for he had erected his huge Terrestrial workshop close to the country home of his human friends. There, beyond the treetops, at the summit of a hill, it squatted, the light of the Moon glinting on its great, curved dome. Behind its stout walls secrets brooded, some of them known only to its master.

But the marvel of those secrets could give Number 775 no peace now. He was a Martian, with a Martian's fierce patriotism. Still, most of his dreams and aspirations had been intimately associated with Earth. Where, then, could his sympathies find attachment, secure from uncertainties and regrets?

He had played a lone hand before. Might he not do so again? Or might not a feeling of bitterness cause him to sever all contacts of sympathy with both of the warring worlds?

He had reached no decision. He had ideas, and he had certain forces at his command; but, as yet, he evolved no plan of action. All he wanted now was speed. He wanted to tear out into the region of the stars at breath-taking, thought-deadening velocity. And so he hurried on toward his workshop, which in itself was a gigantic space craft, whose inconceivably powerful engines were as yet untried in actual flight.

Once he glanced toward the sky, noting the harmless-appearing patch of blue light that was swelling rapidly there. It was fire-flecked by the exhaust vents of approaching war rockets—the Martian fleet. High in the stratosphere, Terrestrial battlecraft were gathering. In a very short while——

There were things that he did not observe. Even had he arrived soon enough, he could not have seen the minute but intense flicker of a welding tool biting through the metal walls on the other side of his workshop; nor could he have glimpsed the tiny space flier attached there by magnetic anchors.

THE LITTLE VESSEL had dived down out of the sky, and had attached itself to the side of the Martian's workshop. It had disgorged a man. Working with nervous swiftness, he had cut a circular hole in the shell of the looming bulk of tenacite alloy.

The partial vacuum beyond the opening sucked in air with a soughing sound. The man's massive body was clad in a space suit. Now he clambered through the breach he had created. The welding tool spat vivid flame in the rusty, Gargantuan darkness, as he sketchily reseated the disk of metal into place.

Here was an individual who was part cherub and part fiend, part idealist and part madman. There was intellect revealed in the high brow, and ruthless determination in the square jaw. In him intense loves and black hatreds, keen understandings and abysmal errors of reasoning, and a colossal ambition, were mingled to form an unpredictable personality pattern which betrayed, also, more than a touch of poetry. Two worlds knew him well. He was Dr. Noel Ransome, discoverer of atomic energy.

The intruder finished his task quickly. A flashlight in his hand sent a bobbing beam over gigantic mechanisms, the nature of which he knew nothing, brilliant physicist though he was. But he had the capacity to learn.

"The government is crazy to allow Cantrill's pet Martian to escape like this," he muttered. "The beast has too many valuable ideas!"

From somewhere out of the eerie silence, metal grated on metal. Muffled by distance, and a dozen stout bulkheads, it seemed as faint as a voice from the grave—and as startling.

Ransome guessed that Number 775 had arrived. His body stiffened, and the light he carried winked out.

III.

THALIA CANTRILL had submitted to the ministrations of her governess with good grace; but as soon as the young lady who ruled her life had departed, she proceeded to put a planned revolt into execution.

She bounded out of bed and dressed with the speed of a maniac, emulating many another youngster who hopes for new adventure. A diminutive space suit was required to complete her attire, for the abode of Nun Sen, which was her destination, was cold, and the air in it was thin, duplicating that of Mars. The light-weight garment she rolled into a bundle and thrust under her arm, together with its tiny air-purifying device and its oxygen helmet. The latter was made of a thin, tough, transparent substance, as flexible as a toy balloon. When worn, its spherical form was, of course, sustained by internal air pressure.

Escaping from the house without being detected was a difficult problem; but she solved it with a success that would have been the envy of any boy of her age. A balcony, with the projecting limb of a tree, provided an avenue of departure which required some nerve and agility to use; but Thalia did not balk.

While sliding down the bole of the tree, she slipped and fell several feet, bumping her shin severely. Her face puckered with pain, and for a moment she thought she was going to cry; but after pursing her lips determinedly, she managed a sheepish smile instead. In a minute she had put on her space suit, which she had dropped from the balcony before her descent. She grimaced with effort as her chubby fingers strove valiantly to close the complicated fastenings.

Presently she was racing toward Number 775's workshop. She was halfway up the slope of the hill on which it rested, when the storm broke. The vast, whirling sea of blue light, which was descending from above, and growing more huge with each instant, began to give audible and ominous evidence of its presence. The first sounds were vague and muted, like the rustle of silken curtains. They were the sounds of massive coursers of the void tearing through the atmosphere at meteoric velocity. Those ships were within striking distance now. The blue flames of their rocket vents were becoming individually visible.

There was a flare of incandescence, more eye-stabbing than any blaze of lightning could ever be. The crash that went with it was long delayed, for sound traveled so much slower than light. But the ground shook with the concussion. To the south, where now-darkened Chicago lay hidden, a broadening spurt of sullen, glowing red appeared.

Another flare of incandescence, and another. They came now with ever-mounting frequency. And the clamor that accompanied them became almost a steady, grinding roar, as titanic projectiles ripped like a ghastly hail into the doomed metropolis. The red glare of her ignited funeral pyre brightened like a spreading scourge.

Those who wielded the instruments of wholesale murder were not men. They could not sneer or frown as men could; they had not the natural organs to produce audible curses; but they knew their work, and hidden within the substance of their abhorrent forms was the capacity for cold hatred.

According to a carefully worked out plan, their battle fleet began to split up into several parts. One group was enough to wipe out Chicago. The others could expend their cruel energies elsewhere. And there was no need, as yet, to waste effort devastating thinly peopled countryside.

THE TERRESTRIAL ships strove valiantly to stem the tide. Time and again a Martian battlecraft plunged cometlike to destruction; but since the defenders had received no specific warning of the attack soon enough to make adequate preparation, their numbers were too small to cope with the onslaught. One by one they were blasted out of existence.

Thalia Cantrill saw the mighty pyrotechnic display, and quite naturally she was terror-stricken and bewildered. She needed the comforting presence of some one wiser and stronger than herself. And because she was nearer to the abode of Nun Sen than to the house of her parents, she scampered on, whimpering and panting, up the hillside.

The great domelike structure glittered in the flickering glare, and its metal sides threw back the echoes of the thunder. It looked like an immense, brooding fortress. Its entrance was sealed, and only a faint emerald glow seeped through some of its ports.

A wave of sick dread came into the child's heart when she found the way blocked. But despair sharpened her wits. An air-intake vent, piercing the shell of the craft, caught her attention. She ran to it, and clambered inside. A stream of air was being sucked into the darkness ahead, to an apparatus which extracted the oxygen from it, and stored this vital gas in large tanks.

Creeping along the interior of the pipelike tunnel, she reached the condensing room. Her space suit protected her from the cold of congealing air. The sound of her entrance attracted the attention of one of Number 775's quasi-human robots, who stood guard beyond a door used when inspecting the machinery. The monster opened the door and entered. Concealed in the darkness, Thalia slipped behind the robot, and escaped into a gleaming passage, alight with an eerie green glow.

The whole structure vibrated with a crescendoing howl. Number 775 had finished the final inspection of his engines. Now he moved a small black lever to its first notch.

Thalia, scampering along the tunnel which led to the central chamber of the ship, felt a gentle, swaying jolt as Nun Sen's colossal creation tore itself from the crust of the Earth. The shock was surprisingly slight; but this was because the propulsive force acted not only upon the hull of the ship itself, but individually upon every atom of its entire mass, including its contents. Thus the pressure and strain of acceleration was almost eliminated, making possible increases in speed that would otherwise have been fatal to all life.

FROM out-of-doors, the spectacle of departure was far more impressive. The entire crest of the hill, on which the workshop had rested, crumbled as if beneath the blow of an unseen Gargantua, wielding an invisible club. Trees toppled and rolled down the slopes. The thunder of departure drowned even the noise of battle. Puffs of mad wind went sweeping over the countryside.

The ship shot upward like a cork borne on a geyser of golden light. It tore past the whirling Martian fleet. Swiftly its form, shaped somewhat like the top of a mushroom, waned against the stars. It was not a rocket; perhaps the energy that propelled it found traction in the curvature of space itself.

Thalia reached the vast, circular room which was the nucleus of the vessel. It looked, now, like a temple to the god of power. Between the bases of the buttresses that ribbed the walls and extended upward to the center of the rotundralike roof, were giant cylinders mounted vertically in spidery frames. They spun on their pivots like mad dervishes, their smooth, black contours gleaming darkly. From them came the soaring howl that was the ship's song of strength.

Thalia peered cautiously through the misty green illumination of the place. Nun Sen was hard to find among the maze of cryptic apparatus that crowded the floor. Presently she located him before a control board at the other side of the chamber.

He had dismounted from the large automaton he rode while afield on Earth, and was supported instead by a light, articulated tripod. He had discarded his vocal and auditory apparatus, used while communicating with Terrestrials. His gray body was uncovered, for the temperature and air pressure here were normal to him. His huge, stalked eyes swayed nervously this way and that, and his tendrils dangled around him like the creepers of some grotesque plant. Never was the aspect of humanness, which his mechanical voice had lent to him, less apparent.

Thalia wanted to rush forward and announce her presence. Yet the realization that she had committed a misdemeanor, which neither her parents nor Nun Sen would sanction, restrained her. She was puzzled and lonely. She did not know quite what to do. Her brows crinkled with vexed thought. She shook her head, and her tousled curls brushed against the curved interior of her oxygen helmet. Finally she darted behind a buttress, deciding to watch from this concealment, and await developments. She did not know what wonders the next few moments were to reveal.

IV.

NUMBER 775 had finished all necessary adjustments of the controls of the vessel. It shot on into space at a speed that was terrific by any standard previously set, but which was only a small fraction of its capacity. Jack Cantrill and Number 775 had tapped one of Nature's deepest secrets, when they had invented the first of the type of engine that propelled it.

Moved either by whim, or by a deep purpose, the Martian sent his tripod striding toward a large, silvery cone, supported on a massive pillar. Outwardly the device exposed none of the marvelous complexities which must have gone to make up its internal structure. At its apex was a needle-pointed rod, mounted on a universal joint, much as a telescope would be.

Fine nerve filaments at the extremity of one of Number 775's boneless appendages, groped through a small opening at the base of the cone, contacting there some mysterious control. Promptly the rod swung on its mountings like a dipping needle, as if drawn by some hidden lodestone out across the cold immensities of the void. Beyond that, there was no visible evidence of the enigma's functioning—visible in the strictly ocular sense, that is—but there were other results that might have startled the gods.

Immediately some intangible aura filled the room. Little Thalia felt the subtle force of it reaching out across that clamoring chamber of wonders, to grip her faculties. At first this was just a consciousness of uneasy tension. Then, after several minutes, came weird sensory phenomena—or such they seemed.

Above the cone which Nun Sen controlled, she saw, or thought she saw, the mottled, canal-ridged bulk of Mars, such as it would appear from a distance of several thousand miles. Young though she was, Thalia realized that this was something that could not happen, by any rule with which she was acquainted.

Experimentally, she closed her eyes. Though she could now no longer see Nun Sen or the contents of his abode, the view of the ocher and gray-green globe of his native world was still photographically vivid and detailed! She blinked, but since the effect was better that way, she decided to keep her

eyelids down. Curiosity and wonder held her spellbound.

She seemed to be looking at Mars through the port of a space ship. Beyond the planet were harsh blackness and stars. Before her were bright instruments and dials, the polished breeching mechanisms of deadly weapons. Figuratively, in her visionary environment, she looked down at herself, and saw the white coat front and shining buttons of the uniform of an officer in Earth's space navy.

THALIA knew that by means of a magic, the whys and wherefores of which she did not attempt to probe, she had for a time become a certain Commander Trent Stanton, sent out with a force of eight hundred ships to attack Mars.

"Another hour and we'll be paying them back with interest for the hell they're raising back home, Bascom," she heard herself saying in gruff, masculine tones.

Bascom was a handsome youth just out of school. He nodded appreciatively. "We will, sir," he said. "But progressive atomic disintegration is what they really need. Unquenchable, incandescent, radioactive fire to singe all those devils to nothing, and their damned planet with them! Orders or no orders, the men'll be sprinkling the catalyzer as soon as they can make the stuff! You'll see!"

"That is just what must not happen, Bascom," Stanton replied sternly. "Mars would have time to retaliate!" Thalia felt the surge of the officer's fears. They amounted to certainty.

Bascom, however, went on, defiantly unabashed. "Our cities are being wiped out, sir. Many of the men here have relatives—mothers, wives, children—who are doomed to die. I have a sister in New York, myself. By now she's probably dead. To tell you the truth, sir, we are a little past sanity. We don't care what happens as long as we have revenge!"

The strange dream phantasma vanished from Thalia Cantrill's mind. Others took its place, punctuated by considerable intervals during which there was nothing for her to do but watch Nun Sen standing quietly before his apparatus. The impulses on which the thing relied for its functioning, evidently required time to bridge distance, though they were incredibly swift.

The visions were jumbled together in vivid though fleeting impressions, gathered from a thousand varied brains: Mars itself. Cold, wind-swept deserts. Canal beds, alive with grotesque vegetation. War craft patrolling the deep, purple sky. Buried cities, whose green-lighted tunnels and caverns teemed with feverish activity. Giant engines at work. Abhorrent inhabitants conversing by means of interlocked nerve filaments; exchanging thoughts, and expressions of hatred, that was clearer and more complete than any which vocal words might have expressed.

Jupiter, the major prize of the conflict. Her steamy atmosphere, so dense that the weight of it would have bruised an unprotected man's flesh. Her hot, quake-torn crust, still dotted with smoking lava pools, lifeless except for the alien life that had invaded it, to wrest from its substance the rich store of radioactive metals it contained. Great, flat, boxlike constructions, whose interiors duplicated the conditions of other, milder worlds. Barracks for the workers. Refineries. Recreation rooms.

All normal activity had ceased, to be replaced by grimmer activities; for it was here that the struggle had begun. The buildings were surrounded by squat fortifications, behind which the warriors of either Earth or Mars, waited to repel the attacks of their enemies. Thalia viewed the grim business through their eyes, and felt it through the medium of their hardened personalities.

EARTH was the last of the planets to be probed. Death had already touched her, and there the storm of emotion raged highest. But the movement and changes of the questing process were so swift that individual attitudes blended like single notes, to form a sort of ghastly, catastrophic symphony. It was as though Nun Sen, pursuing his bizarre exploration, sought to avoid too long a contemplation of the pain of individual cases, and to capture instead the dominating overtones.

Thalia saw fire and destruction through other eyes than her own. She heard the crash of explosions, and of tumbling buildings. She sensed the mad ambitions of leaders, both Terrestrial and Martian—the real cause of the horror.

In instantaneous flashes, she caught impressions of terror and bravery and love, as vivid, nearly, as if they had had their origin in her own self, and not in minds millions of miles distant. Now she wanted to scream in sheer physical agony; and now, somehow, she seemed to absorb the strength of some heroic person, fighting for life. The phenomenon dammed up her own emotions, and made her only the receiver for the emotions of others.

She was many individuals in one, each constituting a single picture in a sequence of pictures which was like that of a disjointed cinema film.

For a moment she thought she saw her home and her parents. They had discovered her disappearance. But insufficient time was given her to grasp the weight of their cares. She received only a sort of blurred, incoherent shock; then the contact was gone.

The swirling visions faded away after that. Thalia Cantrill was exhausted after her nerve-fraying ordeal. She opened her eyes. The tension was relieved now, and she slumped, panting, beside the buttress that concealed her.

She did not try to comprehend what it was that had happened. She felt cross. She wanted to cry, but it wasn't brave to do that. Thalia Cantrill had always been taught to be brave. She would rest and wait.

V.

THERE WAS another who had experienced the deific miracle besides the child and the Martian. From the shadows of an unlighted tunnel, Noel Ransome had peered into the chamber, and had seen the demonstration of a scientific triumph, which to another, less-learned man would have held the aspect of black magic.

What might the Martian's invention be, basically? A supersensitive receiver for telepathic impulses? Or something more, besides? Ransome was capable of making some close guesses. The swiveled rod, topping the conelike apparatus, had moved often during the recent performance.

It might be the projector for a form of energy which could reach across space in a tight beam, little of whose power would be lost by distance. The beam might impinge upon brain tissue, and act to amplify the thought waves emanating from that tissue, enormously, so that a sufficiently sensitive receptor device could pick them up, even at a great distance. Or the beam might provide an actual path for telepathic impulses, analogous to a wire carrying a current of electricity. This latter theory seemed the more reasonable.

Anyway, once received by the conelike apparatus, the waves might be rebroadcast at such an enormous amplitude that even a dull mind in the vicinity could pick them up and interpret them in a form that would be almost as vivid as the impressions of an actual experience.

Selectivity? That is, how might one contact the thoughts of any certain being without the interference of the

thoughts of others? There was the movable projector rod, of course. It might choose any portion of space, or any planet, as its subject. But how about individuals? The adjustment would necessarily have to be much finer than any mere mechanical device could provide. Could thought of some person within the path of the beam establish contact with that person's mind?

Noel Ransome did not care to speculate further now. There was no time. He saw opportunity, and he meant to grasp it. His body was trembling, and his face was pale from his recent adventure. He had felt all the horror and pain and grief, coning from those tortured souls; and he had been sickened by the experience; still, the driving ambition of his megalomania denied him normal compassion.

His eyes shone coldly, and his angular face assumed a look of mingled worry and mad triumph. He licked twitching lips that had suddenly gone dry.

What might not a man accomplish if he could read the thoughts of any brain he might select? Nothing would be hidden from him. He would be like a god, able to foresee every move of every leader of society! He could steal the wisdom of every great mentality on two planets, and employ it to his own good! He could feel the pulse of public opinion at any time, and he could play up to it. A swift coup d'etat could make him sole master of every world that circled the Sun!

Perhaps the action of the device might even be reversed, providing a means of suggesting to the egos of myriad individuals, the idea that he, Noel Ransome, was a dominant entity!

RANSOME scarcely remembered that there had been a sinister threat in the mental kaleidoscope. The unreasoned lust for revenge might easily provide the incentive for the scattering of a catalyzer that could convert two civilized worlds into blazing infernos, whose substance would dwindle until it was changed entirely to pure energy. To him, this was one of the fortunes of war. He could do nothing about it now.

Number 775 was striding back to the control board of the ship. He had shut off the strange mind machine. Things were normal once more.

Ransome was ready to act. He was thankful that Number 775's invention had not revealed his presence to the Martian. Luck had favored him in that respect. Old Faithful's child had simply not thought to tune his apparatus in the way necessary to contact Ransome's mind.

The Terrestrial scientist had considered every possibility. His greatest hope was to contrive a theft of Number 775's finished apparatus. But the thing was very massive, and obviously secured firmly into place. To steal it, it would not only be necessary to dispose of the Martian, but his robots, who were undoubtedly somewhere aboard the ship, as well. Then, only, would he be able to unfasten the mechanism, and carry it away. To do all this was a large order.

However, Ransome had seen, close to the conelike enigma, a workbench littered with tools, scraps of metal, and other evidence that it had been used very recently in the construction of something intricate. Among the litter was a large scroll of gray, parchment-like material. That it contained the diagrams of Number 775's invention seemed more probable. The possession of such diagrams, though less satisfying than the possession of the finished apparatus itself, would be sufficient for Ransome's purpose.

He drew a heat-wave pistol from the pouch of his space suit, and advanced along the dark tunnel. The way he chewed his lower lip betrayed his nervousness. His boots made faint, grating sounds; but he was not wor-

ried about this, for he knew that Martians have no natural ears; and he could see that his intended victim had discarded the microphones which amplified vibrations, enabling him to feel sounds normally beyond the range of his keen sense of touch.

Noel Ransome reached the end of the passage, where it opened into the chamber. Slowly his weapon came up. He struggled to steady his fingers as he lined the sights on Number 775's gray, oblate body. Murdering a Martian was not murder now.

THE INTRUDER was not prepared for what happened next. He heard a shrill scream stabbing keenly through the cold, rarefied air, and through the thin, unresistant texture of his oxygen helmet. He saw a small, grotesque figure scurrying across the wide chamber.

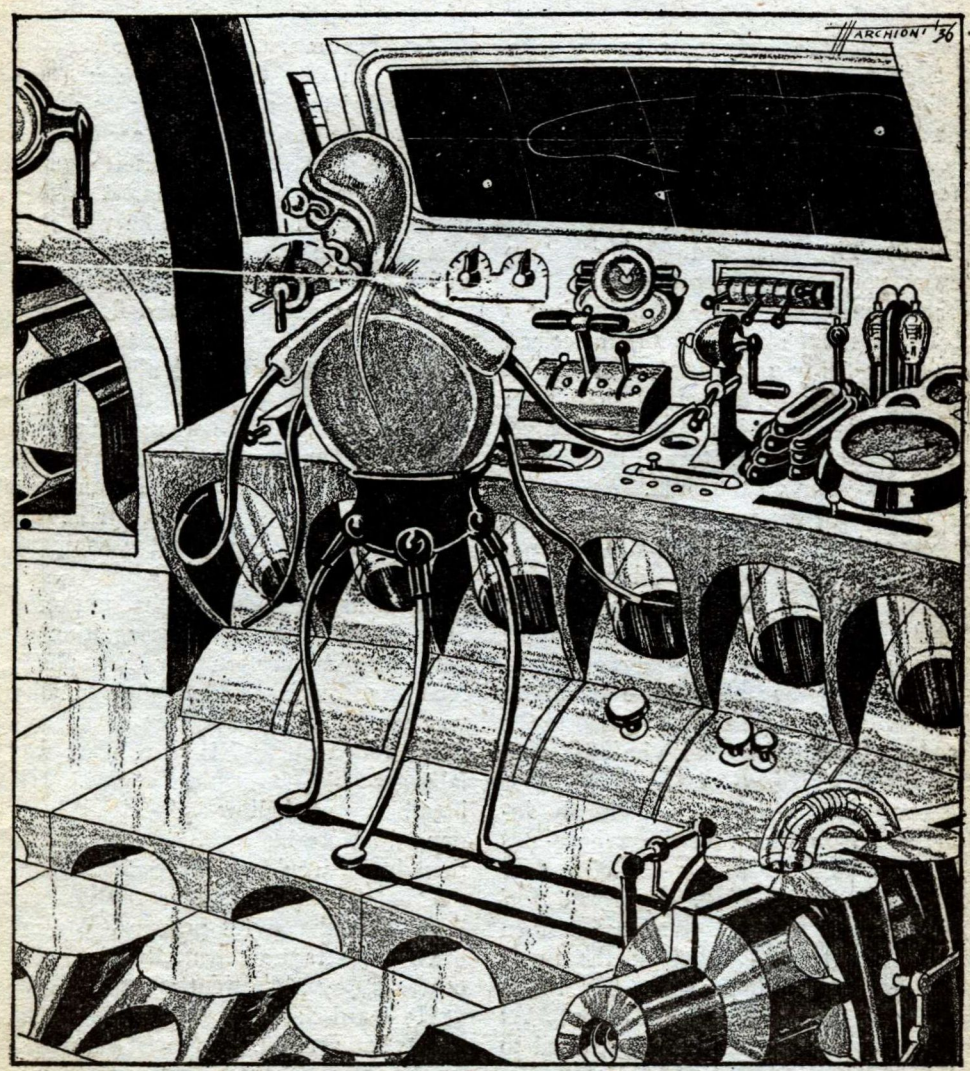
The intruder was not prepared for what happened next. He saw the small, grotesque figure—then realized——

At first Ransome did not recognize this new arrival as a human being. Then he saw that it was only a little child, clad like himself. A girl with tousled yellow hair. Thalia Cantrill had heard the sounds of the scientist's approach, and she was trying to warn her grotesque friend.

Ransome discharged his weapon at the Martian.

Number 775 had no ears, but he must have sensed the slight vibration of Thalia's cry. Anyway, he wheeled about swiftly on his three metal limbs.

The slender pencil of concentrated heat waves stabbed toward him from Ransome's pistol. But the Martian's movement, and the unexpected appearance of Thalia, had spoiled the scientist's aim. His shot, which would have been surely fatal, was changed to one whose result was somewhat less certain.



Acrid blue smoke puffed from the spot where the rays had struck Nun Sen's flesh——

Acrid blue smoke puffed from the spot where the rays had struck Nun Sen's flesh. A thick, unarticulated cry issued from the palped orifice that was his mouth, and his tentacles coiled like the body of a seared snake. He swayed on his tripod, too near dazed with agony to know what to do.

Rushing forward, Ransome pumped another energy cartridge into the chamber of his weapon. He raised it to finish his injured prey. He never pressed the trigger, however. A large, crystal flask, containing a heavy fluid, landed with a painful jolt against the point of his elbow. Thalia Cantrill, now at close quarters, had thrown well.

A childish scream, which combined fear and grief-driven fury, found its way to the scientist's ears. "Get out of here!" Thalia sobbed shrilly. "Go away, you! You've hurt Nun Sen!"

Ransome wheeled. Something in his brilliant though unstable brain seemed to be suddenly unleashed. A move, on which his future depended, had been interfered with. He wanted revenge. Without thinking, he turned the muzzle of the weapon on the child.

It was a false move, for it served to arouse the injured Martian to activity. Through the haze that obscured his vision, Number 775 saw that his little mistress was in danger. All the fierce loyalty of his nameless soul was awakened, so that for an instant he was above himself. A ragged tendril flashed to the control board before which he still stood. A knob twirled.

Ransome's weight was suddenly increased many times. The gravity plates beneath the floor were receiving a flow of power far in excess of normal. Off guard as he was, the weapon was torn from his hand. It struck the metal plating beneath him with a force that shattered its focusing mirrors. As though his legs had suddenly turned to water, Ransome crumpled and fell.

Little Thalia was down too, and the Martian. The latter, however, had not fallen before he had pressed a stud. A pounding vibration, whose significance Ransome understood from his knowledge of Martian methods, echoed through the room. It was an alarm, calling the robots.

THERE was only time for one thing now, the scientist realized, and little enough time for that. His weapon was gone, and he could neither destroy the Martian nor his invention.

Exerting every muscle against the terrific pull of the gravity plates, Ransome rolled toward the bench on which the scroll he desired lay. Reaching the bench, he strove to raise himself enough to fulfill his purpose. He almost fainted with the effort, but at last he was successful. The precious parchment was in his hands.

Again he slumped to the floor, and rolled past cryptic apparatus toward the tunnel by which he had obtained entrance to the chamber. In doing so, he passed the child. She was gasping and speechless, her heart retarded by the abnormal weight of her blood stream. He recognized her pale features, for he had seen her several times in the company of her noted father.

"Cantrill's daughter!" he muttered hoarsely. And with his recognition of her came admiration for her pluck. Noel Ransome's vacillating personality was capable of such sudden changes.

He rolled on. His own heart was laboring like a rusty engine. His breathing was shallow and swift. Spots danced before his eyes. For a time he thought he would never reach the tunnel, but he did. Here he found freedom from the awful pressure, for the gravity plates now beneath him were controlled by a different switch.

He heard clankings behind him. The robots had arrived. He raced on, reaching the place where he had cut through the thick, tenacite shell of the craft. He

unsealed the block of metal, and clambered through, into his own space boat.

Its magnetic anchors let go, and its rockets flamed out their spurts of incandescence, lost in the cold, radiant glory of the greater vessel's stream of propelling force. The hole in the side of Nun Sen's ship, he, of course, did not trouble to reclose; but automatic doors into the room into which it opened, thudded shut, preventing the escape of air.

Earth, already dwindled to a great disk in star-shot space, looked calm except for fuzzy blotches of blue light. Ransome set his course toward it.

He examined his booty. The diagrams showed him that he had not erred. He had obtained what he required. Already he could begin to understand the invention. Now if things turned out right——

The curve of his lips became a bit more crooked.

"And I know where the Cantrill kid is," he muttered significantly.

VI.

NUMBER 775's senses never left him entirely. And so, after Noel Ransome's departure, he was able to remember the things that had happened, and to understand their significance.

The five robots, huge, manlike, and glittering, valiant though hampered by the excessive weight which the overloaded gravity plates imposed upon them, came creaking into the chamber in answer to his summons.

Robot One, the foreman of the group, whose synthetic intellect was most intricate, approached its fallen master, and stooped down to receive orders.

Unsteadily Number 775's nerve filaments groped into an opening in the brain case of his slave. His commands were given, not in words, but in fine neural impulses of the same character as those by which the intelligence of a man, or of any other highly organized animal, directs the movements of its body.

Robot One lumbered to the switchboard, and returned the knob, regulating the flow of power to the gravity plates, to its normal position. The crushing pull was relieved. Meanwhile, invisibly and inaudibly, the chief of the robots was giving commands to its henchmen. Radio, invented on Mars in a past long since forgotten, still had its uses.

As a matter of course, Robots Two and Three leaped in pursuit of the human fugitive. But Number 775 had no doubt that Noel Ransome was now well clear of the ship and was headed toward Earth. The Martian knew that to check his own colossal craft in its flight, turn it around and give chase, would take minutes to accomplish; and though his ship could easily overtake any rocket-propelled vehicle in the straightaway, there was danger in directing such a vessel as his toward an inhabited planet at anything but a very moderate speed—danger not only to the ship, but to the planet itself!

Perhaps because there was nothing that his still-clouded faculties could suggest for him to do in connection with the fleeing Terrestrial savant, Number 775's attention drifted to other, more pressing matters. If Noel Ransome encountered Martian war vessels, there was no doubt that he would be restrained or destroyed, because he was an enemy. If he reached Earth successfully, the probabilities were that his word, including whatever twists fancy or design might lend to it, would be accepted there as fact. The results, considering the powers of the man, and the importance of the diagrams he had succeeded in pilfering, undoubtedly would be far-reaching.

However, Number 775 was more intent, now, upon other things. His orbs seemed to smolder dully as he watched Robot One pick up Thalia Cantrill. Ex-

cept for a few bruises, and a state of nervous excitement which she expressed with convulsive sobs, the child was little the worse for her experience.

She was able to walk toward her friend without assistance. "Nun Sen!" she cried. She could say nothing more; but there was a concern in her voice that would have made further words superfluous, had the Martian been able to hear her.

Nor was it particularly unfortunate that he had discarded his microphones. Thalia touched his cold, leathery hide in a gentle caress that was more expressive of compassion than any tone of voice could have been.

HE responded in kind, a thin tendril that was part of his grotesque anatomy, coiling and uncoiling lightly about her arm. His thoughts, though, were hidden. No one could have told whether or not he was vexed with her for having deserted her home to accompany him on his wild venture.

Robot One was applying unguents to its master's hideous wound, from the center of whose crusted surface, bright blood oozed. The child watched with wide eyes, and she bit her lip when the Martian winced with pain. But at last the antiseptic process was completed. Number 775 was raised erect on his tripod.

Maybe the presence of Thalia Cantrill gave him something that he had lacked before, acting to dispel the cloud of cynical futilitarianism that had made any purpose he may have evolved seem without real use or point. It was here that the fragile things of life made themselves most felt.

Anyway, Number 775's objectives had become crystallized. He knew now, definitely, what he wanted to accomplish. Unless he could realize his aim, he knew that the two civilized spheres of the solar system would cease to be. Progressive atomic disintegration would wipe them out in a flood of white-hot flame. He had read the signs in the brain of the man who commanded the Terrestrial fleet rushing down on Mars. Two acts of revenge; the first perpetrated by men too enraged for reason, the second committed by the people of Mars, by then already facing the reality of doom. There was small hope indeed that his predictions might prove false.

That the attainment of his goal spelled death, not only for Number 775 himself but also for his small companion, may seem to contradict his inspiration. But no, this was not quite true. Thalia was only an individual—a symbol which had recalled to his attention the fact that, on two planets, virtues such as devotion and kindliness still existed, in spite of the present outburst of horror and brutality. It was right that those virtues should continue to endure, even though the vices must endure with them. And since Number 775 was a Martian, his natural, first concern was with the mass rather than the individual. Consequently, though Thalia meant much to him, he was willing to see her sacrificed along with himself.

There was need for hurry. He conveyed a command to Robot One, and then touched Thalia lightly on the shoulder, indicating that she was to accompany the slave leader. There was no time to secure his voice machine, and give her an explanation; but he could see that the little girl was in need of rest. Besides, there was small reason to tell her that death for both of them was near.

Protesting vehemently, Thalia was led away by One. They reached a small room, the aspect of which was entirely Terrestrial, though it was ensconced amid Martian marvels. Number 775 had made it two years before, to accommodate his child friend when she visited his workshop. That was before

the stout structure had been remodeled, and converted into a space ship.

Nun Sen had equipped the room according to Thalia's needs and desires, even to the fanciful Peter Pan and Mother Goose frieze around the walls. The air was warm and Earthly. Thalia could shed her cumbersome attire here; and be, in effect, just another human child at home.

However, when the robot departed, bolting the door behind it. Thalia sputtered impish defiance for several moments. She did not want to be confined thus. Resiliently recovering from her frights of recent minutes, she preferred to be where excitement was in progress.

"Old grouches," she complained petulantly as, with rough impatience, she divested herself of her space suit. "Nun Sen and One, both!"

VII.

WHEN the robot had returned to the central chamber of the vessel, the place teemed with a fresh note of activity. The scream of the whirling cylinders about the walls had become more sibilant and shrill as it faded upward toward the high-frequency limit of audibility.

The engines had not been turned off; rather, they had been given full throttle to build up sufficient velocity for the purposes of a plan whose intention was to probe the structure of the cosmos itself. It was a mad plan; but in it was a thread of good logic, backed up by intelligent, if vague, theory. Whether it would have the desired effect, only the future might reveal.

Number 775 was still at his switchboard. His course, revealed by a small view screen, transversed by a geometric pattern of cross hairs, was toward the interstellar void, and seemed destined to cross the orbits of both Mars and Jupiter. The former planet was an ocher dot to the right; the latter was a silvery speck to the left. So far, everything was at it should be.

The finer adjustments of direction could be taken care of later, when mathematics had reduced all the diverse factors involved to an exact answer. Sirius, the Dog Star, which fitted intimately into the problem, was not even visible in the screen, for it was somewhere on the other side of the solar system. But Number 775 knew its precise position, and that was enough.

The robots, Two and Three, had returned from their futile pursuit of Noel Ransome. Now, with Four and Five, directed by the wiser One, they were busy setting in order a huge calculating machine, whose mathematical powers were keener and quicker than those of any living intellect.

And the ship tore on at ever-mounting speed. The pressure of acceleration was becoming uncomfortable, in spite of the fact that every atom contained within the outer surface of that vast hulk, received an almost equal thrust.

Nun Sen moved, like the ruling entity of a realm of baroques, from the control board to the calculator. Challenged by a magnificent objective, and convinced that at least a partial attainment of his goal was needed within an hour or so to avert catastrophe, he drove himself on, disregarding the pain and weakness produced by his injury, and the elusive and annoying film that persisted in veiling his vision.

He made certain swift, precise adjustments of the mechanism. Then he strode to the burnished cone of strange mental powers. There were things which he still must learn and check, and here his search had its logical beginning.

His nerve tendrils, unsheathed from their chitinous scabbards, he thrust through the opening in the apparatus. They imbedded themselves in a jellylike substance, sensitive to his guiding neural messages.

Obeying his will, the projector rod

turned and dipped, pointing through the opaque walls toward that portion of space, between him and Earth, in which Noel Ransome's ship now must be. The telepathic channel, which the Terrestrial scientist had envisioned in his efforts to construct a theory explaining the operation of Number 775's invention, was established.

Nun Sen's natural desire to probe the thoughts of Noel Ransome was sufficient to control the finer adjustments of the machine, now that it had begun to function. He needed no contact with it to do this. It was only necessary for him to be within the field of his intangible aura, which could pick up his own directing thoughts.

FOR perhaps a minute the mind and the personality of Noel Ransome were under the Martian's keen and intensive scrutiny.

Number 775, whose life, and whose sire's life, had been dedicated to the aim of establishing an intelligent means of communication between the peoples of two worlds, had achieved the ultimate in that line of endeavor.

He could see now the soul of a man, laid bare in complete detail. He could grasp Ransome's monumental visions of godlike power, which soon might be realized. He could probe the extent of the man's selfishness; and he could trace, step by step, the workings of Ransome's emotions, meshing and intermeshing with the processes of his scintillant genius.

The scientist was a tangle of conflicting forces, some of them almost beautiful. And Number 775 was sure he understood their configuration. On this basis, employing a penetrating wizardry of his own, he undertook to predict another fragment of the future. And he was satisfied with his forecast.

Ransome had mapped out his course of action well. Tapping his thoughts, Number 775 was able to see that the savant had already radioed the news of the whereabouts of Thalia Cantrill to Earth. He had added the misinformation that she had been kidnaped, with the plain purpose of attracting favorable attention to himself, and, at the same time, of representing the Martian he had robbed, as a criminal of the blackest sort. Thus he hoped that any move Number 775 might make to defeat him would be checkmated.

Ransome had also radioed the news that he had captured the plans for a device of tremendous importance, though he had, of course, not divulged its nature. As soon as he reached his laboratory things could move very swiftly. Four days at most would be enough to construct a duplicate of Number 775's invention, with certain minor alterations of his own. Backed up by a mechanized world that had always idolized him in spite of his faults, the job would be easy, even though the device was a miracle of complexity.

He had at his command hundreds of trained craftsmen who could make and assemble all but those parts whose nature might betray to them the principle of the invention. These parts Ransome intended to fashion and fit into place himself.

The Earthly scientist had missed few details. Even now there was, in his rambling thoughts, a suspicion that his mind was being studied keenly from a distance. And mixed with the suspicion there was a defiant challenge.

But there were two things against which he had no defense. The first concerned a violent subatomic process, and he viewed it with an abysmal indifference, because he could do nothing about it. The second concerned himself, and it was hidden from him completely. Yet it was one of Number 775's trump cards.

Noel Ransome's ruminations broke off as his attention was drawn alertly to a wisp of blue light to the left of his

flier. But he saw that it was a long distance away. He was safe, and his course ahead was clear.

THE MARTIAN was through with his inspection of the savant. He made a fresh change of the position of his apparatus' projector rod. Moments went by as he waited for new contacts to be established across a much greater distance. Then thoughts and impressions began to come in from Mars.

The Terrestrial fleet attacking her, the slender ships that composed it swooping vengefully over red deserts and dusty canals. Her buried cities, seemingly so impregnable, falling prey to complex torpedoes that whizzed down through the air to imbed themselves in the soil, where buzzing drills at their noses came into play, propelling them down through sand and rock to the caverns. And there they exploded, corrosive lethal gases adding their horrors to the fury of the titanite, whose action was far more destructive than it would have been in a less-confined space.

Number 775 absorbed the mental impressions of his people's tribulation, with outward coolness. But no man could have guessed his hidden feelings.

His will directed the probings of his apparatus to the commander of the Terrestrial armada, and there he read again the signs of the inevitable mutiny. Trent could scarcely restrain even the officers and men of his own ship, to say nothing of the officers and men in the other vessels that composed his force.

Maddened with grief and rage by the reports of atrocities at home, the crews were busy in their laboratories with the manufacture of the catalyzer, even during the heat of battle.

Number 775 tapped the thoughts of some of those men. He envisioned the reeking hell holes where, stripped to the waist, they labored over transmutation retorts that were turning out a black, radioactive liquid. The repulsion of reversed gravity kept the liquid from actual contact with any portion of the apparatus; for in such contact was the certainty of quick and violent disintegration. Only such inert substances as argon and helium were immune to the fluid's action, and then only when they were congealed by a cold that almost reached absolute zero.

The atomic structure of the liquid, artificially built up, was far more unstable than that of radium; and this instability was contagious. Electrons ejected from the fluid's atoms, bombarded the atoms of other materials, causing their structure to collapse.

Out of their ruins came more speeding free electrons which destroyed the balance of still other atoms, and caused the release of their stored-up energy. Thus the holocaust could go on progressively, capable of producing an inferno of heat and electrical violence beyond imagining.

Within no more than an hour the ancient hills of Mars would begin to melt away in blasts and puffs of white-hot gas. Her hoary civilization would perish, but not before it had sown the seeds of revenge.

So Number 775 viewed coming events; and the experience was like rereading part of a book, for he had known how things would be.

VIII.

NOW he sought out the minds of the Cantrills on Earth. They were still at their country home. Except for a sulphurous haze in the air, there was no change in its surroundings. After its brief but deadly onslaught, the Martian armada had retreated into space to reorganize. Terrestrial opposition had stiffened after the first shock of surprise.

The pair stood beside a slim, waspish

space flier which had been wheeled out onto the lawn. Soft moonlight gleamed on its curved flanks. An Earth fleet of ships, employing the same propulsive principle as this little flier, had just been begun; but there was small hope that it would be finished soon enough to be of any use in the conflict.

Nun Sen read the thoughts of his friends; and though he had no natural auditory organs, still he could hear, as mental impressions, the words by which they sought to express those thoughts to each other.

"I think Ransome is a liar," Yvonne said with a puzzlingly blurred calm that matched her stunned feelings. "Nun Sen wouldn't do what Ransome claims! Thalia just ran away, and got aboard his ship somehow without his knowledge. He wouldn't have encouraged her. Anyway she's safe. She's got to be! If we could only, somehow, learn the truth!"

Jack nodded. "It can't be done with radio, sweetheart," he commented. "The external aura of Nun Sen's motors can't be penetrated in either direction by that kind of wave. Too much etheric disturbance. We couldn't get a message inside his hull, and he couldn't answer either. There is only one way that has a chance—chase him. If he doesn't increase velocity too much, we'll be able to catch up."

He glanced toward the stars to where a faint thread of light, marking the fiery path of the Martian's vessel, was still visible; though the distance it had attained since the outset was more than a million miles.

The normal blue color of the halo had already changed, through green, to yellow. This could mean only one thing. Number 775 was speeding up. The Doppler effect applied to light. The Martian's ship was receding, and because of this the wave length of the luminous aura of its propulsive mechanism was being lengthened toward the red end of the spectrum, relative to any comparatively stationary body astern.

"He's really starting to run away from us now," Yvonne said calmly. "We'd better hurry."

THEY wasted no more time with words, but clambered into their little craft with the litheness of practiced adventurers. With a roar and a flash of blue it shot so swiftly skyward that it gave the impression of having been suddenly dissolved into nothingness. Its engines were of the same type as those which powered Number 775's craft.

To the latter, this departure of his human friends was just another thing that must not happen. He had depended upon their influence in Terrestrial affairs to take care of a matter that was almost essential to the fulfillment of his plan.

However, perhaps this unfortunate circumstance might be corrected. There was still time; and it would have been necessary to establish some sort of contact with them anyway.

There was only one means that might prove adequate; and though theoretically feasible, it was still untried. The process hinged upon the possible effective reversal of the telepathic mechanism.

Once more his nerve filaments imbedded themselves in the jellylike substance of the cone's neural control. The energy fed into the probing beam was increased many times. There was still no visible change in the great room; but mental tension became suddenly an agony of an indescribable quality. It was as exhausting, almost, as being bathed in cold electric flame.

Number 775 struggled to concentrate all his attention on the information he desired to convey, in order that his invention might pick up his thoughts, and

project them to Earth in enormously amplified form. He strained all his magnificently disciplined powers, but to no special avail.

He was still in contact with the thoughts of the Cantrills, now rushing through space. And though he sensed vagaries in their minds, which bore a relationship to the orders he wanted to give them, he was disappointed to note that they dismissed these impressions as pointless, if unexplained, tricks of their fancies.

There was no time for delay. His ship, driven by every ounce of power that its engines could deliver, was building up a speed that soon would approach that of light. Number 775 would presently have other matters to attend to, and besides, the mounting velocity would constantly add to the difficulties of communication.

Feverishly he goaded himself, seeking some means of overcoming his obstacles. And, at last, he had a hopeful inspiration.

He directed Robot One to fetch Thalia Cantrill. With a deliberation that was soullessly detached, the monstrous fabrication obeyed, swinging off into the luminescent emerald murk through which giant things of metal glinted elfinly.

Presently the automaton returned, leading the little girl. Her eyes were wide with awe behind the transparent curve of her oxygen helmet, for she sensed the unusual.

"What are you going to do with me, Nun Sen?" she questioned.

Even if he had been able to hear he would not have bothered to answer verbally; for there was a quicker, better way.

A CHANGE in the adjustment of the cone, and the minds of the child and the Martian were in rapport. They became almost two halves of the same thing. And she knew what part she must play. There was a dissimilarity of detail between the mentalities of Earth men and Martians—a dissimilarity which made the projection of thought waves from one to another over a distance a difficult feat to accomplish. It should be somewhat easier for a man and a woman to receive telepathic impressions from the brain of a human child, especially their own.

The energy the cone received was again switched to full. Thalia winced and choked as the eerie, depressing force of it gripped her. She wanted to run away from the burnished apparatus; but with what seemed a sadastic cruelty which one might easily associate with a creature of his hideous form, Number 775 shoved her forward. The Martian would not—dared not—relent.

And, after a few moments, she no longer resisted. It was as though a weird hypnosis had taken possession of her. She stood before the cone like some small, cherubic worshiper before the shrine of a demon. Her face puckered with seriousness; and she whispered out her message, as if, by so doing, she could better guide her thoughts:

"Mother—daddy—— Nun Sen and I are trying to stop the war and keep Mars and Earth from destroying each other. We will never come back, because what Nun Sen is going to do will make us die. There will be a big, hot light out beyond the path of Mars. A star brought close for a little while. This is what you must do: You must have ships sent out to scatter dust and thick, black smoke in the upper atmosphere to protect the night side of Earth from the heat. Otherwise every one will burn to death. That is all, mother and daddy. I love you. Good-by."

The weird seance was finished thus. Number 775 moved forward almost wolfishly to determine the result. And,

after the several moments now required, his sluggish pulse quickened with exultation.

Thalia had been successful.

Jack Cantrill, leaning over the instruments of his flier, started violently.

"Yvonne!" he cried in hoarse excitement. "I—I'm mad! I just dreamed something! It was vivid as reality. Thalia was talking! She told me that she——"

"I know," Yvonne broke in. "You don't have to explain. I had the same vision. Telepathy. Nun Sen has found a way to direct and control it. We needn't wonder how. We know that he has, and that's enough. We have a big job of work to do." She displayed the calm control of perfect self-assurance.

Her attitude seemed to strike a responsive chord in her husband; for his initial surprise vanished, and belief, and some measure of comprehension, took its place. Nun Sen and he had certain theories in common—theories which did not deny the possibility of a star being "brought close."

"You're right," he said without any outward show of feeling, not even of grief. "But how are we going to get any one to believe us? They'll think we're crazy."

Yvonne shrugged. "Mystery always has an appeal," she replied. "We needn't tell all of what we know—just bits of it, here and there. And a little subterfuge if it seems necessary. Certainly we've been involved in enough unbelievable things that came true, so that Earth will be ready to take a bit of our advice on faith."

Jack Cantrill, his tanned features glistening with sweat in the cabin's hot, stuffy interior, grinned a slow, sardonic grin that was almost like a leer of pain. "I hope it works, sweetheart," he commented. His doubts and fears and uncertainties he left unexpressed.

But Number 775, probing the very essence of his friend's being, from across the void, held more of the pieces of the fantastic puzzle, and was better able to perceive its monumental possibilities and cataclysmic dangers. Some of its parts he was trying to control; others were in the laps of the gods.

He spent a few moments now, with his calculating machine, reading with sensitive nerve filaments the pattern of the data it had coördinated. Then he moved on to the control board of the vessel, and made certain changes of the positions of dials and switches there. There was a momentary swaying motion as the craft changed its course a trifle; then all seemed the same as before.

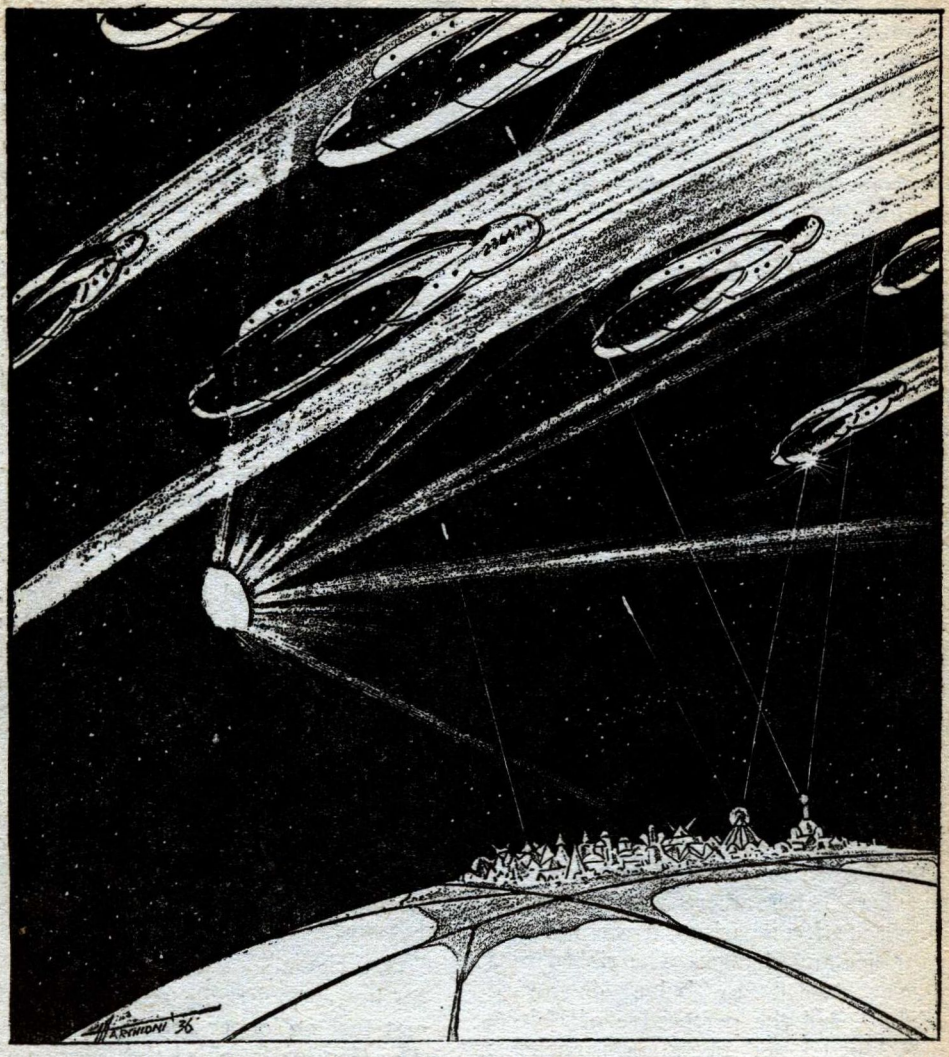
ONLY one thing was left for him to do. Then the passive, grueling wait for results would begin. Neither he nor Thalia Cantrill could expect to see those results, and he could only hope that they would turn out as he had planned.

He turned the swiveled rod of the cone back toward the point where, hidden beyond the walls of the room, red Mars hung in the etheric vastness.

His will sought out a friend of his—a noted scientist whose advice was law among his people. Number 775 now encountered little difficulty in projecting a clear picture of what he wanted done; for the receptor of his telepathic message was a Martian like himself, and there were no barriers imposed by differences of mental structure.

The communication was much the same as that which had gone out to the Cantrills, though it was more complete. A vision of glaring heat, released through some dimly understood ultra-spacial region. The absolute necessity of a protecting dust and smoke screen over the night hemisphere of the red planet. Even the stemming of the tide of attack from Earth was subservient to it.

The great eyes of the Martian savant,



Rockets roared, hurling ships away from beleaguered Mars.

who crouched like a demon in his buried laboratory, seemed to brood dully as he sensed the message. He made swift movements. The emerald luminescence that pervaded his sanctum flickered momentarily. Hues changed in instrument bulbs. Machines fell silent. He had something to do that was more important than the experiment involving the creation of life itself, with which he had been concerned.

The merging of his consciousness with that of Number 775, whose abilities he respected, had enabled him to see the truth without chance of doubt, for telepathic rapport makes lying an impossibility. Coolly, he concentrated on a mental acknowledgment of the command. And Number 775 received it, confident that there would be no failure here.

The latter's vast engines screamed their thin, keening song. Second by

second the velocity of his great ship mounted. The die was cast. There was no more to be done.

Number 775's robots were around him, grim Titans in the green haze, awaiting orders that would never again be given. Little Thalia was wide-eyed, waiting, her small form braced against the acceleration. There were sharp, popping noises as the braces of the great hull assumed a strain that, in ordinary flight, would have been almost nothing. The equalized application of force to all parts of the vessel, and what it contained, had taken care of that. But now an increase in velocity beyond imagining had magnified the slight error of equalization many times.

MINUTE BY MINUTE the ship's speed crept closer to that of light. Science had said long ago, that no material body could travel faster than that, in spite of the continued application of power. But who knew for certain? Who had ever before been able to test the hypothesis? What if something snapped in space itself?

The form and structure of things was altered when subjected to such velocity; but here, where there was no normal standard of comparison, it was not easy to notice any change. The ribbed roof above seemed to bulge downward slightly, and the perspective of objects was blurred and uncertain, somehow; but that was all.

Number 775 might still have tried to watch conditions on the two warring worlds, yet he did not. Perhaps it was because he was weary of the scrutiny; and since he had already done everything possible to better matters, he chose to let whim rule him. He did not even watch his instruments to see at what moment his ship passed the orbit of Mars, and hurtled on over the northern side of the belt of asteroids.

Thalia was beside him, clinging for support to one of the limbs of his tripod. He touched her lightly. Then, moved by some impulse, he turned his gaze toward a near-by buttress. There were ringbolts there, which had been used while lowering the massive thing into place. She would be more comfortable if she were fastened securely.

He led her to the buttress and, procuring stout metal cords, bound her upright against it. Then he did the same for himself, though not before procuring his speech and auditory mechanisms. Thalia wanted some one to talk to in a natural way, he knew, and there was time now.

It was a strange, irrelevant conversation, rambling and pointless:

"Remember Wodin, Nun Sen?"

"The dog? Yes, Thalia."

"He was big and brown, with long, pointed ears that I liked to pull. He was a police dog. Remember, Nun Sen? But he was very old. He ran away into the woods and didn't come back."

"Yes."

"Remember the time you waded out into the middle of Lake Isobel, and carried me with you, Nun Sen? It was very hot that day; but we had fun, didn't we?"

"Yes, Thalia."

So it went. Fragile recollections of a past that no longer had meaning.

The ship had attained the velocity of light. For a minute after that there was no increase—only a curious, sickening, swaying sensation, as though the laboring engines of the craft were trying to push it along a groove whose course was incomprehensibly distorted. Then, abruptly, all sense of being left the two passengers.

IX.

"YOU'RE CRAZY, Bascom! The whole business is settled, and you know it! They've got all that's coming to

them, and to hell with the consequences! They can't murder my folks and get away with it, Bascom!"

The man was on the verge of insanity. His face was grimy and sweat-streaked. His once-neat uniform was soiled. Charred holes of acid burns speckled it. In a metal thermos container which he carried were scores of small glass vials lined with frozen helium gas. Inside each vial, beyond the inner coating of the inert helium, was a quantity of a black liquid that could excite almost any substance to incandescent fury.

Bascom grinned ruefully; but he grinned nevertheless, for he was made of that kind of stuff. He had fought his own bitter fight with himself, and reason had won. Commander Stanton had sent him over from the flagship to make a last effort to check the final irretractable act of mutiny among the officers and crew of the *Triton,* first craft to complete a supply of the catalyzer.

He felt the resentful eyes of many men upon him. The steel-incased compartment was hot and reeking. Meter needles danced. Through a slot in the wall, the muzzle of a small projector tube was thrust. It was ready to receive the glass vials, and hurl them against the somber terrain of Mars, beneath. From beyond the hull of the ship, came the rolling, throbbing medley of warfare—a Martian defense fleet against the Earthly invaders.

Bascom saw the glittering lenses of heat-wave pistols directed menacingly toward him. "I guess you fellows win," he said slowly. "It's the same in most of the other ships. You hotheads are running the show. But here's a bit of information. I hope you'll be able to make something of it; but I suppose that if you can't realize that every human being on Earth is going to die in revenge for the destruction of Mars, then nothing is going to change your opinions.

"But word was just received that the folks back home have begun to lay smoke screens over the cities, beginning with the night side of the planet. By what may seem a strange coincidence, the same thing is happening on Mars.

"As you know, these screens haven't much military value any more. Instruments for blind flying have been developed to too high a degree; and, as a result, a ship or a fleet of ships can locate and bomb any city they choose, without being able to see it. So the smoke must have another purpose.

"Jack Cantrill, noted explorer, who is the author of the move on Earth, gives an obscure hint that an unforeseen calamity will come from space, threatening both worlds, and that the screens are the only defense. You may all check my word, if you wish. We have the news cast. Further reports are coming in at all times. The situation presents a mystery which may develop circumstances that will require the combined efforts of Mars and Earth to combat. There isn't much reason to add hell to calamity, fellows."

He paused to observe the results of his speech. He had talked to his audience informally, as friend to friends, omitting now any useless and irritating tone of authority.

Older men sneered, younger men seemed faintly worried. But Cantrill was a name they all respected. None of those present was fundamentally of a brutal nature; but the cruelties of war had maddened them all a little.

"Shall we wait an hour, gentlemen, before we do anything rash?" Bascom inquired.

"Fifteen minutes," some one suggested after a long pause. "No more."

A GRIMY YOUNGSTER brought a portable news-cast receiver into the compartment; and while they busied

themselves with the various grim tasks of their profession, the men watched, in its view plate, the feverish process of scattering and maintaining vast blanketing layers of smoke and dust over the remaining cities of Earth, high in the upper regions of the stratosphere, where there was little wind to hinder. Planes and space craft, trailing thick palls of darkness, were hurrying to make the fullest use of every passing moment. No attempt was being made to restrict the transmission of activities by radio.

Three minutes passed. Four. "It wasn't a hoax!" a voice croaked from the speaker. "Cantrill was right! Look, everybody! Oh, Lord—look!" Nobody paid any attention to what the voice said after that.

A grayish, silvery luminescence was mingling itself subtly with the sad sunshine of the Martian afternoon. Curious double shadows crept over the battered, ocher desert, and played on the steep sides of the canal beneath. Outlandish cactiform vegetation seemed momentarily to move and shift position, for such was the effect of the weird radiance.

The sounds of battle began to fade away, as various pairs of eyes, whose owners were responsible for the bedlam, stared from ports in the shells of warcraft, and became fascinated by what they beheld. Rocket ships ceased their mad circling, and flew straight courses, supported by stubby airfoils.

"The end of the universe!" one of those in the narrow compartment aboard the *Triton* shouted wildly.

Bascom, leaning against a port, did not smile. His face was gray, but the glint in his eyes betrayed a paradoxical triumph. No one bothered him. He did not feel the need to speak.

The Sun was setting, but in the purple, eastern sky, close to the horizon, was an irregular blob of ghastly light. It was like a rift in a cloud bank, through which a shaft of sunshine is passing. But there were no clouds. The rare atmosphere of the red planet was crystal-clear, except for the drifting vapors of battle. Through it stars gleamed with a steady brilliance. Phobos, the nearer moon, swam among them, dipping, in its meteoric and inverted course from west to east, toward the arid hills.

The unnamable blob was expanding like a widening etheric whirlpool, or like a gap in space itself. Its edges seemed to bend and warp oddly, causing the images of stars to tremble. Now an irregular speck of blue-white flame appeared in its tortuous, eye-blurring depths. Part of the face of some vast, alien sun? The watchers had not yet sufficiently subdued their surprise to seek an explanation.

But the commander of the fleet had sufficient presence of mind to radio an order to retire, to all of his ships. And the command was obeyed as soon as muscles could respond to the impulses from entranced minds. Mutiny and the desire for revenge were forgotten in the face of this inexplicable miracle.

Rockets roared, hurling ships away from beleaguered Mars. Two thousand miles above her surface, they took up a path around the planet, like a host of tiny satellites, there to await further developments and orders. No one knew quite what moves to make, but the interior of a space ship, surrounded by stout metal, and shielded against heat and other dangerous radiations, seemed the safest place for a man to be.

The Martians, all their energies occupied by the spreading of smoke and dust clouds in the uppermost strata of their atmosphere, found no time to molest them. Dark blobs were swiftly hiding the canals and ice caps from view, shielding growing crops and vital water supply from shriveling destruc-

tion. And on Earth the same battle went on.

Hour by hour the blob in the void grew, exposing more and more of the hot, intolerable light at its bottom. Had the flood of heat come more swiftly, it would have baked all life from the surface crust of Mars, and from the continents and islands of Earth. But the inexplicable fault in the structure of the universe spread slowly. Several days might go by before the radiations from it were strong enough to kill. But where might this colossal disruption end?

X.

IT WAS the afternoon of the third day. Myron Radeau, fat, jovial astronomer who, nine years back, had been an associate of Dr. Waters, frowned in puzzlement as he drummed a ticking chronometer on the chart table of the observatory. The heat was almost intolerable.

"Well, Cantrill," he said at last, mopping his brow, "I've taken spectrographs of this light, and I've found that the Fraunhofer lines match those of the star, Sirius, exactly. Does that information help you out any?"

"Some," Jack Cantrill replied, his features impassive. He and Yvonne had come to Radeau's observatory to check certain details of the fantastic phenomena that were taking place.

"What do you make of it?" the astronomer demanded.

"We're dealing with another set of dimensions, Rad," he answered. "In the first place, the rift has only one side to it. It lies just within the orbit of Jupiter. From beyond Jove's path it cannot be seen at all. The answer? Well, obviously the other side, or end, of it, doesn't lie in this portion of space at all! And the probable conclusion is that the light is the light of Sirius itself, eight and eight-tenths light years distant over the normal three-dimensional path.

"Number 775 has achieved sufficient velocity to smash the barriers of the three-dimensional cosmos. He has forced a three-dimensional course through a hyper-dimensional region to a portion of space too distant, hitherto, for practical commerce. What he has done is clearly a deliberate act; and for one who understands the mathematical side of the problem, and has the proper forces at his command, it should be possible to reach any portion of the universe in this way.

"His ship tore a hole in the structure of the universe, just as a bullet would tear a hole in soft mud. The gap is still widening. That's about all the explanation I can give now, Rad. There isn't time for more."

Jack's hands fumbled absently with the arms of his chair. "There's nothing I can do to help here any more," he went on. "So Yvonne and I are going out there to see for ourselves just how things are."

"Thalia? I'm sorry, Cantrill. She was rather a little heroine, wasn't she? Telling you what to do, and all the time knowing."

"Thanks, Rad," Jack commented laconically. His eyes roved to Yvonne's. There was more moisture in them than usual; but she, too, was made of stern stuff. "I don't like to sit here waiting, Jack," she said. "I want to know."

"They're gone, of course," the fat Radeau said gently. "Smashed. The power necessary to punch a hole in space like that must be equal to that needed to bridge the normal three-dimensional distance to Sirius. The law of conservation of energy, you know. It is doubtful whether you'd be able to find the wreckage of their ship, even if it happened to stick together. I don't want to seem brutal,

but I don't want you to endanger yourselves unnecessarily."

Yvonne nodded and smiled without offense. And the astronomer saw something hauntingly deific about her pert figure, yellow hair and blue eyes. "Good-by, Rad," she said. "And good luck!"

HER husband had already left the observatory. She followed him out into the night that had been changed to hellish day. There was a sulphurous pungence in the air—a residual trace of the countless tons of opaque vapor that had been dumped into the upper stratosphere. But the observatory had, of course, not been so shielded, for had it been, its usefulness would have been checkmated.

The sky seemed like molten nickel. In its center, peering through the expanding rift, was the dazzling, blue-white curve of monster Sirius. More than half of its surface was already exposed.

All the vegetation around the observatory had wilted, and the red-tiled roofs of the building itself seemed to crumple and buckle in the heat.

Protecting her eyes with an upraised forearm, Yvonne ran toward the little space ship that squatted on the side of the knoll. The rays beat through her helmet, and made her feel dizzy and nauseated. A few hours more and no living creature could withstand the fury of the great, alien sun even for a few seconds, for as the rift widened, the surface of the star was being more swiftly exposed. She wondered suddenly how many people were destined to perish, because of this horror which Nun Sen had unleashed to defeat a greater horror.

She was climbing into the cabin of the flier; and then, quite abruptly, something happened inside her head. It was too subtle for her to notice at once that it was in any way significant, and, in fact, never until she had escaped from its influence, did she give it any particular thought.

It was not startling; it was just a vagary, a peculiar sense of peace quite separate from the urges and griefs that possessed her. Utopia. The ideal. Dim, ungraspable pictures flitted through her fancy. Her courage was not altered; but she felt a greater benignance than was usual for any human being. It did not occur to her that she might be the victim of a subtle treachery.

She said nothing of the experience to Jack, and he made no mention of an identical experience which he felt. They had a quest to undertake, and it occupied most of their conscious attention.

Doors clanged shut. Small cylinders began to spin and screech. The Earth was soon far beneath.

XI.

WITHIN half an hour something totally unexpected happened. Terrestrial fleets, strewing dust beyond Earth's blanket of air, struggling to beat the unveiling of the monster star, were dumfounded to receive offers to aid from the Martian horde, whose sole motive a short while before had been destruction. The grotesque devils from across the etheric desert had fallen under the same spell that had grasped the faculties of mankind.

And with a curious lack of suspicion, their offer was accepted. Nor, as it proved, was suspicion justified. The Martians' philanthropy was in good faith!

The force from Earth, hovering beyond the red planet's atmosphere, was informed of the strange turn of events. They were commanded to reciprocate the gesture, in favor of their former enemies. They were doubtful, for the telepathic waves, scattered, rather than projected in a straight line, in the

vicinity of Earth, did not penetrate to so great a distance. Yet, to keep their energies occupied, the crews obeyed orders.

Sirius, shining through its jagged window in the cosmos, became more and more exposed, until all its huge, searing ball was revealed. Beneath protecting blankets of smoke and dust, which speeding air and space craft struggled to maintain, Earth and Mars waited for the future to work out its unknown scheme.

Neither planet could be completely shielded—only the cities and the areas vital to agriculture, could be covered. Mars, normally cold and dry became an arid furnace of heat, over whose face titanic winds raged. But Earth had oceans, and besides she was somewhat more distant from the source of the radiations. From the oceans came water vapor, which arose high in the atmosphere and condensed to form clouds as it approached the absolute cold space, which even the glare of the star could not alter.

Those clouds, like the clouds of Venus, had a shielding effect over many areas. But Earth could not hope for the immunity which a steaming atmosphere gave to her more primitive neighbor. Heat-blasted and hurricane-torn, she would have to accept whatever tribulations nature held in store for her.

And few of her inhabitants troubled to remember Noel Ransome, hidden away in his laboratory, absorbed with his stolen magic.

BY some incredible stroke of fortune, neither of the passengers of Number 775's ship had perished. Unconsciousness could not have lasted more than several hours.

Thalia Cantrill awoke during the early stages of the Sirian visitation. The first thing she knew was that sinuous tendrils were groping over her body. Nun Sen stood before her, to unfasten the cords which bound her to the buttress. His great eyes gleamed catlike in the gloom, for the apparatus that produced the luminous green haze was damaged beyond functioning.

Oddly, it was very cold in the great, battered chamber. The silence was heavy, except for a sleepy hiss of air escaping through an opened seam in the massive hull. Intense blue-white light, finding its way through a tiny port in the crumpled roof, made a silvery path through the frost motes that filled the air. But the beam of radiant energy quickly melted the ice particles that floated into it. The ship's insulation had so far resisted the entrance of heat, and atmospheric expansion resulting from the leak had lowered the temperature.

Because of the space suit she wore, the child did not suffer from the cold or the rarefaction of the air. But she ached in every bone and muscle. The forces which had wrought havoc with the craft had not left her unscathed. She whimpered with pain and misery.

"I thought—— I thought—— Are we all right, Nun Sen?" she stammered.

His mechanical voice was thin and faint when he replied. "We do not know that everything will not be all right, Thalia," he said. "Shall we go to see what it is that has happened?"

Too frightened for tears, she nodded.

Nun Sen led her along a dark hallway. All his brilliant faculties were busy. At first he could not understand how it was that they had survived. Then his questing ruminations fell upon a homely Terrestrial analogy: That of a straw driven by the blast of a tornado, deep into the trunk of a tree. The force was so great, and it acted so swiftly, that the straw, though far less stout than the wood of the tree, did not have time to crumple!

That was part of the explanation. Besides, the equalized distribution of the propulsive system's power had automatically acted in reverse to minimize

the shock of the interdimensional collision. Then too, in the hyperregion through which the ship had bored a path, a set of natural laws, doubtless differing from those of the normal universe, had been dominant. No one knew what queer tricks they might play.

Number 775 had not been conscious while his monster, flame-spitting fabrication had plowed its way through that alien fabric of the cosmos. Perhaps no living intellect of Earth or Mars could have continued to function normally in that unnamable place. Things there were too different, too strange.

He had not had an opportunity to observe conditions there. No instruments had recorded the flood of cosmic rays that had bathed his vessel. He had not seen the flashing lights, and the shifting illusions of outlandish forms, which must have been light-born images of things belonging to thousands of planets, during past, and perhaps even future, time!

HOWEVER, he had theories which had proved themselves true, at least in part; for they had enabled him to plot a shortened, transdimensional course to Sirius. He had thought of the hyperregion as a kind of cosmic crucible, where renovating processes were constantly going on.

According to one hypothesis of many years standing, the universe was gradually running down—approaching ultimate and moveless stagnation. The stars were scattering their substance in the form of radiations, toward infinity; a condition that presupposed that a day would come when all energy would be distributed in homogeneous quantity throughout the void. It would still exist; but since it had lost its capacity to flow, it would also have lost its capacity to produce changes in matter. The universe would be nothing but an inert corpse.

But was this, really, a true conception? Who knew that, traversing the infinity of the ether, the radiations of stars did not find their way, by a devious channel too complex to picture, to this hyperplane, there to be reconverted into the substance from which stars are made? The release of atomic power had proved the belief that matter and energy were different forms of the same thing.

Number 775 could not follow the idea through in all its details. But he had known for a long time that space was not as simple as it seemed to his organs of perception. They allowed him only to look at one of its aspects. The situation was like that of a man, viewing a cube, and seeing only the square plane of one of its surfaces. Tests, mathematics, and good guesswork on his and Jack Cantrill's part, while they were planning their engine for ether ships, had given him much information concerning the hidden structure of space; for the principle of the invention itself meshed intimately with that structure.

The Martian's thoughts rambled on, reaching at last the wearing ennui of ideas reasoned to too great a depth. Somehow he wondered whether there was any such thing as an absolute fact. Time, distance, matter and energy, were associated in such bewildering and complex form that it was almost difficult to be sure. But he had glimpsed a bit of the marvelous pattern of the stars.

He and Thalia Cantrill now stood before a small pane of darkened glass, bolted into the massive shell of the wrecked vessel. It afforded a typical interplanetary view. Stars and hard, black sky, and, what seemed, from their softer light, to be a number of planets. A dozen at least.

But there were strange elements, too. Astern was the cosmic rift, its edges fluttering and moving. Through it shone the Sun, a small, bright disk. And in the center of the field of view was another bright disk, a bit larger. It was

Sirius' companion star—almost a satellite of the much larger and hotter body. And the wing of a vast, solar corona was visible, too, at the bow-ward edge of the window. The ship was hurtling straight toward vast Sirius!

NUMBER 775 was not startled by this discovery. He had anticipated it, knowing that his motors were damaged beyond repair. He had no means to pull away from the star's gravitational grip, and save himself and the child. Days might pass before they perished, for the distance to the huge bulk was great, and their velocity was much retarded after bucking the terrific resistance of the hyperregion.

Probably the ship would not fall into Sirius, but would follow a cometary path around the star. Yet in doing so, its entire mass would be fused, or perhaps even vaporized, with heat. Only the rapid radiation possible in the vacuum of the void prevented the shell of the vessel from melting even now.

When he spoke, the Martian avoided the subject, turning his attention to another and more lastingly important one.

"They will come here, Thalia Cantrill," he said, speaking more to himself than to the little girl. "Your father's people and mine. There should be plenty of room for both to build colonial empires on those planets. And if there is not, your father will find a way to reach other stars and their systems."

"Then are we going to see mother and daddy again?" Thalia questioned.

"I do not know. We shall try to call them now."

They made their way back to the central chamber of the ship.

Nun Sen tested the cone, which still stood among his now-sprawling robots. It was damaged, and refused to function.

The Martian had expected this. There was nothing to do but attempt a repair. Robots Two and Five were still in working condition. The former, Nun Sen directed to take Thalia to her refuge, and to take care of her wants. The latter he ordered to seek out and patch the leak in the hull.

Then, by the light of a small, green-glowing bulb, he set to work, taking apart the incredibly delicate telepathic mechanism, in an effort to locate the trouble. To rebalance it would take time, for he had to labor alone. Neither of his two available robots was suited for such fine work.

Hours went by. Two days. Three. The air in the ship had become suffocatingly hot. Still he was at his task. Being a Martian, he needed little food, and no sleep for long periods.

And at last the job was finished. Swinging the projector rod this way and that, he sought for Cantrill, impelled by a vague hunch that his friend was now somewhere astern. It was logical that Jack would follow as soon as possible. Finally, he achieved contact with the occupants of the small flier. It was not far off—a million miles to the rear.

Nun Sen sent for Thalia. The weird performance of another occasion was repeated. The little girl whispered numbers which indicated the position of the wrecked space ship.

"Daddy—mother—— We're alive. It's hot here. Dreadful. Come and get us!"

THERE would be a wait before rescue could be affected. Nun Sen was moved to seek contact with his native sphere, and with its enemy. Could it be done from this distant part of the void? The rift was closing now, like a bullet hole in jelly. But it was a three-dimensional rift, imposing only the obstacles of normal space. And though the distance, even by this channel, was

enormous, still the beam over which the telepathic impulses would pass was tight, losing little of its energy even though it spanned many millions of miles.

After a long interval of waiting, he was successful. The images from other minds were dim but adequate. Martians, in their ruined, subterranean retreats, were still sullen with hate, in many cases, in spite of the aid they had received from their neighbor world. But they were busy saving themselves from the now-waning radiations of the star. And their energies were exhausted after their mighty struggle with nature.

Nun Sen passed over the probing of Mars lightly. His chief concern lay elsewhere.

Earth was exhausted, too, but there was a subtle feeling of good will among her inhabitants. They would defend themselves in war, but they would never again make war. And Nun Sen understood their feeling; for, indirectly, he was its creator.

He sought out Noel Ransome in his laboratory. And what the Martian wizard learned, was pathetic, and yet grand.

Something had gone wrong with Ransome's godly dream of glory. Too much had been revealed to his brilliant, though emotional, mind; and somehow the clay in him had become truly deific. He had been bathed too long in the vivid essence of pain and death and fear, gleaned from suffering souls; and his vision of grandeur had assumed the aspect of a Midas touch. The pictures had been too clear. He had been purged and chastened. And a new aim had seized him. He could not be sure of its ultimate success, but he could hope.

Nun Sen saw the mechanism Ransome had built, using the stolen plans. It was much the same as his, though larger; and instead of a single projector rod at its top, for directing the waves along a straight path, it was fitted with a large sphere, dotted with prongs to scatter the impulses in all directions.

He had not used it, as he had intended, to establish himself as absolute master of Earth, and perhaps its neighbor world as well, but for a different, kindlier purpose. And he was building another apparatus, with the intention of smuggling it to Mars, where he hoped it would disseminate the same spirit of honest, courageous good-fellowship.

Had Number 775 been able, doubtless he would have smiled. He had judged Noel Ransome correctly, predicting just how his strange, mixed personality would react. But, after all, it had been an easy thing to do; for the telepathic contact had enabled him, in a sense, to know Noel Ransome better than Ransome knew himself.

AWAITING RESCUE, blistering in a heat far above any to which he was accustomed, Nun Sen still was able to feel a satisfaction which had seldom been equaled during his lifetime.

He turned his projector rod toward the planets of the Sirian system. From only three of them came any trace of mental impressions, and they were very dim—originating in brains too primitive and faint to think clearly. The other worlds were too young, even, to harbor life capable of thought. But they would serve the purposes of colonization, and supply, as Venus and Jupiter had done.

The rift in the cosmos would close, but it could be reopened again at will, in a place far enough from Sirius so as to cause no discomfort on Earth and Mars. Nor would it need to be as large as the present rift. There were minor problems of technique still to be solved, but the way was clear.

He felt a slight vibration reaching his flesh from the floor beneath the metal tripod that bore him. Unhurriedly he moved along a passage to an airlock designed for attachment to other ships while in space.

Stout panels opened and closed. Jack and Yvonne Cantrill were before him, their faces strained with worry, their eyes bright with excitement.

"We're here!" Jack stated tersely. "is everything all right? Where is Thalia?"

"Everything is all right, and Thalia is safe," Number 775 answered.

"We must hurry, man of Mars," Yvonne urged. "Thank heaven we were able to find you! The rift is closing, and we are getting closer to the star every second! Besides, Ransome is up to something. Things are happening on Earth that are unnatural. It was the—the thought projector that he stole from you, wasn't it?"

"Do not allow Noel Ransome to trouble you," Nun Sen advised cryptically, knowing that there would be plenty of opportunities for explanation later. "And we have a moment. Come."

He led them back to the great, domed room where his robots were unfastening the conelike apparatus.

"We will take it with us," he said. "It has been, and will be, very useful. There will be room aboard your flier."

"Thalia!" Yvonne called, looking about.

There was no response. Then Number 775 spied her, curled up on the floor, behind a buttress.

"Thalia Cantrill is asleep," he announced. And somehow there seemed to be, in his flat, mechanical words, a benignance that was an echo of a strange, absorbing love. But perhaps it was not so strange. If the Arrhenius theory of the propagation of life spores by light pressure, from planet to planet, is correct, then all living creatures must have not only a common, fundamental origin, but a similar birthright as well. Sympathy and devotion cannot be the exclusive virtues of Terrestrial creatures alone.

Still, whatever emotions lay back of the Martian's statement, Thalia Cantrill resented it. She was worldly.

Like a jack-in-the-box she bounded up. "I'm not asleep!" she blazed truculently. "Nun Sen is a big fibber!"

Both her parents chuckled as the little girl ran toward them.

Number 775 stood quietly by, waiting. He was as hideous and inhuman as ever, with his coiling tendrils and flat, gray body, glistening like a lump of wet mud. He was not a man; he could neither laugh nor weep; but was there, in his great, stalked orbs, limpid and cool, a gleam that had the quality of a smile?

We dug like demons—all of us.

The Chrysalis

A Short Story

by

P. Schuyler Miller

BATES grinned when he saw those logs. I know that as well as though I'd been there. That grin of his is famous. I've seen it time and again when he has come across something rare or unusual, wrinkling his homely face into something like the relief map of a lava flow. Besides, I whooped myself when I discovered them.

There were more than when I first found them, the week before, just after the freshet. The creek had cut away a sort of alcove in the bank, eddying

back in a clear, deep pool with a long, sleek swell of current over the topmost log. The water was eating hungrily at the bank and at the stiff, blue clay that underlay it, and little trickles and sudden slides of gravel were cascading into the pool.

The water was cold—damned cold—but Bates went in up to his waist without hesitation. That's the way he is. I've seen him squat for hours in the blazing sun, bareheaded, dusting out a burial so that he could get plenty of detail in his photographs. Once in the middle of February, when he came on half a pot exposed in a cut bank, he wasted a whole day and ruined a good ax hacking out a huge block of the frozen mud in which it was embedded, only to have the whole thing crumble to bits when he tried to thaw it out. And he'd do anything for tree rings.

Bates is a dendrochronologist—a tree-ring expert. He dates things by them, as easily—or so it seems to me—as we would look up a year in the "World Almanac." He was originally just the common, back-pasture variety of amateur archæologist, a good one, to be sure, with quite an enviable reputation in the circles where it counted, but nothing to startle any paper into giving him a double-page spread in one of its Sunday magazine sections.

Then he happened to run across a site with a particularly ungodly mix-up of culture traces, and got it into his head that the only way to solve the thing was to date it. Obviously tree rings were the answer: every one who reads the newspapers knows all about how they show what years are wet and which are dry, and how Professor Douglass and his crew have dated hundreds of ruins by them in the Southwest.

The trouble was that nothing that they had worked out there was any good at all to him. If there is any place less like the Arizona desert than the foothills of the Adirondacks, I have yet to see it. Anyway, he started from scratch to work out a calendar of his own.

He did it, too. He dated everything in sight that had wood in it—old houses, covered bridges, antiquated horse troughs, Indian stockades—and before long he was far out of sight in the depths of prehistoric times, grubbing joyously among nubbins of charcoal and scraps of rotten wood, farther back than any one had ever thought it possible to go.

He tried linking in the layers of mud laid down in the bottoms of ponds, and the sand in river deltas. He had half a dozen different calendars and chunks of calendars ranging over thousands of years, with gaps between them in which a civilization as big as Colonel Churchward's Mu could have risen and been lost.

He was particularly fond of the ones that hovered around the fringes of glacial times, when men were just beginning to amount to something in the world. That was why he grinned when he saw those logs.

THERE WAS a good twelve feet of gravel over them, and three or four feet of stiff blue boulder clay under that. They were embedded in clay as fossils are embedded in rock, and for the same reason. Hundreds of centuries ago they had lain, water-logged, in the mud at the bottom of some glacial lake. Silt covered them, washed down from the melting front of the great ice sheet that lay over half the world.

Year after year the layers of clay built up, thick in the warm years as the ice melted faster, then thinner and thinner as the great cold came again and the glacier crept southward over the continent. It heaped gravel and broken rock in long moraines over the frozen lake bottom. Finally it disappeared for good. The world grew warm again and new streams cut their way down

through the débris left by the great ice.

Those logs had been trees in interglacial times, when apish men roamed over Europe and mastodons and mammoths wallowed in the swamps of the northern hemisphere. Their rings would record the changes in climate that brought the ice sheet creeping like slow death over the face of the planet. No wonder Bates grinned!

I had seen the ends of two logs protruding from the clay when I led a hike that way the Sunday before. The water was still high, and by now a dozen or more were uncovered. Queerly enough, they were all very much of a size and lay side by side, all on the same level, just under the surface of the water. Gravel from the bank had drifted against their exposed ends, hiding them, and Bates's plodding boots had muddied the pool below so that he couldn't see the downstream face of the pile. But Bates isn't one to wait. He unslung a short-handled shovel from his pack, waded out into the middle of the creek, and went to work.

In an hour's time he had a dam and a channel that diverted the current along the opposite bank of the stream. The upper surface of the logs was high and dry, or drying, and he had hacked a long trough through the clay of the creek bottom which had lowered the level of the eddy pool by a good two feet.

He hunched down and studied the logs. They were soft and cheesy to the touch, and dark with age, like huge, uneven cylinders of black chocolate. Pines, probably. He hoped so, for pines had the most sensitive rings. He reached down and began to scoop the drifted gravel away from their ends. And then he yelled!

Those logs were cut by men!

They were cut by men—Heaven knows of what race or color—who lived with the hairy mammoth and the giant sloth before the ice came, twenty or thirty or forty thousand years ago! The ax marks were plain on the exposed wood. They weren't beaver marks—he knew those by heart. A flint ax made them—a flint ax wielded two hundred centuries and more ago, not in New Mexico, or Colorado, or Wisconsin, but here, *here,* practically in his own back yard!

He went at the gravel like a terrier, with both hands, until he had uncovered the ends of six great logs, lying side by side in the blue clay. Then he cleared away a space beneath them with a trowel. He ran his fingers along their buttery underside—and sat back staring, goggling, utterly incredulous.

Those logs were notched to fit over the top of a crosspiece!

BATES is too good an archæologist to go off half cocked. Before he left that night, he had uncovered one whole end of the thing, down to solid rock, and covered it up again to protect it from the force of the stream. He reënforced his dam and deepened the channel he had dug, until all but a thin trickle of water followed the other bank, with a solid dyke of tamped clay and stone between. And when we arrived, long before dawn the next morning, he set us to work at once draining the pool.

There were three of us, counting Bates, and a fourth was on his way. We had no time to spare. The barometer and the weather maps both shouted "Storm!" and rain would ruin forever our chances of saving whatever had been buried in that ancient vault.

For vault it was—the oldest structure ever found that was raised by human hands. It was made entirely of huge, hewn logs, five feet square at the base and over twice as long, and it was set on a great, smoothed block of solid limestone.

We worked that day as I never want to work again. We dug away that twelve foot gravel bank until it stood

back a clear six feet on all sides of the vault. We cut into the clay and peeled it away in great, thick slabs, with Michaelson following every step. He was a notary, and a wizard with a camera, and if Mann should arrive too late we would have a sworn record that no investigating committee of blue-nosed skeptics could argue away.

Mann flew. I had met him once, at a Rochester meeting of the Society for American Archæology, where he was carrying on Parker's enviable tradition as superhost to half the archæologists in the country. Bates knew him well, and what was more, he knew Bates. No train was fast enough for an emergency like this one. The sun was barely an hour high when his plane bounced down into the pasture above the creek and he came stalking across to where we were working, his coat tails flying and his white mane rumpled and tousled where he had been yanking it in his impatience.

Mann is sixty if he's a day, but he dug too. He dug like a demon—we all did—but time went past like the whisk of a scared trout. The whole west was black, with fitful flares of lightning illumining the cavernous hollows of the clouds, and now and then a rumble of closer thunder.

Michaelson was swearing dismally as the light faded and he had to give longer and longer exposures to his films, and Bates' face was a savage mask. Heaven alone knew what was in that great log box, and if the storm broke that knowledge would be kept through all eternity.

Night was on us before the last log was clear. Michaelson's flares lighted the landscape weirdly as he photographed the vault, deep at the bottom of its muddy crater, with our haggard faces peering past its massive bulk. The limestone block on which it stood was pecked and polished by human hands, its edges roughly squared. That, at least, we could leave to study later. Nothing less than an earthquake would carry that away.

It was insanity to expose the wood as we had done. It was soft and sodden with water, and full of heavy, hard-packed clay. Heaven knows what kept it from collapsing before we were half done. But it was the only way. We had no time to do it carefully. The first raindrops spattered against our faces as Mann lifted a flare high above his white head and Bates and I seized the ends of one of the great roof logs. It felt like solid lead.

"Drop it!" Bates gasped. His teeth were set in his lower lip and there was a trickle of blood on his chin. "It doesn't matter. We can't wait."

LOG AFTER LOG smashed into the pit below us. The top was cleared. A mass of the blue clay filled the vault, retaining the impression of the logs that had covered it. As we wrenched away the ends and sides, down to the level of our waists, I heard Michaelson's camera whirring at my ear, recording every detail.

Mann's hand fell on my shoulder. It was raining hard now, and little craters were puddling the wet clay. I thought of the little droplet marks that are found imprinted in the stone of fossil beaches, and somehow those lost ages seemed closer than ever before.

"There are only a few more flares," Mann told me. "You'd better clear the interior. Use a trowel."

Have you ever used a trowel on hard clay? Layer after layer we peeled off, slowly, laboriously, a chunk at a time, until my back and arms and my tortured wrists screamed for respite. Down—down—we went, three trowels delving like mad, and Michaelson below us, swinging an ax, hacking the logs into sections small enough to carry safely to the field above.

At last a bare six inches separated

us from the remaining logs. Mann was in the middle, his sleeves rolled to the elbows, his gnarled old arms darting expertly, shaving the clay away in tiny flakes. Suddenly something flashed white under his trowel.

We stood frozen, staring, at his cry. Michaelson came climbing out of the darkness behind me, clutching at my arm as he balanced at my side. Windy gusts of rain swept across the wet clay before us, eating it away, enlarging that spot of glistening white.

The flare went out. I heard Bates swear, heard him striking match after match, heard them splutter out. One caught. All his body was warped over it, shielding it from the wind and the driving rain. Its feeble flame lighted his clay-streaked face and Mann's hand, thrusting the flare toward him. Then the bald, white light blazed in our faces again, and Michaelson's cameras were whirring, clicking, whirring at my side.

With numbed, blue fingers Mann scooped away the clay, working it down to an even level. A second patch of white appeared, close beside the first. No one spoke as his bony fingers ate away the clay, deeper and deeper, aided by the pelting rain. Our breathing sounded harsh and strange. I saw Bates' face, opposite me, and there was something indescribable in it, in his glittering eyes.

Mann's plying fingers stopped and his bent back straightened as he, too, stared into Bates' face. And then it was as though some wizard's screen were snatched away from before me. I saw what I had not seen before—what, somehow, my brain had refused to comprehend.

Thrust up from the hard, blue clay were the two white mounds of a woman's breasts!

It was impossible! We knew—we had proof—that that vault of flint-hewn logs had lain under tons of earth for tens of thousands of years. No human flesh had ever endured so long—could ever endure so long.

It was impossible!

But it was true!

I touched the smooth, white flesh. It was hard, firm, and oddly dry—almost with warmth of its own. It was not like dead flesh, nor was it stone—a statue. I heard Bates' hoarse voice, whispering: "We must uncover it."

And Mann: "Yes, Yes."

Under their trowels, under their digging fingers, the white flesh grew and grew. Twice they stopped, impatient, while we pried away more logs and hacked at the clay with frantic shovels, levelling it down, carving gutters to carry away the teeming rain that poured down over that glistening white flesh, washing it clean, revealing it to our hungry eyes.

SHE LAY on a low table of hewn stone, smoothed like the great outer block. Her eyes were closed, and her full lips, and her slim white arms lay straight at her sides. Her hair was piled in a tumbled mound beneath her head and flowed down in two great, golden masses over her shoulders, gleaming like spun metal through the clotted blue clay. She was beautiful. And—she was dead.

Mann knows races as he knows the faces and voices of friends, but he could not place her. There was never a race like that in recorded history, nor in the legends of men before history. In her high cheeks, her narrow eyes, her slightly flattened nostrils were Mongol traces, but that slim white body with its glory of golden hair was not Mongol. Her long, straight limbs and delicate, tapered fingers were not Mongol. By no fantasy of the imagination could she be identified with the yellow race.

The rain was beating like icy flails upon our backs. Trees in the darkness were tortured by the wind, and behind its dyke of clay the tumult of the rag-

ing stream was rising to a sullen, brooding growl. The glare of the torch fell in a pool of light about us, its dim edges glinting from tossing wave tops, lipping higher than our heads at the very summit of the dyke. Gullies were eating their way into the broken clay and murky rivulets streamed through them, eating at the soft earth, crumbling it away.

Mann's voice was cracked and shrill over the clamor of the storm. His bare arm stretched toward the leaping wave crests, and words drifted to me on gusts of the wind.

"Get her away—the plane—before it breaks. No time—hurry! Hurry, man!"

Bates was on his knees in the clay, pushing his fingers under her white shoulders. His eyes turned to me and I understood. My hands gripped her ankles, smooth and glistening-wet, yet somehow dry—warm and strangely dry, and harder than flesh should be. We lifted her, stiff, like a statue, between us, and she was not heavier than a girl would be.

We held her high, scrambling down from the great stone into the pit, the muddy water swirling around our thighs, the soft clay underfoot sucking and slipping. Painfully, clawing for purchase in the sliding gravel, we worked our way up the steep side of the crater, out of the light of the flare, into the darkness.

We laid her on the cropped, wet grass of the pasture. Bates ran back and stood shouting down at the others where they crouched in the pit, searching the clay for ornaments, offerings—anything that might have been placed with the body. I saw his lean arm, silhouetted against the light of the flare, pointing upstream, and it seemed to me that there was a deeper, uglier note in the shout of the savage waters.

Barely in time, Mann's streaming mane appeared over the rim of the pit, his hand seized Bates's, and he scrambled out, kneeling to reach for the cameras. After him came Michaelson, dropping the flare to fling himself over the pit edge just as the freed waters of the creek smashed against the gravel cliff beneath him.

Then we were standing in rain-swept darkness while Michaelson fumbled with matches and the flare, were stumbling across the uneven ground toward the plane, carrying that still, white form that should not, could not logically exist—a woman older than the very hills above our heads!

ALL THAT NIGHT we crouched in the lee of the plane. By the time the first wan light began to creep over the sodden landscape, Mann decided that it was safe to take off. The ship would not carry more than two.

We helped him load that glorious, rigid form into the cockpit and stood in a huddled group as he taxied slowly up the bumpy field, swung around, and came roaring down toward us. Somehow the plane gained speed; somehow he lifted it, mud from its dripping wheels lashing our up-turned faces, and then we were standing alone in the cold, wet morning, with only incredible memories to bear witness to what had happened in the night.

There was no plane west that day. How we endured it as the train dawdled along through the interminable flat lands west of Syracuse, I cannot understand. I was half frantic with suspense and I knew that Bates must be even closer to sheer nervous collapse, but we sat, stony-faced, staring out at the flat, gray landscape, waiting, while Michaelson fussed and fretted over his newest and largest camera. Waiting—for what, none of us knew—none of us could ever have guessed.

The museum car was at the station. Bates knew the driver, and what happened to traffic laws that night would

bring the Rochester police to the brink of tears. Michaelson, white-faced, sat hugging his camera to him like a baby, but he never breathed a word of protest. None of us grudged anything that would save another minute.

The only lights in the big building were in Mann's workroom. He looked up as we entered. Evidently he had not rested since he left us, sixteen hours before. A fling of his hand included the two men who stood with him behind the long table with its still, white, lovely form.

"Clements—Breen."

The former was a man like a bearded mountain, younger than I am, the latter a man like a wizened elf, older than Mann. In that room we had the three greatest anthropologists in the United States—and a mystery that baffled them all.

Clements was slow of speech. His brow wrinkled and words began to boom at us, only to be snatched from his lips by Breen's tempestuous babble.

"I have seen nothing like her, ever. There is——"

"—no precedent! Never! You, Bates—she's yours. You found her. What do you say?"

Bates' smile was a bit apologetic. "I've had no opportunity to examine her, professor. You have had half the day. Surely you can speak for what you have found."

This time Clements' thunder carried through. "There was nothing with her? No offerings of any kind? Then study her closely, now, before you ask us anything more—you too, gentlemen. There will be time enough for discussion afterward."

I stared again at those lovely features, framed in their mist of spun gold. Mann had cleaned the clay from her, and she lay like a girl asleep, long dark lashes upcurved on high, white cheeks, red lips parted—it was impossible that she should be dead! And dead for thirty thousand years!

I touched her, and again I sensed that curious roughness as of old parchment, that radiant, vibrant inner warmth. It was not like dead flesh, nor wasn't like the flesh of any mummy I had ever seen. It was rigid—hard—like stone, almost, yet without the coldness of stone.

BATES was examining her closely, his face for once expressionless. His fingers traced the contours of the gently swelling muscles under her white skin. His eyes devoured every inch of her beauty, stretched there before him, but they were a scientists's eyes, reading the story hidden in those matchless lineaments.

He took her hair in his hands and let it ripple slowly through his fingers in a curling yellow foam. He touched her eyelids, gently, and her full lips, and peered, frowning at the tiny ovals of her nails. He looked up, past me at the others, and there was blank bewilderment in his eyes.

"What does it mean? What is she? I—I don't understand."

Clements shrugged hugely, his hairy face smug. Little Breen's eyes glittered and his voice was shrill with excitement.

"You see? Her lips—her eyes—her fingers—did you see them? It is impossible! No scientist could do it today. And ten—twenty—thirty thousand years ago—— It is impossible!"

Mann saw my bewilderment. "Her fingers are grown together," he explained, "her toes also. You can see that they do not separate. The skin is continuous, and her eyelids seem welded to the cheeks. That could be if she was abnormal—a cripple—in life. But her lips, too—— Look closely. Touch them."

I laid my hot fingers upon their full, crimson curve. The glistening enamel

of her perfect teeth showed between them. I tried to press them back, as I had seen Bates do. They were like wood! They would not move!

"Flesh welded to flesh is not strange, but flesh grown to the enamel of her teeth!" It was Clements speaking. "And look closely—there is a meniscus, a serif, where they join."

It was true. It was as though that marvelous body were cast in wax, all in one piece. Under her nails the flesh curved up with the same little concave meniscus, and when Clements gave me a lens I saw that at the base of each golden hair the skin rose in a tiny cone, shading gradually from ivory to shimmering yellow. Every tiny wrinkle—every whorl and ridge of her palms and finger tips was plainly marked, but nowhere were the tiny pits of pores.

Nowhere was there any opening in that strange, hard membrane that covered her entire body in place of normal human skin.

Bates had been examining her with that stolid thoroughness that is so characteristic of him. Now he stood staring into vacancy, oblivious of everything.

I knew what thoughts were passing through his mind. What was she, this woman out of the past? What manner of creature could live as she must have lived, sealed away from the world and everything in it? How did she eat—drink—breathe? Was it like a plant, absorbing moisture and food through that unnatural skin—feeding on light itself? Was she, in fact, some superplant from an age when plants were lords of Earth and all that lived on it—the culmination of a line of evolution longer and greater than that which had given rise to the human form she mimicked?

SHE was no plant! The man in me, surging up at the vision of her slim, white loveliness, knew that. She was all woman—a woman such as history and the races of history had never known—a woman of that elder, godlike race whose vague traditions filtering through the ages had been preserved in the myths of the earliest known men.

Men of her own race had laid her where we found her—or was it men of another blood, living centuries after the last of her own kind had vanished from the Earth, and ministering to her as the goddess that her beauty proclaimed her? Was it the forgotten science of her ancient race that had preserved her, immune and inviolate, through the ages?

I heard Bates' voice, strained and unreal: "You're sure she's dead?"

What if she were not dead? What if she were in some hypnotic, trancelike state of suspended animation, preserved by the magic of her ancient science until the day when men should be ready to receive her again and with her rule the world in godlike power? What if we should wake her—now—after thirty thousand years?

Mann answered him. "We have found no evidence of life, and we were as thorough as the time allowed. I would swear that she is dead, if she were a normal being. But——"

"We are not sure!" boomed Clements. "Because our tests show no life we cannot swear that she is dead. Because she had been buried in the earth since the days of the ice age, we cannot assume that life could not remain in her. There have been other instances—of other forms of life, preserved in clay or stone for months and years. I tell you, we are not sure—and we must be!"

Bates nodded thoughtfully. His emotions were no longer overbalancing his better judgment. "What records have you made?" he asked.

Breen gestured impatiently. "The usual things. Her weight—the standard measurements of the body—photo-

graphs and molds with Negacoll. Clements has samples of her hair and microphotographs of her skin. We have done what we could, without dissection. An expert craftsman, such as you have in this museum, could make her live again as you see her now."

Bates bit his lip. It was a difficult decision to make. "Then there is only —dissection?"

Breen nodded: "Yes."

A thin line of worry had appeared between his eyes. "Suppose she's alive," he protested. "We'd kill her. And we don't know that she's dead, we can't be sure!"

Breen snorted. "Of course, she's dead! Why talk madness? This perfect preservation—who knows what natural chemistry of the body, and of the soil in which she was buried, might not have preserved the flesh and caused this hornlike hardening of the skin? Mammoths have been found with everything intact. We must examine her, thoroughly, and we must be quick. Decomposition begins suddenly in these cases, and in an hour—poof!—there may be nothing left! We are scientists. Never has there been such an opportunity. Of course, we will dissect!"

He was right, of course, but Clements, I think, felt something of what we did. There was more of the romantic in him than in Breen. He interrupted: "One moment, professor. This hardening of the skin has undoubtedly resulted in the wonderful preservation which we have seen, but—does it extend to the vital organs which we cannot see? We must not expose them to the effects of the air until we are certain that they will not be destroyed."

Breen stared at him. "What do you suggest?" he demanded.

"The X ray, first. It will show us what we want to know as well as dissection—the details of the skeleton, and the nature of the vital organs. Then refrigeration—as soon as possible, to be safe—and injection of preservatives. The tissues will not be in danger of destruction, then, and we can complete our examination without the need of this mad haste."

Breen stood for a moment with pursed lips, nodding slowly. Then he swung to Mann. "You have an X ray?" he asked curtly.

"There is one downstairs," Mann told him. "One of our research staff is using it in his study of pottery. But we use only the small-sized plates. We can arrange with the hospital to take a full-length picture."

Breen's hand shot up in impatient negation. "Later, if need be—not now. You have a fluoroscope? Then we will begin with that—the photographs afterward. There is no need of depending upon hospital routine when we can do the work ourselves—and trust it when it is done. Will you bring the apparatus up here?"

"Yes," Mann assented. "There is no room downstairs. We can set it up over there, under the skylight. Open it, please, Mr. Bates—it is too warm here. We must be more careful of that. And I will need help with the equipment."

Bates and I went down with him to get the X ray, leaving the others to rig an adjustable canvas framework on which to place the body when it was photographed. The apparatus was infernally heavy, and it took the three of us the better part of an hour to get it set up and working properly.

Meanwhile, Clements was deep in another examination of her skin and hair, and little Breen was bounding back and forth between him and Michaelson, who had completed the stretcher and was making a simple holder for the plates.

We laid her carefully on the taut can-

vas and buckled two broad straps across her flawless body, holding it in place. Breen was tinkering fussily with the transformer of the X-ray generator while Mann held the fluoroscope. As I stood by the door, watching them, a breath of air from the open skylight ruffled the curling golden wave that lay heaped against her cheek, and I could have sworn that her rounded bosoms rose and fell gently with the regular breathing of deep sleep. I looked again, and it was illusion.

Breen finished his adjustments, and I snapped off the lights. There was the click of a tumbler switch, and the dull violet glow of the ray illuminated the faces of the five men bending over that still, white form on the stretcher. The drone of the transformer was the only sound in all the room.

Breen's heels rasped on the concrete floor. He was going around behind the stretcher. Clements had lifted it in both hands and was moving it into the direct path of the ray. Then Breen reached over and took the fluoroscope from Mann.

He took it—I saw that—and he must have lifted it into place behind the frame. Michaelson stepped back into my view, and all that I could see was the carved, white face dimly lighted by the ghastly glow of the X-ray tube. I stepped away from the switch, to one side, to get a better view.

BREEN SHOUTED.

I saw him bob up from behind the stretcher, choppy sounds pouring from his mouth. There was a dry, brittle rending and Michaelson leaped back as though shot.

And then I saw!

A great black gash split that matchless body. It lay in halves—halves that were moving, separating, straining at the canvas straps that held it. They burst with a rotten snap and then it slid down against the cross brace at the bottom of the frame. Then out of that cloven gap rose a thing out of madness!

Faceted eyes as huge as a man's two fists glittered in the wan light. A black, humped form rose from between the tilted breasts, higher, higher—dragging itself out of the riven husk that had been a woman—towering on fragile, jointed legs—dwarfing the men who stood beneath it.

Two wings began to grow from its sides, like shimmering disks of fire. Colors rippled through them—colors that paled and waxed and paled again in pulsing waves of radiance. Light poured out of the thing's warped body, making it a transparent, crystal shell. Light blazed from the myriad facets of its glittering eyes. And then it straightened its bent back.

It stood erect, like a man, on two legs. Its wings enveloped it like a gauzy veil of light, fluted and laced and ruffled, creeping with colored fire. A mass of feathery tendrils stirred uneasily between its eyes, where a mouth should be.

Its wings were swelling, as a moth's wings do. They spread until the whole room blazed with their glory. They swept up and forward until they shrouded the four men who stood motionless beneath it—Clements, Michaelson, Bates, and Breen. Mann had stumbled closer to me, outside of their gossamer spread. For a moment those two great compound eyes regarded us over that curtain of living flame, and then the oval head sank slowly down, its mouth parts palpitating—spreading——

Neither of us knows what time passed then. As we gazed, the color of those vast, encircling wings deepened and brightened, until all the room was filled with a splendor of violet flame. It seemed to grow—visibly—until its bent head towered inches from the open skylight and its throbbing wings pulsed within a yard of Mann's rapt, rigid body. Warmth flooded from them—

radiation—like the warmth that had emanated from the naked woman form that had been its chrysalis. And then, somehow, I found my fingers on the light switch. Somehow they moved—somehow the lights went on.

And there was nothing there!

Nothing? The thing had weight and substance, for I had lifted it in my own two arms, and seen it crush the bodies of our men into its embrace. But it was transparent—invisible. A shimmering violet haze hung between me and the opposite wall, above it the flicker of watching, many-faceted eyes. And in the midst of that haze, crumpled and shrunken by whatever awful force had blasted the life out of them, stood the four men.

Light hurt it. For a moment that cold gaze rested on us. A moment it stood there, staring at us from above its enshrouding, fiery wings. Then, like a whisk of fleeting shadow, it was gone, out into the empty night, and we were alone with the shriveled husks of the men who had been our friends.

What was it? How can I tell you, who know no more than you do? It was a thing that lived in the days of the great ice age, when savage men hunted the mammoth and the giant sloth where our American cities now stand. It was a thing of many shapes, like a mighty butterfly, making its chrysalis in the image of a beautiful woman—a goddess of utter loveliness.

Those forgotten savages worshiped it, and built it a crypt, a shrine of smoothed stone and massive logs as their fathers had done, and their fathers before them, since there were men who loved beauty. And in time it crept out of that lovely, treacherous shell and blasted the life and soul from those who tended it.

Where has it gone? The world is different now, and there are none of its kind to mate with it and preserve its hellish breed. Perhaps it died, as moths die, within an hour or a day, and lies invisible in some field or forest nook, the blazing light of its unnatural life gone out of it. Perhaps it still lives, somewhere in the north where the ice still lingers, and will somehow multiply and return to scourge the Earth as it was scourged in the days before history, by a hell of utter beauty that drains men of their very souls.

Perhaps—but shall we ever know?

White Adventure

A Thought-Variant by WARNER VAN LORNE

Henry Atwood worked feverishly—fiercely—— The existence of humanity depended on him!

THE weather report was clear if discouraging.

It read:

May 11, 1941: Snow flurries throughout the entire northeast portion of the United States. Hurricane warnings up from Eastport, Maine, to Cape Hatteras. Cold snap of unknown proportions expected to follow, with frost as far south as Florida and west as far as the Mississippi Valley.

Henry Atwood scanned the report as he turned from the mail box and walked slowly back to his low brick laboratory building in the foothills of the Adirondack Mountains. His eyes swept across the acres of apple orchards. They were in full bloom. Then he swore, softly. Four years' work wasted! Grafting, pruning, building until he was ready to offer the world something new, and for what?

The first flakes of snow drifted down before he reached home. But the breeze was still warm! Perhaps—even yet——

But the snow fell, a foot—two feet—three feet of it.

And the next day's paper reported in screaming headlines that it had fallen to the same depth as far south as Virginia, and west to the Mississippi! Yet the thermometer did not drop below fifty during the night—and the sun came out warm and clear. By ten a. m. it was seventy in the shade.

Henry was whistling as he left the laboratory in the morning and plowed his way through the drifts to learn that the apple blossoms were uninjured except from the weight of snow. A few limbs broken here and there—but no killing frost!

But a strange thing struck him. There was no mud under the snow! He pushed his hand down through. The snow was warm! But it was not melting!

Throughout the United States there was near panic. Farming came to a halt throughout a vast territory which lay blanketed under a three-foot level of warm snow, which did not melt.

Then snow fell west of the Mississippi—blotting out the balance of the great American grain belt.

Inside of three days, cattle was starving in the great Western cattle country. Prices of meat dropped to nothing, while the first great flood of fresh-killed beef hit the market—then went skyrocketing as it became clear that there was no continuous supply in sight.

In New York, people laughed and joked at first at the unseasonable snow. The children brought out their sleds, the parks were crowded. Winter sports, in May. No uncomfortable cold. *Warm snow* to play in. They were delirious with joy. For the first time people knew snow that was not uncomfortable to travel around in. It was a new and pleasant sensation.

Every idle man was put to work clearing away one of the heaviest snowfalls in history. Slowly, the main traffic thoroughfares were being cleared; the city began to come back to normal after the terrific storm. The men enjoyed the work; there was no suffering from the cold.

Suddenly the work was stopped. The snow was not dissolving when it was dumped into the rivers. The water was being clogged by the white mass. Where there had been especially heavy dumping, the water was so thick a boat could not move through it.

FOR TWO DAYS the men stood around and did nothing, until a new plan was formulated. Then they went to work piling the snow in vast heaps, clearing lanes for the traffic.

When they tried to wash the snow from the streets it created mass instead of melting. So that was discontinued. The conglomerate mass of snow and water was almost impossible to move. The snow seemed to drink up the water that was poured onto it.

The water supply showed signs of failing. Warnings were issued about waste. Water was only used for necessary purposes.

Then another storm struck!

In New York there was wind of an unheard-of velocity. Every part of the Northern country was swept by high wind. The snow was spread and drifted. There were drifts twenty and thirty feet high in the streets. The city was at a standstill. Business could not be carried on.

Thousands of people headed for the South, as the North tried to dig itself out. Railroads were the first to get under schedule again. Every possible train was rushing South with the enormous flood of business. The South saw the greatest prosperity it had ever known. They shipped unheard-of quantities of food North and the thousands of people rushing South were filling every available hotel room.

Food was being sent from Europe

by the shipload. Any kind of food sold. There was a shortage that could not be adequately overcome. The inland cities suffered worst from the lack of home produce.

Early garden truck was dug from under the snow until it became worthless from lack of moisture. The great wheat surplus was slowly disappearing. The great stores of excess food were taxed to the limit to supply the market.

Then snow fell over the remaining portion of the country!

The rush to the South was stopped. People hesitated, not knowing just which way to turn. Every boat leaving the country was filled to capacity. Soon there were thousands waiting their turn to embark. Every available inch of space was turned into passenger room. People paid well for any kind of accommodations, even shipping on cattle boats.

Then the papers told the facts: The snow was not melting!

Every seaport was taxed to capacity to care for the ships bringing in food. There was not enough dock room. They had to wait their turns to unload. Every type of ship was put in service to bring in supplies. Ships that had lain idle for years were going to sea, reaping a golden harvest on outgoing passengers, a greater harvest on incoming food.

Congress was working overtime trying to find some way out of the dilemma. Politics were forgotten in the general need. Huge sums were appropriated to clear the national highways and speed the distribution of food.

A large sum was offered for a solution of the problem. The snow had to be done away with, but how? There seemed no answer. Every scientist in the country was working to analyze the white blanket that slowly choked the country.

THE RURAL COUNTRY was tied up completely by the snow. In the Northern sections they were able to clear some roads with the snow equipment they always used. The South was helpless. Snow-removing equipment was in great demand. The factories were turning it out twenty-four hours a day, but it would be months before there was sufficient to care for all the roads.

In wind-swept country snow had drifted thirty or forty feet deep, completely cutting off some communities. Electric lines were down, telephones were out of order. The companies had all they could do to keep the lines open between big cities. Small towns weren't even considered.

Air lines were the one means of transportation that was not hindered greatly. The landing fields were cleared and they arrived and left on very close to a normal schedule. All the government officials used the air lines for travel, it being the one sure way of arriving at a destination.

Chicago was in worse shape than New York. The wind kept whipping the snow back across the streets as fast as they were opened. Finally snow fences were built across the ends of the side streets to keep from blocking thoroughfares. Men were constantly kept busy keeping the few means of transportation open.

Every sporting-goods store in the country was sold out of snowshoes within two days. It was easier to travel on them in the cities than to try and walk on the sidewalks. Sleds were used to transport every kind of article. Boxes were dragged along as makeshift carriers. Man power was replacing machines.

Half the manufacturing plants were shut down because people could not get to work, and supplies were not delivered. Food was the only thing that *must* be moved so every kind of transport was put in service to carry it.

The streams seemed to be drying up. There was no moisture to feed them,

and where the snow fell it seemed to act as a blotter, drying up every bit of water.

The cities began to see a real shortage of water appear. The snow was clogging their mains. Men worked frantically to keep them clear. The reservoirs were sinking rapidly. The water would be down too low for use before long.

Small communities had to abandon their water systems within a few days. The snow clogged the small mains too much to let even a small trickle through. The wells were in high favor, furnishing most of the available water.

In one town, shut off from communication of any kind, they put all supplies in one great community storehouse for the use of all inhabitants. These were rationed out by an appointed group of officials. The water supply had failed and three wells in the village were handled the same way. The water was rationed out, one gallon per person a day. This amount had to do for all washing as well as for drinking.

Farms a mile from a village were out of touch entirely. It was impossible to travel from one point to another. High winds destroyed trails as fast as they were made. The rural districts were left to their own resources. The centers of population required all their facilities to try and keep on a safe basis.

The South was paralyzed. While the North tried to dig itself out of the snow, the South was stupefied by the unaccustomed storm. They had never seen snow in most of the sections that were now covered with three feet of it. They had no means of handling it and were trying to attack a hopeless job when they went to work to clear roads.

EVERYTHING had to be done by hand. Men were shoveling, where the North was plowing with powerful equipment. They built makeshift plows for the trucks, but these were inadequate.

By sheer man power they opened the main roads. Men were stationed every little way along the highways to go back to work the minute the wind blew the snow back into the cleared space. It was a hopeless task but had to be done to move the food and keep from starving.

Every coast city was like a beehive. Men worked night and day to keep the ships moving. Some ships unloaded their cargoes on small boats, to get it to shore for fear it would be too long before they could get dock space.

Shipping on the Great Lakes was at a standstill. The snow made travel so difficult the ships were practically useless. There was a floating mass on the surface that could hardly be plowed through with the most powerful ships. It crushed around them, seeming to hold them at a standstill.

Some ships were still used to carry food supplies from one city to another, but a trip that formerly took hours now required days. The fast lake boats were helped along by tugs. That broke up the mass of snow a little and let the ship slowly go forward.

The canals were abandoned. They were clogged too badly to get a ship through. The water would not even flow.

The big waterways were impassable. The Hudson River could not be navigated as far north as Poughkeepsie. The Mississippi was open for only a few miles. The great river was a sodden mass. Always slow-flowing it stopped entirely with the snow.

In Florida, oranges were picked from the trees with snow around them. Men plowed through drifts and drew the fruit back on any kind of sled. The fruit was suddenly in very high demand. The juice was both food and drink, and there was such demand it could not be supplied. Oranges sold as high as two dol-

lars a dozen within a short distance of the groves.

Soon the growers kept the remaining supply for home use. The shortage of food, that was staring the country in the face, taught them the value of their own foods.

In California the same thing happened. They began to can the fruit at a furious rate, trying to save all that could not be used immediately.

Every city was put under martial law. It was impossible to hold the people in check. They were panic-stricken. Wells were drilled in every park to try and help out the meager water supply.

New York City took over the distilleries to try and create drinking water from the salt water. Other coast cities followed. Every seaport was lucky to have a plentiful supply right at their doors, even if it had to be distilled.

This helped a little, but the supply was way below the demand for just drinking purposes. Wells were sunk deeper and deeper trying to reach the slowly receding moisture. Drills could be heard twenty-four hours a day.

THE NATURAL supply of water was at an end. There had to be some means of creating it. Huge plants to handle salt water were being erected to try and beat the time the other supplies were entirely gone.

Suddenly Europe stopped sending food! They were afraid they would find themselves covered by the same blanket, and started storing every bit of extra food they had.

The country was thrown into a complete panic by this news. They were hungry before, now starvation was ahead. There were riots in every place where people could gather. Crowds insisted on the navy taking what Europe would not ship of their own accord.

Harassed public officials were under heavy military protection. People seemed to think they were to blame personally for all the misfortune. Some of them dared not appear in public without heavy guard.

Wheat was the only thing still held in quantities enough to supply food. The surplus was fast disappearing, even that could not hold out for long.

South America seemed to have missed most of the storm and people were heading down through Mexico by car, on foot and in any other way they could travel. Anything to get away from the slowly choking blanket of snow.

Small communities were forgotten. The authorities had their hands full without thinking of the outlying districts. Small bands of people began to drift out of the cities, taking supplies from the rural sections. Where there was resistance they killed the owners outright.

The trains with supplies were held up and robbed. Armed guards had to be carried with every load of food. Trucks were stopped along the roads. The bands along the highways became so numerous trucks were unsafe for shipping anything. Trainloads of grain and what foods were still in existence carried from twenty to fifty guards; and even then some of them were overpowered.

In the big cities the people began to travel around in crowds. It was hard to get labor for the handling of necessary supplies. Why should they work? It was much easier to die at their ease than to work at it.

One group of men roaming the streets, consisted of a former banker, a well-known lawyer, a college professor with a following from every walk of life.

Only food supplies were guarded. Other things had lost their value. The big buildings were ransacked and robbed of everything men had always wanted.

The police and National Guard had all they could do to control the food and water without watching private property.

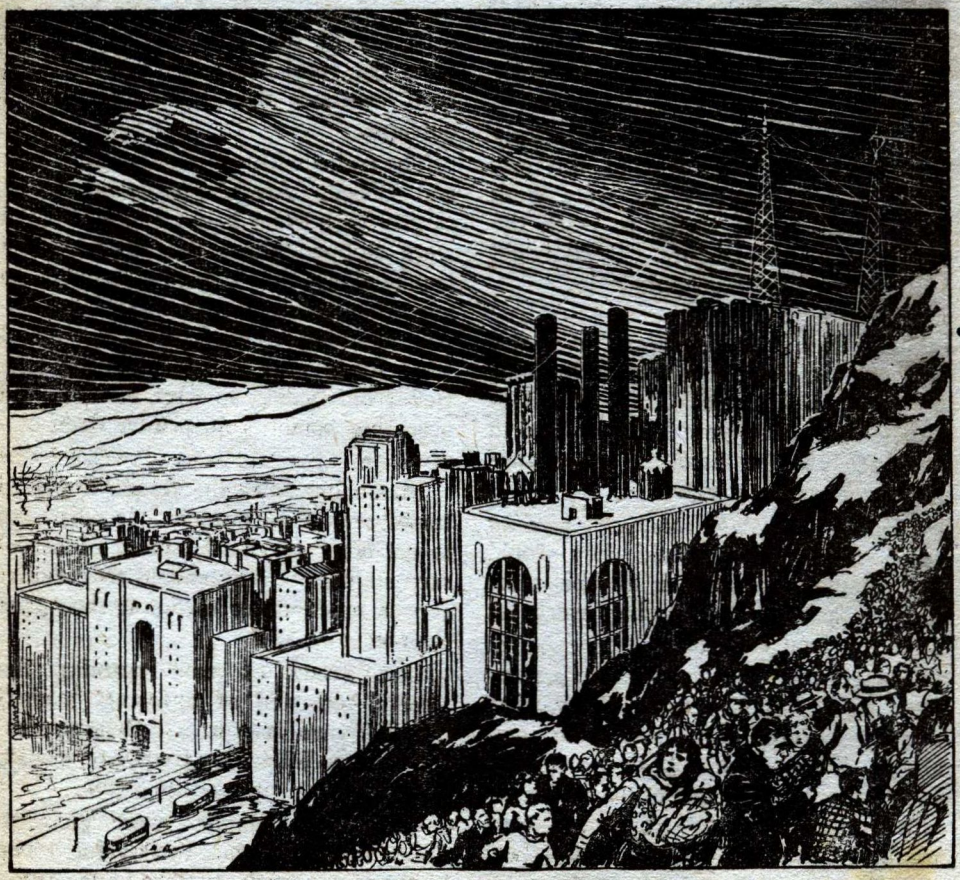
The whole country seemed to have lost its head. No one cared for anything. All work ceased. People were dying from lack of water.

Chicago had bottled every bit of lake water the people could find room for. Everything had been filled with it. Water, that would not have been drunk before now, was nectar.

The death lists were appalling in the cities away from any big body of water. Their supplies gave out as soon as on the coast, but there was nothing to turn to. They drilled wells but could not begin to keep up with the demand. People were going crazy from thirst.

EUROPE will not admit any more Americans! The news hit the people planning to leave the country like a thunderbolt. They had thought themselves lucky because they could get away when their turn came to board a boat. Now they were in more desperate plight than most other people.

Few were in their home cities, having rushed to the coast. Now the coast cities turned a deaf ear to their pleas. They had their own people to look after, without a lot of strangers taxing them



They wanted to get rid of the snow. That was all that mattered. Now——

even more. They fed and gave them a little water; but it was less than the rations handed out to the natives.

Europe was preparing for the siege that had hit America. They had enough to look after, without any more from the United States pouring into their countries.

Farm houses became fortresses. They had to fight for their supplies. Roving bands who tramped through the drifting snow were a constant menace, attacking and taking wherever there was a weak spot. The cases of tragedy were so numerous people paid no more attention. They had too many troubles of their own.

Law and order were slipping fast. The country was reaching the point where people would stop the movement of any supplies before long.

The cry of water was on every one's lips. They could not remember when they had had enough to drink. All the water was tainted and tasted of one thing or another. There were so many chemicals injected in the city supplies to stop disease, it no longer tasted like water; but it *was* wet.

Disease was spreading fast. Every precaution was unheeded. The authorities tried to stop big gatherings of people, but it was useless. Misery liked company too well to stay apart. They had to get together and talk.

The hospitals were kept in fair condition; and daily there were many new cases who tried to rush the water and food guards.

Power lines began to die out. The great water-power plants could no longer operate. The water for steam had to be stopped; it all had to be used for one purpose. There were only a skeleton of telephone lines that still worked. They were used only for official calls; government; fire; medical.

The boilers of steam plants were drained of water. It was gathered from any spot where it still remained. The water reservoirs were emptied long since, except for the amount filled with snow, and useless.

The big buildings were gone over systematically for any sign of bottled spring water overlooked in the fever of excitement. When a group found a little there was a battle, always ending with the strongest drinking what was found.

One bunch found a five-gallon bottle filled, and a terrible fight ensued. There were about twenty parched throats in the group, and each man wanted the bottle. The fight ended when the bottle was dropped and smashed.

This was real calamity and made things appear more hopeless than ever. It was on one of the upper floors of a building and the man who dropped the bottle leaped through the window before the others could get to him to wreak vengeance.

CATTLE were kept alive on a few of the smaller farms, where they had hay in the barns, by guarding them with rifles. Small communities gathered together for the added protection of numbers. Their cattle were housed in barns, with a constant guard to keep roving bands from killing them.

One farm had a big cistern filled with rain water. When the snow came they were very lucky, for they had water enough for months stored away. They had food for quite a while, and were in a position to stand a longer siege than most.

One band discovered some of the big wine cellars in the center of New York State. Hundreds of barrels stored away to age! There were about fifty in the mob that discovered them. An hour later they were all gloriously drunk.

Another band, passing, stopped, heard a bedlam of song and laughter from inside. When they investigated, the first crowd was thrown out, too

drunk to resist, and the new men took possession.

There were great orators among these and before long they were listening to speeches on the ills of the world. Another hour and they were in condition to tell the country just how to straighten things out. After due deliberation it was decided to be a national duty to go forth and preach.

They traveled nearly a mile before stopping, then it was decided they needed another drink. Many fell out of the return march to sleep at the side of the road. The snow was warm and made a nice bed.

When the remainder drew within sight of their source of happiness, something was wrong. Another band had taken possession in their absence. After many tearful pleadings they had to turn away. The men inside would not unlock the door.

The wine cellars changed hands nine times in as many days. Each group that took possession got too drunk to look after the supply and it was taken by the next roving band. One bunch had possession three different times, but lost it again!

One truckload of food, that was captured from the owners, supplied a crowd for a while, but the lack of water made them desert it with what they could carry away.

Every road had cars left along the side, in some places only a short way apart. There was seldom a highway without cars standing, many to the mile, helping to tie up moving traffic.

Hundreds of people died in the storms along the roads. Sleeping from exhaustion they were not awakened when the snow was blown over them. The snow was light and drifted so fast they were buried under deep heaps of white. Forgotten by the people they were with; their friends of a few hours before. Self-protection was the first rule; no one held forth a helping hand to the weaker. The fewer who remained, the more for those left.

The country had reached the turning point. Law and order had held in most sections. Now the population was getting beyond control. They were heading toward destruction through their own lack of effort. The men who were trying to hold order and some semblance of reason were slowly letting things drift. The task had grown beyond them.

The air lines still kept up some service, having been taken over by the authorities to carry on the necessary work. They missed the roving bands traveling over the surface of the country. Their motors did not require the water other means of transportation did.

Water was even transported by air from great distances to centers of population. The air was the only transportation that still moved at all. Railroads had dropped their schedules; a train moved only rarely. Trucks had tried salt water in their radiators and were soon ruined.

The men who still kept their heads tried desperately to find some solution. They tried every kind of heat to melt the snow. It all failed. If heated too much the snow exploded. This caused some bad accidents.

People tried to eat the white stuff and died. It would not digest. They grew to hate it. Some went crazy and raved about "the white blanket." Adults played in the snow crazily, throwing it over their heads, diving into it.

A few men stuck to their posts, keeping a meager line of communications open. There were still some people who kept their heads in the midst of confusion. The majority in important posts failed entirely. Their work had to be taken over by others or left undone. Conscientious public officials were overworked. They had to carry the burden for those who did not stick

to their posts. Small men became great overnight. Big men became nothing, forgotten, lost in the multitude.

People gathered around every natural lake that still contained any water. It was hoarded and kept under guard for use when the public supply was exhausted. There were murders for a small cup of water.

MEANTIME, Henry Atwood was working feverishly to analyze the snow. There was a peculiar electrical content that was beyond placing in any known category. He was first of all a scientist. When the snow fell he knew frost would follow. But it didn't.

The heavy fall of snow was a chance to carry out an experiment that he had expected to wait several months for, a condition that would allow it. For a year, every spare moment had been spent erecting small towers throughout his orchards. Wire loops reached many feet above each, with peculiar curves and twists. There were twenty in the vast stretch of trees, with the snow-covered blossoms. If the invention did not work, he was ruined.

When the thermometer dropped to forty the second night, he felt sure frost was on the way. He examined every tower carefully before dark, then went back to the laboratory. If it worked his orchard would be uninjured, if it didn't——

A small storage battery was connected to many feet of wire around the walls. It didn't require much power. A small switch was thrown, and he went to bed staking everything on the success of his work.

In the morning, when he opened the door, he stopped to rub his eyes. *There was no snow in the orchard!* Pools of water stood in the low spots. Little trickles ran along the ground. A few hours before, everything had been covered with three feet of snow. It was impossible—yet it was true!

A circle of clear ground reached several hundred feet beyond the orchard, then stopped at a set line. The snow was just as deep beyond that point and looked as if it had been sliced with a knife.

He had invented a ray to keep the frost from affecting the orchard—instead it melted the snow! It was the craziest reaction Henry had ever obtained. He walked around for several hours examining every spot. Then he moved the towers into new positions. Twenty-four hours later he threw the switch again, watching the reaction.

For a few minutes nothing happened. Then a faint blue smoke seemed to rise from the whole field. A minute later every bit of snow was gone—there was several inches of water racing madly to escape and seek low ground. It was all Henry could do to get a container and fill it before the water was gone in the surrounding snow.

The field was clear, the ground soaked with what seemed like normal moisture. Feverishly he reset the towers and filled several containers with snow, placing them within the space covered by the waves. Another day, and he again threw the switch—and nothing happened.

This was beyond him. Every tower was in perfect shape and did not seem to be affected. The amount of energy was too small to do any damage. He went over every part carefully. Everything was in perfect shape. Then he tested the battery. It was dead. When he went over it carefully to find the trouble—it was burned out!

Instead of being discharged, it was destroyed by too much power. Every plate showed the effects of great energy; they were twisted and buckled at every point.

For three weeks he labored with only a few minutes' sleep at a time. He had the solution for melting snow, yet it worked backward. He burned out one

battery after another without success; but, finally, when he hooked a discharged battery to the line—it absorbed the energy and he could melt twice as much snow before it burned out.

When he built a big tank with the two poles in it, the effect on the storage battery was very slight. He tried hooking leads to the power line and the energy was carried off without trouble. At last he had the solution.

With a pack on his back he headed for the nearest telephone. The news must be given to the authorities as soon as possible. It would save the country.

When he had been driving his way through drifts and impassable snow banks for several hours, he stopped. There were less than three miles behind him—— He could never get to the outside world with the news!

He expected to find the roads open a short way from the laboratory—but nothing was touched. There were several miles of the same going before he could hope to reach a point where communication would be kept up.

HE SAT DOWN to rest and try to find some better means of traveling. Suddenly he heard a slight buzzing in his ears—an airplane—it was coming closer. Searching the sky he finally saw it, many miles away. But slowly it turned in a slight circle and headed straight for the laboratory.

It was coming down! He called until his voice was hoarse, then he realized they could not hear. He worked his way slowly back along the trail. It was slow but he traveled faster than on the way out. The snow was broken some and made things a little easier.

Every nerve cried out from the exertion. He was driving with every bit of energy in his body. Then he lost hope—the plane was taking off again. He realized he was shouting and waving his arms frantically. Then he stopped; it was all so useless.

The plane was going to pass directly over him. It was bitter to see success slip away, when it was so close. Then the plane made a circle overhead; he could see a man watching him. He waved again and they answered. The ship sailed back toward his laboratory and came down again. They were going to wait!

Three hours later they were speeding toward New York, the nearest landing field that was open. By chance the airmen had caught sight of the brown spot where Henry had melted the snow, and came to investigate.

Papers which had not printed an edition for several days ran the presses full speed, with a complete explanation of the way to melt the snow. The power companies were busy, hundreds of men were setting up equipment that would melt the white blanket in a few hours and free the city of its strangling nemesis.

Every means of communication was used to broadcast the news. Equipment was being set up in every part of the country within a few hours. People were hopeful again. There was plenty of help to carry the work forward at a terrific pace. Henry was happy. His name was a byword. He had saved the country.

In three days the roads were being cleared. The equipment was simple, any one with some wire and a storage battery could melt the snow, once they understood the principle. Gangs of men were slowly moving equipment forward and leaving bare roads behind, the country was fast heading back toward normal.

Crops were replanted on land as soon as a field was cleared. Food was growing again! People were willing to live on very little besides wheat. There were no complaints. Hope had returned. Things were coming back into shape.

But Henry was worried. He warned

people not to try and melt too much at one time or it might cause disaster. They were designing bigger equipment all the time, trying to cover more territory.

The power companies offered to clear off all the snow without cost. They would absorb the energy in the electric lines and save manufacturing costs. They found ways of storing huge quantities of energy and the work went forward faster.

Europe started sending food again, no longer worried. Americans who had gone to Europe took the first available ships for home. It was a place to live once more.

The people who had hurried down through Mexico into South America turned back with renewed hope, if with sore feet.

THE power companies decided they could set up vast fields of current and clear the whole country at one stroke. It was a gigantic task, but they were proud of being able to do things in a big way.

Permission was granted and they started on the greatest broadcasting towers ever seen. The snow had no effect on radio waves and the radio stations were constantly sending out news of the progress. Equipment was going up like magic.

Henry Atwood sent out a warning. It was printed in all the papers. "Don't carry through this idea. It will wreck the country. The floods will do more damage than lack of water did."

People read it and laughed. They were going to get rid of the snow. That was all that mattered. Surely, he *had* done a great thing by giving them the wave which melted the snow, but he couldn't restrict their use of it now! The whole country waited with bated breath for the day when the snow would be gone.

When it was announced they would melt the snow on the third day from date, Henry sent out another warning. This time the papers did not even print it. Why throw a wet blanket over the hopes of the people? They had to get rid of the snow!

Henry turned slowly away. They did not pay any attention to him. A plane carried him back to his laboratory in the mountains. He *had* to get back; away from the people who were heading for the greatest disaster in history.

He stored supplies for two weeks, and put his home in shape. He went to work and melted the snow off the slopes behind the laboratory. As much as he could do away with, he melted, to watch the water slowly soak into the ground.

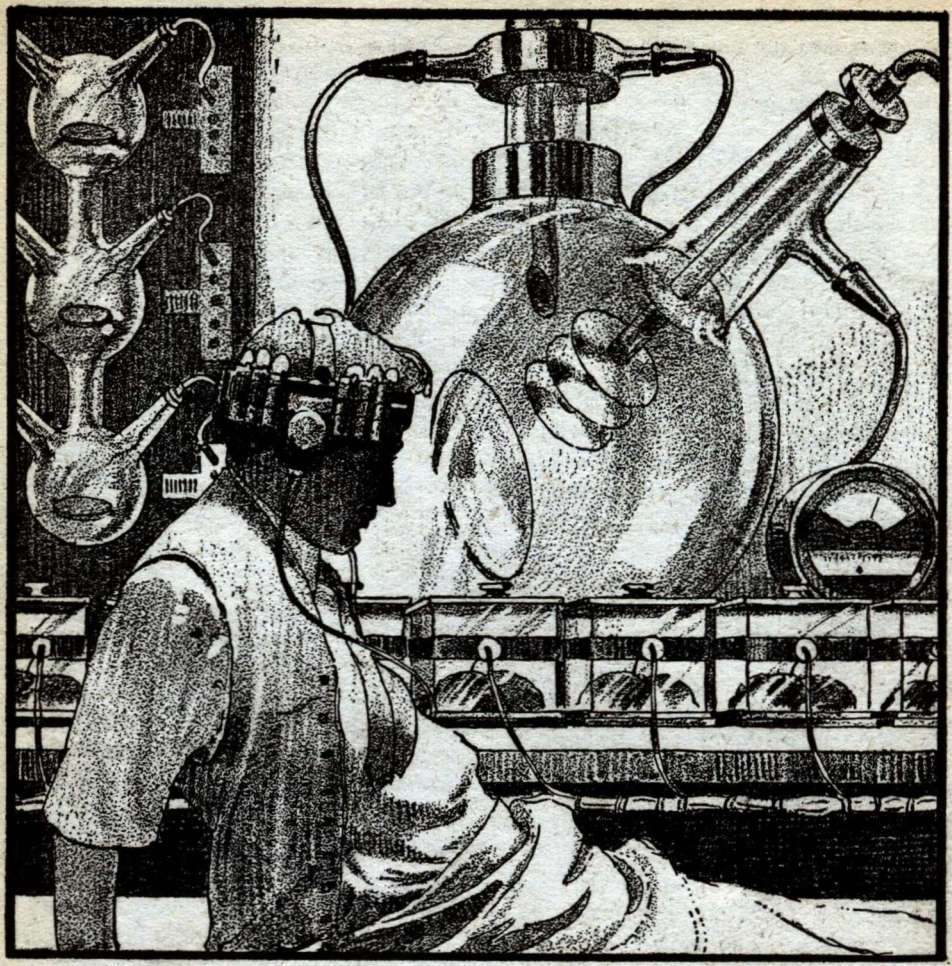
The supertowers were finished. The radio news which thrilled the country saddened Henry. Noon of the next day was set as the time for the great work. "It would see the end of the snow," the announcers said. "The country would be back in normal condition."

The next morning Henry walked alone through the orchard, wondering if his trees would be hurt. He was quite high in the hills; above the valleys which would soon know a roaring, roiling plague of surging floods. He felt ill—blamed himself unreasonably!

At eleven o'clock he entered the laboratory and shut the door. At a quarter after twelve the first gurgling streams rushing off the mountains began to pour by the building. He held his hands to his ears for a moment, and closed his eyes. Then he dropped his hands hopelessly and sat down.

By one o'clock the orchards were like a shallow lake, flowing downhill. He could hear the roar of swollen streams!

The radio burst through with a brief announcement. "Warning every one," the announcer said, "regardless of water and mud—head for high ground and——"



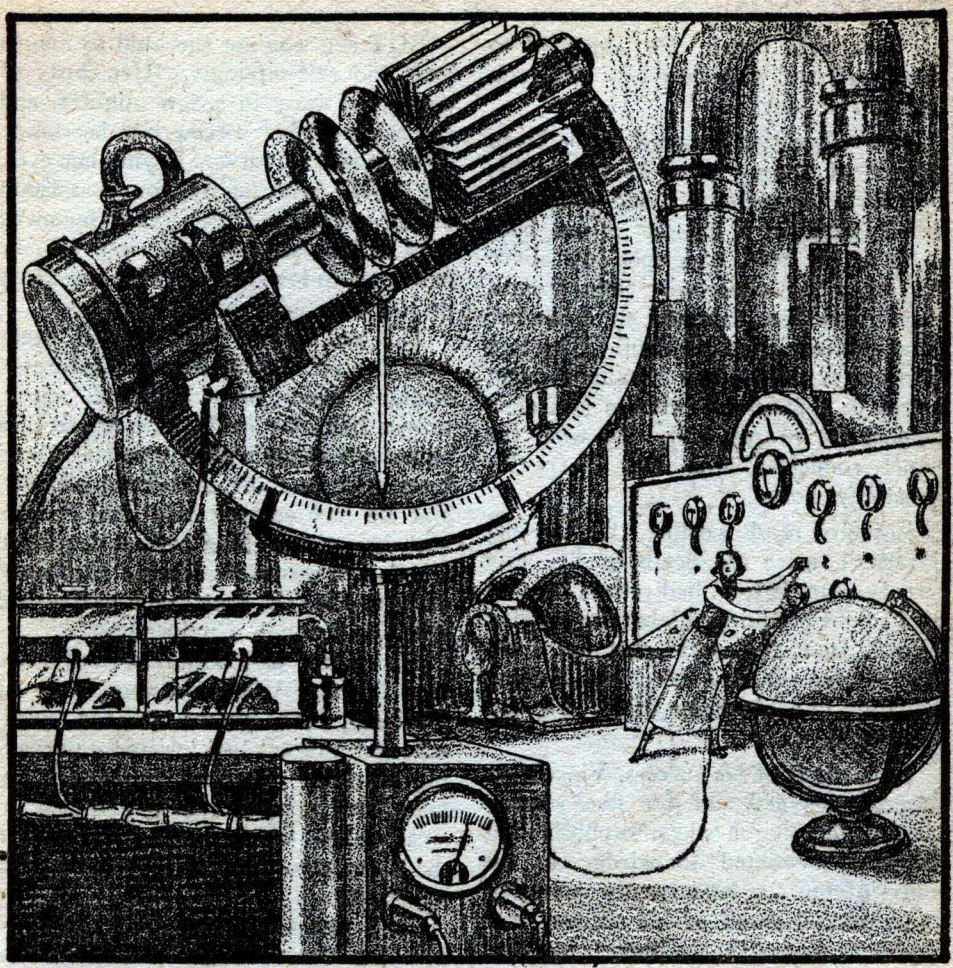
Spawn of Eternal

Beginning a Powerful Two-Part

DORA HARTWELL knew, with a sudden pang, that this man was unknown to her. He looked the same, but in his eyes there was a mystery that was unsolvable. His name was Vincent A. Renolf, but there was no name for the new spirit that showed itself in his face. The lips had become thinner, more firm. Lines of concentration were etching deeper each moment in his young brow. An impersonal quality had crept into his previously frank visage. The girl sobbed, turning to the still figure of her father on the couch.

"He is dead!" she cried suddenly. "And you have killed him!"

The young, well-built man, whom she thus addressed, was sitting upon the cold porcelain slab, his arms supporting



Thought

With a fearful cry she pulled out the wires—then turned wide-eyed and defiant——

Story by EANDO BINDER

his body from falling backward. He had arisen to that position from one of reclining, twenty minutes before. Since then he had not moved. Had merely stared without expression around the walls of Dr. Hartwell's well-equipped general laboratory. And all the while a deep wisdom had grown in his young face.

Now he turned his eyes—uncannily bright eyes—to the girl sobbing brokenly at the side of her father's corpse. "He died—from the shock of success?" His voice, too, had changed, had become deeper, more resonant.

The girl nodded, choking back her sobs. "Yes, from that. Twenty minutes ago you revived from the anæsthesia and suddenly sat up. Father cried in joy, then turned white. It was

his poor weak heart. He staggered to this couch and now he's—— Oh, you have killed him!"

The young man frowned at the fresh torrent of tears. Then he turned his eyes away from the girl, and seemed to lose himself in a trance. From both sides of his head, at a spot just above the ear, a thin silver wire came from a tiny metal box fastened to a leather band that encircled his skull. The two wires, curled to allow him movement, ended in a panel of switches and dials against the nearer wall. To what the panel connected was Dr. Hartwell's great life work.

Eccentric and wealthy, Dr. Joshua Hartwell, after the death of his wife twenty years before, had retired himself in a superbly equipped laboratory. Had retired from the world, but not from his labors. It had been his lifelong ambition to achieve one thing. He had succeeded.

As a result of his success, Vincent A. Renolf—his assistant for five years—was undergoing a metamorphosis that brought unwonted knowledge to his mind of but five and twenty summers. As a second result of his success—unforeseen, of course—he himself had died in an ecstasy of triumph. The third and final result of his success—as it unfolded itself in the months that followed—was strange indeed.

His daughter Dora, at his side for all of her twenty years of life, loved him dearly, morose and testy though he had been in his ceaseless experimentation. She had been his only contact with the outside world, had managed the house and two servants, and had bought his materials for the workshop. Yet something had warned her that when the result of her father's decades of furious experimentation turned to success, he would die. Consequently, she cried now not because he had died, but solely because of her love for him.

BUT she was not the kind to mourn long and self-pityingly. Her gusts of tears died away in a few minutes, and she relegated her sorrow into her heart. Time would soften it. Drying her eyes, she looked again at the young assistant on the porcelain table. That far-away look in his face hurt her, too, for she had come to love him in those five years he had been with them.

Tall and lithely built, he was every inch a man. With regular features—straight nose, high forehead, curly, brown hair—he could have made it a business to move feminine hearts. Could have been, in short, an adored playboy. But he had escaped that fate despite such incentives. Had instead developed a keen and responsive brain. Orphaned early in life, Dr. Hartwell's money had sent him through a university.

His father had been Hartwell's one true friend. With a strong sense of gratitude, the grown-up and well-schooled Vincent had insisted on repaying his debt. Hartwell, on sudden impulse, had refused money, and had instead asked for Renolf's assistance in the laboratory. He had proved a worthy assistant.

Dora was sorry now she had named him the cause of her father's death. After all, he was not to blame. Despite her misgivings, her father had gone through with the great experiment. Renolf had offered himself as the subject because of his great respect and faith in the old scientist. Now it was done. The man she loved sat there, unmoved by death, by tears, by stormy accusations. He was not Vincent any more. He was—more.

And the man who had been Renolf and was now something more, finally awoke from the trance that had held him spellbound. He had seemed to listen to silent voices, to look upon unseen things. A world had opened before his eyes. Incredible lore had flooded into his receptive mind. And his face, a

barometer of such inner revelations, became a picture of power.

Dora felt a great fear steal upon her—a fear of the unknown. Much as she knew her father's work, she had not grasped fully what its culmination would mean. This silent, brooding man was its culmination—and she was frightened. With a sudden cry she ran to the panel whose pilot lights glowed steadily, and ripped out the wires that connected to the young assistant's headband. Then she turned, wide-eyed and defiant.

Renolf had leaped from the table at her move, but too late to prevent the act. His look of sudden wrath turned to bewilderment. He seemed to sag within himself. Watching, Dora saw his face lose that cosmic wisdom and become again the face she knew. It was the old Vincent again, as though he had materialized out of a distorted dream.

Dora threw herself in his arms with a sob of joy. "Vince! Dearest beloved! I didn't know you with those wires on. You were a different person!"

The young man held her close, tenderness on his face. "I was a different person, Dora. A composite character in which my own personal reaction was completely submerged. I knew you, darling girl, but as from a distance. And I knew myself—only as a part of my new being!"

Dora took his hand. "Let us leave this place. It is my father's death chamber. And it makes me shudder to think of that—other being who was in here a moment ago!"

But the young assistant did not move, pulled her gently back. His face became grave. "Dora! We cannot leave! That is, I must not. I must reconnect those wires, and——"

"No, no! Vince——"

But he had already stepped to the supply closet and was rummaging around. The girl watched him with beating heart. He turned on the electric soldering iron after finding several yards of silver wire.

"Vince! Have you gone mad!"

HE whirled upon her, his face kindling. "No, far from it. I'm doing the sanest thing I know. This is something bigger than—just you and me! In that short time I was sitting there, I learned much, saw much that I can't attempt to explain. Dora"—his voice became gentler—"listen to me for a minute and believe in me. I still love you, never fear. Nothing could change that. But, at present, there are other things.

"Your father was a great man—how great the future will reveal. Behind that panel lie ten human brains, ten mighty thinking brains that connect to a living person's mind by a complex system of electrical contacts. Those two wires you ripped from their lugs carry to these sensitive relays at each side of my head the full thinking capacity of those ten brains."

Renolf's voice became reflective: "Really, Dr. Hartwell's—your father's—idea was obviously sound. It had been thought of before. But it remained for him and his clever genius to find a way of converting thought messages into electrical impulses. Then he went farther and found the way to establish contact between two brains—one living, one dead!"

Dora shuddered, recalling how her father had paid enormous sums of money to get brain organs for his experiments. Dead brains—but not decayed—fresh, not more than five days after death of the body. It had been done in secrecy, so that the public would not hear of it and shout "Frankenstein!"

Dead brains, immediately immersed in a fluid that halted decay! Then days, weeks, of labor, attuning a delicate thought receptor to the brain's emanations. And those emanations—they were induced by an apparatus that stimulated the brain to give off its indelible

memory impressions. Thus, the intricate work done, they had at their command everything the brain had absorbed during life.

The brains themselves were not ordinary ones—not those of criminals or average people. They had been, during life, the thought centers of great scientists, great scholars—great thinkers. They had been retrieved from the grave at a terrific cost. At a terrific cost that Dr. Hartwell had paid willingly, eagerly. And those brains—with all their combined lore—lay quiescent behind the panel. Dead and inanimate, but able to wield a mighty power through what they had been during life.

"The next step, of course," went on the young assistant, "was to connect a number of dead brains together, and lead their combined mental knowledge to one receptor. He did that too—great man that he was! And with that combination of ten powerful brains, the recipient of their memory lore becomes —a *superman!*"

The girl sucked in her breath sharply.

"A superman!" repeated Vincent. "I know it, I felt it there as I sat with the life impressions of ten brains surging through my one mind. Perhaps it is that the interweaving of ten minds that in life had covered in their activity practically all of human knowledge, produces in the recipient mind new thought. New thought, Dora, that pygmies our total human conception!"

"But Vince," essayed the girl, finding her voice, "isn't there something—diabolical about it? Somehow, as you sat there—something like a living Sphinx might—I felt an awe, even a fear——"

The man picked up the electric iron. "Dora, there is nothing to fear from this. With my new-found power I can enrich mankind's store of knowledge immeasurably. With those wires connected I am ten great minds working as one. I can invent things, discover things, preach things, never before suspected. I can shove the world ahead a century."

He soldered one wire to its lug and its end to the broken end that went to his headband. Then he brought the glowing iron toward the other wire.

"Wait, Vince!"

Her voice beseeching, Dora went on: "Vince, when are you—coming back again? That being with the wires connected, I cannot love him—only you, Vince, without the wisdom of ten brains staring out of your eyes!"

THE YOUNG MAN patted her hand soothingly. "I promise you that in, let's say five hours—that will be breakfast time—I will take off the headgear. You ought to go to bed till then; you're tired and worn out."

The girl drew herself up firmly. "I should say not. I'll stay with you and with——" Her eyes went to her father's body.

"As for that," said the man slowly, "we will attend to the funeral later in the day."

Then he completed the last connection. Dora watched his face. She saw again an incredible wisdom suffuse his eyes, saw his lips tighten, his brow become furrowed. Where a moment before he had looked at her with tenderness, now his face reflected only distant recognition. Involuntarily, the girl fell back a step.

Renolf—the new Renolf—spent a long minute in silent thought. Then he strode to the workbench, able to reach any part of the room with the extended range of the wires. He picked a tool here, a coil there, rummaged in the cabinets below for other small objects, and finally surveyed a heap of articles before him. Then, with deft fingers, he began to put together a queer apparatus, embodying, among other things, photo-electric cells, coils, and radio condensers. The girl grew weary watching his pur-

poseful and incredibly rapid work, and sat down in a comfortable chair. Her father had often snatched short winks in that same chair when working all night. She slept.

When Dora awoke with a start, the clock indicated that it lacked but a few minutes of the time for Renolf to remove his headband. In fact, he himself had awakened her. She saw first of all that the wires were down, were disconnected. The glad cry on her lips died as she saw that despite this, Renolf was still the superman. Then he spoke in his sonorous voice: "You will notice that I have accomplished my aim of the moment. I have eliminated the use of wires between myself and the panel. Henceforth the connection is through the ether. That is the first step in my plans. Now, because I have promised you——"

He removed the headband, laying it carefully on the bench. There was a moment of bewilderment, a transition of facial expression, and then once again the genial young man, vibrant with life, stood before her—no longer a superman.

"Dora," he said, a vague undercurrent of exultance in his voice. "It is marvelous—uncanny even—what mental power this places at my disposal!"

His eyes went to the figure of the dead scientist, a deep reverence in them. But suddenly they narrowed and he strode rapidly toward the couch on which the body lay. On the floor near by was a small envelope. Renolf picked it up.

"What is it?" queried the girl in surprise. "I did not notice it before."

"It is addressed to me," informed Renolf. "Evidently he took it from his coat pocket just before the end came. Somehow you missed seeing it."

TEARING the envelope carefully, the young assistant extracted from it several sheets of paper inscribed with Dr. Hartwell's fine script. Amazement dawned in Vincent's face as he read. Dora watched him in silence, wondering what these last words of her father could be.

After reading the last lines, Vincent seemed to lose himself in a trance. A mixture of perplexity and wonder was on his face. Dora went over to him and touched his arm. He started and then silently handed her the sheets. Dora read:

To my assistant, Vincent A. Renolf. I am writing this hurriedly on the spur of the moment. To-night we shall know if the supermentality we wish to create will be the result of a connection between yourself and the ten-brain unit. I write this because—well, it's almost a premonition that I may not live through this day. It is no secret that my heart is weak.

I must not take any chances of leaving you uninformed on certain points, and yet I did not wish to broach them before success had rewarded my efforts to create a superman. These points are very important, because I realize more than you what this will mean.

My work on this project, you may and may not have suspected, was for a purpose. I did not merely wish to create a supermentality for my self-glorification. I wished to give to the world a superman who would in some way—great or small—be of benefit to mankind. And if you, as you read this, are indeed that superman—and I am no more—remember that my hands created you, and that you must be what I wish you to be, or else earn the inner revilement which comes with the betrayal of a trust.

Go out into the world as a superman, Renolf, and do that which you can for the betterment of mankind. You have a tremendous power for good. Beware of letting a lust for power overwhelm you in your course, for then you may do incalculable harm. I cannot guide you in your course, but your better judgment will be your best check and rein. Yet I have no fear that you will misuse your new-found power. I have come to trust in you, my boy, and could not think of a better man to entrust with this great secret.

And let me secondly admonish you never to reveal this secret, or give the ten-brain unit into other hands. What

you can do with it, do. Let no other share in your knowledge, for others could do no more, and there are many chances that they would misuse this great scientific gift.

Lastly, I must reveal something which I have kept a secret even from you, because it seemed so utterly mad, and was impossible of verification. It is this: Some three months ago, while attuning one of the delicate sensory cells that make contact between two of our inanimate brains, I caught a suggestion of exterior excitation. You know the sensory cell is basically a radio receiving set, with thought waves—or the electronic waves we substitute for the actual thought waves—instead of radio waves running through its coils.

The mysterious excitation which made itself felt to me because of the excess power I was feeding into the pulse valve, startled me. I bent closer and the sensation—something like a sixth sense—grew stronger. I was astounded to feel the thought emanations from some powerful exterior source.

You were busy at the time in the chemical lab, and I spent the next two hours trying to track down the mysterious thought emanation. The power exponent was twenty-five, which meant it was equal to the combined radiations of a thousand human brains within a radius of one mile. But a thousand brains all thinking in one thought band, so as not to heterodyne! This being a paradox, an impossibility, I knew it could not be explained in that way. If only there had been a certain way of tracing back to the focal point!

To be brief, this strange thought radiation was inexplainable. And it had me worried—because it was a radiation of menace! How do I know this? I cannot say. The message itself was unintelligible. In all the time I listened I understood no one thought—no one particle of the message, whatever it could be. And that is queer, because thought has a language of its own. If it was human thought, regardless of whether coming from a Chinese or Arabian, it should be intelligible. It wasn't—and therefore it wasn't human thought.

Then what was it? I wish I knew the answer! Could it have come from space? Think of the tremendous power necessary to give a power exponent of twenty-five from even as close a body as the Moon! I cannot give you the answer, Renolf, and I mention it because I felt it as a distinct menace—a menace to Earth and humankind! You will think I'm crazed, that the nearness of the great test tonight has twisted my mind. So I thought myself when the mysterious emanation stopped, and I had a chance to think it over.

But not three days later it came again. when I was setting up the last sensory cell for Unit-B2. After that I made it a habit to watch for the radiation every odd moment I had. I was going to let you hear it too the next time it came. But it never came again after that!

You will wonder why I have told you of this. And the reason is because I want you to remember it, and watch for it yourself. Sometime it may come again. If you are in contact with the ten-brain unit, it will perhaps be an intelligible message to you. It is a mystery that must be solved—must be solved because I feel it is a menace!

In conclusion let me say that if I am not with you when you begin your career as a superman—and I will not be with you if you are reading this letter—you must plan carefully every move you make. Use every ounce of sagacity and judgment Heaven gave you in that great work of benefiting Earth. And Dora, my dear daughter—she loves you, Vincent. She will be a splendid helpmate both for yourself and your work in the world. God bless you both.

JOSHUA HARTWELL.

WHEN Dora finished reading, she looked up and for a moment their eyes locked in silent amazement. It came as a shock to the girl that her father had had such a definite purpose in making his ten-brain unit. Now she understood why Vincent had had no choice but to reconnect the wires when she had broken them. He had been close in her father's confidence—must have sensed what he had in mind all along. But this other thing—this mysterious menace——

"Oh, Vince! What can it mean?"

The man answered, knowing what she had in mind. "I don't know myself, Dora. This is the first I've heard of it, and it sounds mad—preposterous!"

"Do you think"—she choked a bit—"that father was perhaps after all——"

"No! Not that," exploded Vincent. "Whatever he meant, he meant it in his right mind. Your father may have had a weak heart, but he had a proportionately strong mind. However, no use to conjecture on the matter. Come, let's have something to eat."

He led the way upstairs to the living quarters, and over a breakfast table explained to her what the future entailed.

"First of all, your father must be given a decent, but not widely publicized, funeral. Secondly, the apparatus which gives me my new-found power must be kept a secret. There might be investigations later—and trouble. Then I will work toward one goal—benefiting the world with your father's great work, in accordance with his last message to us.

"Almost nothing is impossible to me now. Inventions, discoveries, new scientific processes—they will pour from my mind and those ten other great minds. For we will all be working as one unit, as one superbrain. But not only those things. I am also going to try to right the wrongs of this world—the most glaring ones.

"There are governments that can be changed—should be changed. Laws can be readjusted. Clever and ruthless persons who live off the fat of the land can be put to honest labor. Crime can be stamped out, if not completely, at least to a great extent. Propaganda, misinformation, fraud—they are blights that can be wiped out. A big order, yes, but *we* can do it! We can make this world a saner, happier place—because we have power! Power of the mind. And that, Dora, is a greater power than any other!"

Vincent stopped for breath, and a shining light was in his eyes—almost a fanatic light. The girl grew afraid. Even Vincent, her own Vincent, was being affected by this, her father's deed. Perhaps the change would grow, would take him away from her—forever!

"Vince, dear!" Her voice was timid. "And us, Vince, what about that?"

Renolf started out of a trance. His voice was absent-minded. "About us? Well, time will take care of that."

Then his voice became more natural, more personal, as he saw the hurt look in her suddenly lowered eyes. "Dora, please! You must understand. Our marriage must wait. How long I don't know. But for a while I must concentrate on my duty. I belong now—to that which your father made me!"

And so it was to be. The funeral was carried out in all solemnity, but in practical secrecy. The flesh of Dr. Hartwell was laid away from mortal eyes without ostentation. Only his daughter was there to mourn him as a loved relative. Then it was over, and they plunged into their work.

II.

"NO MORE FUNDS?" queried Renolf—the super-Renolf—quietly.

Dora shook her head. "I did not know it, but father had put practically everything, his whole fortune, in this work. It is gone now. There is not enough to pay even the servants."

It was a week after the momentous night in which Dr. Hartwell had seen his life work turn into success. He had put his all into it, even his life, as a last installment. In that week Renolf had labored almost ceaselessly in the huge laboratory. A notebook had begun to bulge with formulæ and data—stupendous things produced by ten masterful brains producing through one that was alive and receptive.

Dora was changed from that night. In those seven days certain things had clarified and stared starkly in her face. The new Renolf, pushing himself with giant effort, had hardly time to look at her, had barely time to bark orders to her—for she was skilled in labora-

tory technique—and guide her efforts to help.

Only at night, when taking a four-hour sleep, did he remove his headband, and then only to give her a wan smile or perhaps a word of encouragement. Of their love he said nothing. And Dora knew that she could never stop loving him. She was even beginning to love the new Renolf, glorying in his achievements. Only in a glimmering way did she understand the superhuman results he was getting in the laboratory, but it stunned her mind. It was a new genius. Colossal. Stupendous beyond ordinary conception.

"No funds? Well, then we must get some."

Saying this, Renolf sat down at a desk and wrote for an hour. Intricate formulæ came from his swift hand. Diagrams that illustrated crudely but effectively an apparatus with queer globes set in geometrical order within a spheroid of glass. Then he folded the sheets and put them in an envelope.

"Take these to the In-your-home Television Co. Let them read it. Take a lawyer along as witness. When they are prepared to make an offer, ask for a million dollars, cash without limit. It is not my intention to allow inventions to get in private hands, but since we need funds to go ahead, I will make this exception."

Dora went as he directed. The lawyer with her was skeptical, and went along only because he still believed her account to run into hundreds of thousands. The head of the In-your-home Television Co.—they had been trying to put television in the home for ten years—was frankly uninterested.

"Let my head technican see it?" he spluttered. "Why, my dear young lady, his time is worth money. I'm sorry but——"

But Dora had a way of her own. She was not afraid to talk. The financier finally became slightly interested, enough to call in one of his research men. The latter stared in skeptical surprise at the envelope. Then he read. Before he had reached the end he was trembling like a leaf. He called the president to one side and they whispered excitedly.

Face flushed, the financier returned. "Ah, we do find something in your claims at that. Of course, it isn't worth much—perhaps an outright price of ten thousand?"

"A million, cash unlimited," said Dora.

To the lawyer's utter confoundment, the president agreed with a slobbering eagerness. He promised to close the deal after the apparatus had been built and tested. But he would advance say a hundred thousand to make sure the envelope was not carried to some other company.

RENOLF permitted himself only a faint smile on being told that it had sold at his price. "And why not? The thing is worth a hundred times that price—right now. Later, that financier, who is even now probably rubbing his hands in great glee, will get the shock of his life. And not just that one financier. They are a breed I intend to stamp out as I would stamp out vermin!"

With the unlimited funds, their work went on. Renolf began Notebook Number Two—then Three, Four, a dozen. In the meantime he had arranged for his secret never to be discovered. The ten brains and their control panel, all inclosed in a huge aluminum box, were buried fifty feet below the house. The workmen who dug the hole never found out what went into it, for Renolf lowered the apparatus himself.

It was a miracle Dora alone witnessed. Renolf turned the face of a chromium reflector on the aluminium box. Nothing had happened—that she could see or hear. But the huge object, weighing a half ton, had gently risen from its place, floated over the pit,

and drifted featherylike down, down. Renolf held the reflector over the pit for the final part.

"Nonferrous magnetism," explained Renolf, more to himself than the girl. "Science has never suspected that ferrous magnetism might be produced in other metals than iron, cobalt, and nickel. It required only a research in molecular space arrangement. Then the secret reveals itself: molecules forced into a ferrous interlacement—full play of polarity—anything can be made magnetic—earth and gravity—manifestation of that principle——"

Then the aluminum box was down and the workmen were called in to fill the pit again, and left the place scratching their puzzled heads.

"No matter where I am," explained Renolf to Dora when it was over, "there will be complete contact between me and the brain unit—through the ether. Not radio—better than that. Radiation without a diminution value measurable anywhere on this Earth. I am one with those ten brains. Yet I can travel as freely as the wind—as though all those brains were contained in my skull."

Dora had shuddered at the bluntness of the new Renolf more than once. She was getting used to it. She was getting used to everything in her new life—though at first it had seemed like a strange and dreadful dream. She began to wonder when he would strike. When he would gird himself with his hyperhuman powers and defy a world.

BUT the weeks went into months. Renolf was careful. He knew it would not be wise to start his campaign only half prepared. Leaving the laboratory one day, he took Dora to the spacious garage, and here they began to assemble a large machine whose various parts they had been ordering for weeks. The necessary laborers were hired to help set up half-ton sections of curved pieces of duralumin. In another month it was completed—a long, slim, tapered cylinder of dull metal, with windows of pure, crystal quartz.

Then skilled mechanics were procured to set up intricate machinery. They worked from blue prints that brought perplexed frowns to their faces. Often Renolf had to explain for long minutes. Then they would work at it, with a sort of awe in their attitude, and a sort of sheepish skepticism. Renolf inspired them with involuntary respect, but his outlandish machinery was crazy, any way you looked at it.

"An airship?" grunted one mechanic to another, after they had made sure Renolf was not within earshot. "If this thing can fly, I'll pick my teeth with the Empire State Building."

But the final touch was done by Renolf and his assistant, Dora, after all the heavier work had been completed. Into the uncapped openings of the machinery, which was all in the rear of the ship, they installed the more delicate workings. Not spark plugs and distributors and magnetos, but phototubes, thermostats, electronic units, and tiny reflectors of polished tantalum. There was no timing or spring adjustment or greasing, but instead meter readings, galvanometric testing, and the hissing of crackling sparks.

Renolf surveyed the ship one night. There was pride in his eye. Dora stood by his side, meek and quiet. She had spoken very little to him in the past month. There had been nothing to say, really.

"There it is," said Renolf matter-of-factly. "With my other work done as far as I need to carry it at present, and with this ship, we are ready for a start in my great scheme. This ship will run silently, and very speedily, by diamagnetism—magnetic repulsion to the Earth's iron core. The power is to be from silicon-to-boron conversion, which is a form of controlled atomic energy—

exothermic transmutation, in short. The bottom plates of duralumin are simply charged with diamagnetism—in a degree greater than the force of gravitation—and the ship floats. It will move forward when the rear plates are given a greater charge.

"Great, isn't it?"

Dora looked up quickly at the new voice, for it was the voice of Vincent, her beloved. He had torn off his headband.

The girl nodded with a brave little smile. She had learned how to do that in those toiling weeks. Now he would dash off to bed——

But he surprised her. For the first time in weeks he infolded her in his arms and kissed her. "Dear, brave girl," he crooned tenderly as she clung to him eagerly. "I know this has been a trial to you. I have been dominated by my superself ever since I started my work. I have even slighted you to the extent that you should kick me and say good-by."

He kissed away her protests and her professions of loyalty to him, then and forever. "I know, darling. You don't have to say it. I knew you would stick, and some day——" He sighed. "But you understand. My duty. I am dedicated to humanity through your father's great work, at least for a certain time."

He pulled her toward the house. "As a reward—for me as well as you—for what has been accomplished in these five months, I will leave off the headband—guess how long, darling! For a whole day!"

They skipped to the house in a mood of light-heartedness.

IT WAS the next night that Renolf first had proof that Dr. Hartwell had not imagined hearing a mysterious, inarticulate voice from an other than human source. He had just come back from a trial run of the new ship. It had worked marvelously—as smooth in flight as an arrow, as maneuverable as a bird, as silent as a ghost. His thoughts were far indeed from strange radiations; he was thinking of the great day when he would begin his task of world betterment.

Suddenly, just as Dora came up with eager questions about the ship, he felt a dizziness. It came to him with curious slowness that his brain was being hammered by strong radiations. He held up a hand to check the girl's words. Then he concentrated on what seemed to be pouring into his mind. Yet it did no good to concentrate—the queer message was unintelligible, like the gibberish of an ape. But it had a quality far different from animal jargon. It gave Renolf the impression of deep thought—inarticulate but yet rational. And it seemed to throb with menace!

Like an intangible flood of nameless horror, the voiceless threat reverberated through his brain till he reeled from it. Renolf was vaguely aware that Dora's eyes were wide—that she had put a hand to her mouth to stifle a scream. For his face was ashen-gray and his eyes tortured and hot.

Then it stopped, as suddenly as it had begun. Renolf staggered to a seat, to find himself panting. He ripped off the headband almost savagely. "That was it!" he cried hoarsely. "That was it, Dora—the menace your father told us of in his last letter. No figment of his imagination, as I had begun to consider it. It is unmistakably there—a threat, insidious and—and sneering. That's it—sneering! As though the sender were a lofty being talking to ants. I must find out who or what it is. I must!"

He began to pace restlessly up and down. There was no sleep for him that night. Later he put on the headband again, fearfully. But the mysterious voice was not there. Then the super-Renolf struggled with the problem.

Dora found him in the morning, star-

ing vacantly out of the window at the flower garden. He was not wearing the headband. "Vince, you should get some sleep. You are wearing yourself down needlessly."

Renolf turned slowly, with the stiffness of a man who is highly fatigued. He gave a wan smile. "Yes, I think I'll go to bed now. But I've made a decision; or rather, the super-Renolf has. There are two main purposes ahead of me: One, to better the world; and the second, to track down the menace that whispers from space, or somewhere.

"Perhaps the menace is the more important of the two. But since my work has progressed this far for the other program, I shall go ahead with it. If the menace is prepared to strike, it must give some forewarning. And my plans for world betterment will also include plans for world regimentation in case of emergency. Yes, that will be the best course. And your father would have wished it so."

"My father!" cried Dora. "What he has brought to pass! At times, Vince, this all seems like a crazy dream—like the impossible events of a fantasy. It seems too unreal—so different from normal life."

"It is, of course," agreed Vincent. "But only in certain ways. I still find myself human. Right now I'm hungry. And after I eat, I shall want sleep. That's normal life, isn't it?"

III.

THE FIRST the world knew of the presence of an unsuspected power in its midst was when a voice rang forth thunderously from every radio set in use, on every wave length, in every far corner of Earth. Renolf smiled grimly as he pulled the lever which sent a million watts surging through the ether, blanketing every other radio station on Earth.

"People of Earth! Prepare yourselves for a coming change! No matter who I am, but in three days will come the beginning of a new order. Above all, do not let panic overcome you, though certain strange things happen in your traditional existence. Know that, whatever occurs, is for the benefit of every one, to the harm of none, unless by accident. I will call myself the Benefactor, and by that you may know me from now on."

Renolf explained to Dora, in his emotionless voice, why he had sent such a startling message over the ether. "To institute any great reform, the masses must be put in a suitable frame of mind. True, they will be skeptical for a while, will call it a hoax, but that will change. Some millions in the world have heard and understood. The rest will know before three days are over. It will be on every tongue, in every newspaper. All will be thinking of it. Then will come the announcement of Step One and——"

Step One was disarmament—complete disarmament over all the Earth. That the unknown—who called himself the "Benefactor"—meant business was shown to a seething world. On the evening of the third day, a strange metallic craft hovered over the city of Washington, directly over the Capitol. It was a tapered cylinder and hung silently, magically, in thin air. The thunderous voice for the second time impinged on all open radio sets:

"People of Earth! The Benefactor speaks again, as I promised I would. My first step in making good my name will be to demand complete disarmament of every nation of this Earth. I am at present hovering over the capital of the United States in my airship. I am in a position to bomb the Capitol Building. But that I won't do. I wish merely that suitable searchlights be turned till they light my ship and see that I am really here and not bluffing. If my request is disregarded, I will drop

a bomb squarely on the dome of the Capitol. I am waiting!"

For an hour nothing happened. Renolf, seated at the complicated control board of his ship, peered downward, waiting. Then, apparently because the giant radio voice had sufficiently impressed them, searchlight beams swung crazily through the air. In a moment they had centered on the mysterious metal cylinder. At the same time there came the buzzing of aircraft.

"Ah, they have taken me seriously—too seriously," said Renolf.

The aircraft approached, circling warily, part of Uncle Sam's fighting fleet. They had come from Annapolis posthaste. Renolf manipulated his controls. Nothing happened except that an uncanny green glow appeared around his ship, like a benign halo.

Then there was the rat-a-tat of machine-gun bullets. Renolf smiled a grim smile. They not only took him seriously. They had already declared war on this weird craft which hung so threateningly over the heart of the government. When the weaving airplanes had drummed out hundreds of rounds of gunfire, without making any impression on the strange craft, they ceased such activity, by radio order. But they stayed around, watchful and belligerent. Their pilots and crews stared perplexedly at the white cylinder. Some of the men were perspiring.

Then Renolf broadcast again: "You have done as I asked, and more. The bullets of your machine guns cannot harm my ship, nor can large shells. I am surrounded by a field of force that turns aside material objects. In short, I am impregnable! Furthermore, though you cannot harm me, I can harm you. This I must prove, or you will not believe. Then listen. Evacuate within three hours the grounds around the Capitol Building. Make certain that not one soul is within its confines. At the end of that time I will bore a dozen holes in the ground with a weapon of mine, in that deserted area. Au revoir till that time!"

That was no time to take a chance, the people below knew. The President himself, having made it a point to listen to the second of that night's broadcasts from the Benefactor, ordered the grounds around the Capitol evacuated.

Those with him, men pale and perspiring, advised that the President leave the vicinity altogether, in case the unknown go berserk and destroy the Capitol. That is, in the slight event he could do all he claimed. But the President, stroking a thoughtful chin, refused, saying such a power, whoever it was, could be only honest in his promises.

ABOARD THE SHIP, Dora bit her lip nervously, gazing on the obscure scene below. She could not be as unperturbed about the whole thing as was Renolf. After all, it was an unprecedented thing in the history of the world. It was simply stupendous, breath-taking—at bay against a nation. Against the world! But Renolf, idly watching the aircraft buzzing around his impregnable stronghold, seemed entirely at ease. He was all confidence that he was laying his cards down in the right order.

The three hours finally dragged by. The white cylinder lazily left its position above the Capitol dome, and drifted till it was over the now-barren grounds before the building. Then a pale violet ray shot downward. Its end struck the ground with a loud hiss.

There was a thunderous noise of ten thousand boiling cauldrons of molten lava—and then a hole! The beam flicked out. The white cylinder drifted, indolently it seemed, a dozen yards farther, and again the violet beam hissed down. Another hole. Again the ship moved. Another hole. Another. Another. A dozen in all, just as had been promised!

"Now you have seen one of my offensive weapons. It has demonstrated that I, the Benefactor, have terrific power—invincible power. The power of intra-atomic energy. Think this over, people of Earth. In three more days I will carry on my campaign for world betterment. Till then, adios!"

In those three days, before completing Step One, Renolf did not use the laboratory. He excused Dora also from their previous steady research, and bade her do what she pleased. Only he, Renolf, must be left in peace. Then he set himself to work—work that consisted mainly of deep, trancelike thought. Now and then he made lucid notes in a big notebook.

It was a knotty problem—knottier by far than anything he had had to sweat out in the laboratory. In his laboratory work he had guided himself along the handrail of theory, fact, and deduction. In this reform of a world, he must deal with that nebulous, often perverse, thing called human nature. Sometimes human beings resist something that will be to their benefit, unable to bear a radical change in their age-worn, rutted existence, maladjusted though it may be.

Step One was simple in its aspect, far-reaching in its effect. The world—and every radio set was open at the time—heard again the stentorian voice of the Benefactor:

"People of Earth! Again, I, the Benefactor, speak to you. War has been a tradition in our lives. We cannot conceive of a world without it. Yet it should not be. Think once, each one of you, what war means. It is conceived in false patriotism, grows to maturity in a bath of innocent blood, and at its finish leaves behind misery and famine. The beating of drums, the waving of flags—how they stir us to militant loyalty. But when the shouting and the smoke clears away, what has been accomplished? Nothing, except that some countries grow fat and others grow lean.

"Therefore I, the Benefactor—having at my command weapons to which capital battleships are target toys—condemn war and declare it outlaw! And to prevent any recurrence of that greatest of human follies, I command that the battle fleets of the powerful maritime nations leave their present bases. Those of the Atlantic powers—Great Britain, France, Germany, Italy, and Russia—to meet at Iceland's largest port, Reykjavik. Those of the Pacific powers—the United States and Japan—to meet at Manila, in the Philippine Islands.

"Through your spy agencies, each of the nations can be assured of no trickery to one another. As for trying to trick me, be warned that I will use the violet beam, with which the ground before the Capitol of the United States was riddled, on any fleet which fails to appear at one of the two rendezvous!

"The time limit is twelve days. A small time limit? You may groan that to one another now, but if war were declared, each of you would get your fleets that distance eagerly and easily. If any nation wishes to be an object lesson, let it refuse to follow my command. In my ship, which can attain unbelievable speeds, I am omnipresent. I shall ferret out any fleet that hangs back."

BUT what would he, the so-called Benefactor, do to them, if and when some fleet held back? That was the question on every one's tongue. Renolf listened to the chain-station broadcasts, reviewing current events. The ghost of a smile hovered over his brooding face. Frantic announcers, delivering news of greater magnitude than ever in history before, could hardly control their voices. Trickery—fraud—a German plot—a dictator's cabal—madman's hoax—it was called everything.

"But would you," asked Dora, "destroy any fleet not obeying?"

"Would I?" said Renolf thoughtfully. "I wonder!"

Twelve days of world suspense. In that time Renolf decided it was time for them to move. Isolated though Dr. Hartwell's laboratory home was, in a small mid-western town, it was to be expected that sooner or later their identity would be uncovered. They had taken care to leave and arrive in the cylindrical ship only in the dead of night. But there were always eyes to see and tongues to wag.

"Before long," stated Renolf, "we, as the so-called Benefactor, will be much sought after—both for kindly intentions and for deadly intentions., We will have to make the former contacts carefully. The latter we must protect ourselves against. Here is what we will do. We must pack all my notes and certain small apparatus in the ship. I will do that.

"Then we must get as much of that million as we can from the In-your-home Television Co. in cash. You will do that. Then we must leave for parts unknown. In our new home, any material we need must be brought through some one else. Broxton, the man-servant who served your family for forty years, will do that. As for keeping our little household shipshape, Mrs. Broxton will qualify. The brain unit will be safe enough here, buried and unsuspected."

"But where will our new home be?" asked Dora. She did not think to remonstrate against leaving the only home she had ever had. If Renolf said leave, leave it was, even though it would hurt her for a while.

"In the Arizona Rockies," said Renolf. "I know a place up there, lost in virgin wilds. Ideal for secrecy. It is quiet there, peaceful, close to nature. Lakes and mountain streams near by will——"

In fact, one mountain stream tumbled down a fifty foot cliff not a half mile from the deserted hunting lodge into which they moved. It was not a comfortable home, somewhat primitive, but large and solidly protective. Before the eventful day of the naval get-together came around, they had established themselves more or less securely.

"Now," commented Renolf, "we can go ahead with our plans without acute worry about apprehension, arrest or assassination,"

IV.

THE VICINITY of Iceland's main harbor of Reykjavik was a formidable looking place on the day set for the tryst of maritime powers. It bristled ominously with ships of war. Only one ship of each nation's fleet, by tacit agreement, actually entered the harbor. The rest of the fleets steamed slowly in wary formation out on the ocean. Great Britain's fleet, having the most to lose in case of trickery, had strategically positioned itself along the coast. France's armada circled aimlessly far out.

Yet it took but a glance for Renolf to see that none of the nations had sent their full naval force. None had sent even half their available ships. They had feared the power of the Benefactor, dared not disobey entirely, but they had feared attack at home as well.

Renolf sent his dull-white ship scudding over the area outside the harbor. Thousands of eyes watched it in awe, knowing it must be the Benefactor himself. Then he spoke:

"Nations of Earth! Every large maritime power of Europe is here represented, but none in full. You mistrust me. You mistrust each other. You mistrust your very selves! I see that I must give a full demonstration of my powers before this present project can be carried out in full. I command that each nation here represented

evacuate one of its capital battleships, and tow it ten miles out from the bisection of the harbor mouth. They must be left there in a group.

"I go now to Manila, to check up on Japan and the United States. I will be back in six hours! Yes, I repeat—six hours. On my return, I will destroy utterly those empty ships!"

The aluminium ship swooped as though in exultation, and then sped silently into the thin blue of the sky. Up and up it went. Higher than man had ever gone. Thirty miles—forty—seventy! Then it swung in a grand arc, cleaving almost airless space, and shot toward distant Manila. In the eternal gloom of near space, it sparkled back somberly the spears of starlight.

Inside, Dora raised her head. But determined not to be astounded—or not to show it, like the emotionless Renolf—she put on the smoked glasses with which he had previously provided her.

Through these she looked upon the glory of the Sun. In that thinness of air, its corona and halo were unobscured, undiffused. The wispy solar prominences, fiery breath of a vigorous young star, seemed to writhe from its circular outline. And in the powdered pool of sharp stars, the planets shone like small beacons.

Dora started. Renolf was beside her. He pointed at garnet Mars. "Some day I would like to go there—and solve its mystery. The mystery of its death."

"Can you—do even that?" gasped the girl. "Go out there—to Mars?"

Renolf turned his eyes, those luminous, wisdom-flooded eyes, upon her. "I can do even that. And besides, out there—somewhere in space—lurks the menace! Twice now have I heard the insidious whispering which seems the challenge of an alien and inimical power. I must take the initiative some time and seek out the source of those threatening articulations."

"But I don't understand!" said Dora with a troubled frown. "If the supposed menace wishes to do Earth harm, why does it not strike now? Why should it issue warnings or challenges?"

"Perhaps it is not ready," returned Renolf with a shrug. "Perhaps, too, it is unwittingly giving away its presence through the great sensitiveness of the sensory cell, which is an amplifying unit for thought waves. In short, I know nothing of what or who the menace is."

"You do not even know it is a menace!" added Dora, who was inclined to be skeptical of the whole thing.

Renolf smiled in a frozen way, but said no more on the subject. At times he doubted himself there was anything alarming in the mysterious syllables, which might after all be the accidental tailings of other-world minds uninterested in Earth in any particular way.

MANILA was sighted three hours after leaving Iceland. The fleets of the United States and Japan, only partially represented, were on either side of the harbor mouth. It was a momentous tableau. Two nations, long rivals on a great ocean, inexorably drifting toward a struggle for supremacy, were facing each other. One bursting shell, even a salute from the shore batteries, might have precipitated a mêlée. Certain of the Japanese officials were even discussing the matter, for they outnumbered the American fleet to a small extent.

But into this charged atmosphere was projected a side-tracking influence. A commanding voice thundered from their radios. "You also, powers of the Pacific, have cheated on me. The price of the misdemeanor will be the same as that for the Atlantic Powers—one capital ship each. I shall return here in six hours."

Then back the tapered cylinder flung itself—back to Iceland. The emptied ships were all in place, drifting slowly apart. It was the crucial moment. Could the Benefactor make good his

boast? Could he sink or destroy five mighty engines of war? Or had the Earth been frightened after all by an abortive attempt at world power?

The answer came swiftly, like a flash of lightning. Invisible in the bright sunlight, a violet beam hurtled from the white ship. To watching eyes, the first of the deserted battleships simply sagged within itself like a butter ship in hot water. Sprays of boiling water and steam arose in a colossal geyser. And then—there was nothing! Only bubbles and a ring where the dreadnaught had been!

Above, the insignificant-looking aluminium craft lazed over the second warship. Then it too vanished as though disintegrated by a bolt from Jove. It was all over in a half hour, and thousands of eyes looked at the tossing waves that not long before had floated five great ships of war.

"Thus can I, the Benefactor, deal with opposition. What I have done to your ships, I can do to your armies, your cannon, your forts. They are doomed. But to destroy them utterly, which would be the best way, would entail the loss of human life. And human life I am vowed to save, not destroy.

"Therefore, the only other course is voluntary demobilization by every nation. Under threat, of course, that I stand ready to enforce my decree.

"I will be lenient in the matter, however, and will allow matters to stand as they are for two weeks—fourteen days. On the fourteenth day I will appear at Geneva, the seat of the present League of Nations. Here must every nation send its representatives for a grand disarmament program. I, the Benefactor, will outline the procedure. We will there at Geneva weld together a true and lasting League of Nations!"

With this parting speech, while yet the world gasped at the incredible feat of destroying five battleships, Renolf snapped off his superradio transmitter. Then he touched the controls, and the ship darted skyward.

"Renolf," breathed Dora, still stunned at the cataclysmic event. "You are a god now in your power!"

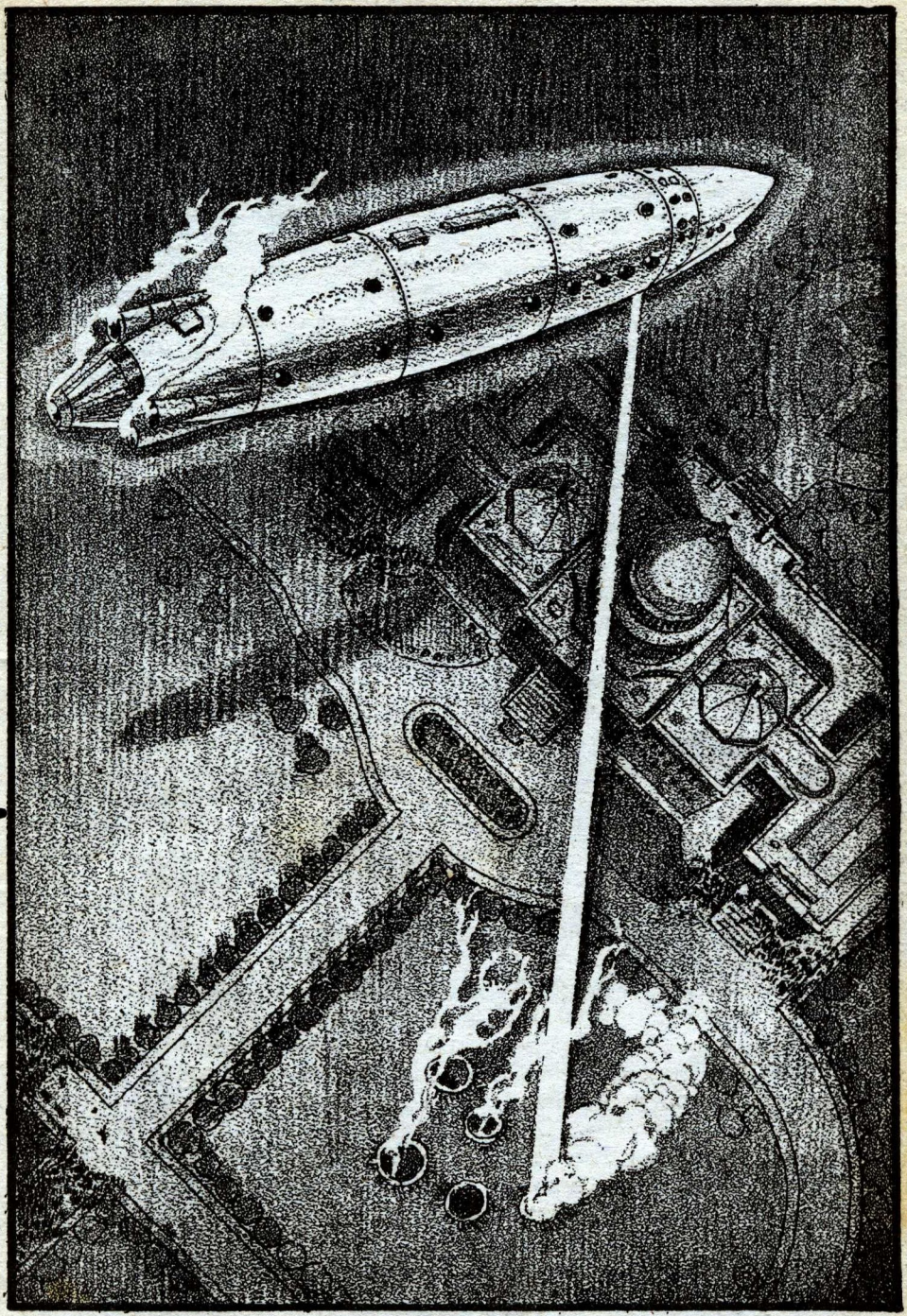
The man, young in years, age-old in knowledge, smiled faintly. "Just a matter of degree. To a Roman army, the possessor of a machine gun would have been a god of power. To a puttering alchemist of the fifteenth century, a modern chemist would be a magician. To this world, I—or rather, what your father made it possible for me to be—am omnipotent, because I am a century ahead in thought and science. Yet it is but atomic power that gives me such destructive ability. A long-suspected, long-sought-after, scientific secret. It is child's play, almost, to impress the world of to-day with such a revolutionary discovery."

AS their ship dropped from the upper stratosphere down to the wide bosom of the Pacific, a cloud of smoke appeared to one side of the island on which Manila was situated. Renolf started. Then he saw the livid red streaks of booming cannon in the pall. He exclaimed aloud, unbelievingly, for the two fleets were at war!

Japan had attacked, seeing a chance to take the Philippines and cripple the American fleet at the same time. The fanatic officials had shrugged away the suggestion that the Benefactor would be angry. The Benefactor! Who was he? Some insane impostor who had hoaxed a whole world.

And the insane impostor darted over the watery arena vengefully. Then his violet ray, so unimpressive in its manner of discharge, unlike the roaring cannon, sang a silent song of power. The great capital ships, belching at one another from five miles, suddenly wallowed, one by one.

Frantic crews ceased their loading of



There was a thunderous noise of ten thousand boiling cauldrons of molten lava—and then a hole!

cannon. Figures swarmed to the decks in alarm. No shell had struck. That they knew for they would have felt its terrific impact all through the giant steel structure. Therefore it must be something else. Therefore it must be—the Benefactor!

Ten minutes after Renolf's arrival, the last cannon belched. Naval officers regarded each other in bewilderment. Nothing was wrong, yet the ships wallowed unpowered, helpless. They could not maneuver. Then a shout went up from every ship, as through the thinning smoke of battle was seen the dull-white ship of the Benefactor. His voice came soon after:

"Powers of the Pacific! You have done the one thing I least wanted—battled each other. For this your fleets should be destroyed. Yet I will not do that, because of the many innocent lives that would go down with the ships. Your punishment has been great as it is. I think you will find your engines badly damaged, perhaps wrecked. Those ships unaffected, for I spared several, will have to tow you in. The Benefactor is all-powerful, and merciful."

In their secluded home in the mountains, Renolf answered Dora calmly: "Theatrical? How else accomplish my aim? I must have world power. And then, when I have it, I must give it back—but under altered conditions. I must first lead the way to better things. Then the people of Earth must be allowed to carry on themselves.

"Only in that way can there be progress and content. Forced into better things, it would not last. But led to better things—that is the secret of it. As for being theatrical at first, it is unavoidable. Human nature looks with more of awe and respect on that which is ostentatious—on that which is done in a stupendous way."

The next day, despite everything, however, war clouds hung over the Pacific. Radio news items divided themselves between the Benefactor's doings, and the growing belligerency between Japan and America. For the Japanese had carelessly started a bombardment on Manila before the Benefactor had arrived to stop the duel of the fleets. The newest and mightiest of nations began to heave and mutter. Their national honor had been sullied. Japan must make reparations—that or fight.

Before a week had gone by, war was declared between the Pacific powers. Renolf spluttered aghast. "How can they fail to consider my say in the matter? Do they think I have been playing a game?"

It was Dora who saw the light. "No, Renolf. But it is what they consider a master move in diplomacy. You, the Benefactor, are obviously American to them, for you broadcast in English with American accent. Washington noticed that and——"

"I see!" exploded Renolf. Then his voice became calm: "A master move indeed! Being American, I must needs join in with the United States. They respect me as a power, but they credit me with their own narrow failings. My demonstration of supremacy they recognize, but my message—that they disregard!"

HE spent an hour in deep thought. Then he left in the ship, alone. Ten hours later Dora heard her lover's supervoice throb from the loud-speaker, for all the world to hear:

"People of Earth! The Benefactor has struck again. Forced by necessity, I have so crippled the fleets of Japan and the United States, that war is impossible. And for the benefit of Washington, remember that I salute no one flag. To correct false impressions, let me say that I am allied with no national power. I stand alone. And in my hand I have the power to subjugate Earth! I will use that power only as a means to

an end. Remember the world conference at Geneva!"

Renolf strode into the mountain lodge moodily, frowning.

"What did you do?" asked Dora. "Destroy the fleets and become a—murderer?"

"Of course not," returned Renolf, glancing at her sharply. "Using the gas-collapser beam, I simply stopped their engines—like at Manila. Japan's fleet now wallows unpowered in mid-Pacific. The American fleet now clutters the Panama Canal like common débris. I do not destroy, for then I would be no better than they."

Dora hung her head at the rebuke. She had accused him without forethought. Secretly, she had feared his great power had gone to his head. Renolf, by his next words, proved he guessed her state of mind.

"Ruthlessness is generally a companion to great power, isn't it?"

"No, no, Renolf! I didn't mean——"

"But you did." Renolf was brutally frank. "Dictators, generals, captains of industry, kings—arise to positions of power through ruthlessness. And they exercise their supreme command without pity for whomever falls across their path. At present I am ruthless too. But I work to an end where it will be eliminated. If at any time my methods go against your grain, you may freely depart my service."

Dora faced him, eyes going hard. "That was unnecessary, Renolf. I am with you because I believe in you and in what you are doing. If I ever do quit you, you can know there is something radically wrong in what you are doing!"

She marched from the room, head held high. Vincent later was to remember, and commend her. And now even Renolf—the cold, hard, super-Renolf—followed her retreating figure with admiration in his eyes. Then his thoughts flew back to the Panama Canal scene. Somehow he had hated to do it. A vestige of throbbing patriotism had stayed his hands at the beam controls. He, an American, disabling his own country's naval fleet!

Then had come sanity again—insanity in the eyes of the world—and he had swung the beam nozzle. The gas-collapser beam had silently sprayed downward. It was an astounding thing. It caused all hot gases to instantly collapse, or simply, to cool. It affected nothing else, except that some of the sailors in line with the beam felt their lungs heave inward.

All the combustion engines instantaneously ceased working—not only ceased working, but also jammed so forcefully from back spin as to snap weaker parts. Whether Diesel engine or steam engine, they stopped. And hundreds of eyes had turned skyward and whispers had arisen, half in awe, half in anger: "The Benefactor!"

Japan and America, separated from each other's throats by an immense ocean, found themselves in a strange predicament. They had declared war—and were unable to carry it on! Without battleships, how could they land at each other's coasts, bombard and capture ports, and disembark troops? They couldn't even meet, ship against ship, in mid-ocean and have it out! Certain people all over the world smiled for days afterward. It was so ridiculous. Washington and Tokyo fumed and cursed, then prepared to send delegates to the Geneva Conference. The Benefactor had whipped them, and for fair!

Europe found herself in no less of a predicament. True, her five powers had their fleets yet. But only on condition, that was plain. What had happened to Japan's fleet could happen to Great Britain's. The latter nation felt herself the most outraged of all. Acknowledged mistress of the seas, what was she now? At the Benefactor's will, she could be stripped of her prestige. Long before the Geneva Conference

came about, European politics had become subtly changed. The great powers trembled.

And well they might. Renolf wanted them to more than tremble. He wanted them to shake in their boots. Controlling the destiny of the major portion of Earth's civilized population, he wanted them to feel their throne tottering. An Earth dominated by Europe, Japan, and America. And that combined power—ever at odds within itself—dominated by the Benefactor. What would be the outcome? A billion souls more or less asked that question. History, supreme history, in the making!

V.

THE Geneva Conference of 1940.

The League of Nations organization took preliminary matters in hand. Thousands of delegates, representing every prominent nation of Earth, were recorded and assigned living quarters. Even the smaller, little-heard-of countries and dependencies sent delegates. They, in fact, were eager to be represented. If the Benefactor stood by his intimated ideals, they would not be the losers. The world had been aroused—that fact was apparent.

The first day of the conference was disappointing—from a newspaper's point of view. At three o'clock in the afternoon the dull-white, tapered spheroid of the Benefactor dropped from the clouds. It positioned itself over the League of Nations hall. Then from it came a giant radio voice. The officials, prepared for this, had had suitable loudspeakers distributed throughout the room.

"Delegates of Earth's nations! The Benefactor greets you! In the past three weeks I have demonstrated my invincible right to be a power above all powers. I have outlawed war—and I shall not rest till all war machinery is completely abandoned or destroyed. In my previous short speeches I have hinted at a new order. I have promised world betterment. That cannot be done till war is put behind us as a relic of a misguided past.

"Therefore, to-morrow this conference will lay its first plans to completely demobilize Earth. I shall be here again at three o'clock. For the rest of this day, you delegates may make any preparations necessary for to-morrow's work."

That was all. In keeping with his previous activity, the Benefactor had spoken only the words necessary to carry his point. It was no oratory, no campaigning, no flowery speech to stir emotion. Yet every word sank into the listener's brain like flaming meteors into a lake. They were words to be pondered, to be respected.

The second day of the conference left the world gasping. The Benefactor, from high in the air, delivered his first long speech. For three hours he spoke, his thunderous voice booming over the delegates like a god's voice. Every one who heard was amazed—not at the portent of his speech alone, but at the surprising lucidity of his statements. Statesmen, prepared to hear the idealistic frothings of a Utopist, hung their jaws at the searching clarity of the speech. No idealist's vain rantings, this!

In substance, the speech outlined a vast but comprehensive program of disarmament. A central committee was to be elected to superintend details. The members to be elected from among the delegates, and no more than one member from a country. They were to meet a week from then in person with the Benefactor, to begin their work—the work of demobilization. And it was to be over in a month!

"I am back of this," concluded the Benefactor, "with all my power. The Disarmament Committee is to be supreme over any national government.

Any government resisting must answer to me. I will not take human life, but I will put an immediate stop to any resistance. Demobilization of Earth's total war machinery will begin everywhere on the world at once. A month from now it will be over. Then, people of Earth, will begin the New Order!"

Renolf spent the weeks between meetings searching through a vast pile of books which he had previously gathered. Books full of names; "Who's Who"; memberships of societies, fraternities, nation-wide and world-wide organizations. Their members were the cream of Earth's intellectual citizenry. Especially was there a preponderance of scientific societies.

Dora, her head swimming from typewritten listings of names, names, names, was amazed at Renolf's tremendous vitality and persistence. She went reeling to bed, usually at his insistence. He would be up out of bed before her, poring again through the books.

Sometimes she felt that it was not one man doing what he was doing. It was ten men—ten men in one. Sometimes she would have a spare minute to look at him. Was it Vincent she saw? A youthful face reflecting incredible wisdom. No, not Vincent, not her Vincent—this was another man, a creation of her father's vital research, an enlarged portion of human intelligence, a supreme giant among pygmies.

AT the meeting of the Disarmament Committee, the world looked for the first time on the mysterious Benefactor. If they had felt awe at his voice, his presence struck them like a blow. He radiated a subtle power and confidence that was inhuman. Despite his human appearance, it began to be whispered about that he was an extra-terrestrial being. His hat did not quite conceal a leather headband with little metal boxes at the sides of his head. About his middle was a broad belt with a series of inclosed metal cases in front and back.

Completely dominating the gathering, the Benefactor outlined in detail the demobilization program. The committee, now a dictatorial body, was to issue mandates to every armed nation or community. Guns and cannon were to be melted down. Airplanes, trucks, tanks, were to be converted into commercial use. And so on. The committee was empowered to appoint suitable deputies in every region of Earth. But the Benefactor was to pass upon all appointments, and on all methods of procedure.

"But suppose," asked one delegate finally, when the Benefactor called for open-floor discussion, "suppose the world, as one, refuses to disarm! What then?'

The Benefactor smiled shortly. "I leave that to the masses. Those who at the beating of drums must leave home and peace and fight a war that means nothing to them. Let a government refuse to disarm when its citizenry sees, at last, a warless world!"

It was an amazing point of view, especially to men of politics and government. Thousands of men, hearing this by world-wide broadcast, shook their heads dubiously. But millions of people, those who really were the world, leaped to their feet, tears of gratitude in their eyes that at last they had a true champion for their right to live in peace.

It was just before the conference ended that the inevitable happened. There was the sharp crack of pistol shots. A wild-eyed man stood with the smoking gun empty in his hands. Ten feet from him, on the speakers' stage, was his target. A man high in diplomatic circles, he had surreptitiously threaded his way forward during the eager crowding around the platform.

He looked now dumbly, first at his emptied gun, then toward the man at whom he had shot. But the Benefactor,

target of a dozen heavy automatic slugs, smiled at him. The would-be assassin was led away in a great silence. The Benefactor spoke, pointing to the belt around his waist and the metal cases. "I am not harmed. I am protected by an invisible screen that turns aside material objects, just as my ship is. Only my hands are free. But you cannot assassinate me by shooting or stabbing my hands!"

He walked away in a turmoil of excited buzzing.

AND AGAIN the inevitable happened. Inevitable because human nature does not accept, until forced to, things it has been told. Russia refused to disarm. A dictatorial government kept its rigid leash on its subjects and defied the Benefactor. Troops were immediately marched borderward to resist invasion. The Russian diplomats rubbed hands in glee. He, the Benefactor, had vowed not to destroy human life. How then could he defeat their armies?

They rubbed their hands in glee only a few hours. Then their hands trembled so that they could not be rubbed. For reports came in that every army of theirs had been stricken with cramps. Cramps? Something like it. All the soldiers in any one unit had suddenly fallen to the ground. Then they had doubled up, moaning. They had recovered in a few hours. Having no more fight in them, at the next town they had meekly surrendered their arms to deputies of the Disarmament Committee. Russia was stripped of her lethal weapons just as quickly as all other nations.

Renolf permitted himself a short chuckle. He fondled the handle of his gas-collapser projector. "You see," he said to Dora, as their ship sped away after the last of the Russian armies had been taken care of, "a man whose lungs suddenly squeeze together as though having been struck in the chest by a pile driver, is in no condition to keep marching to the battlefield!"

The day before the tempestuous month of Earth's demobilization was over, Renolf summarized for Dora the state of affairs.

"We have succeeded in the first part of our program. Step One has been completed. Earth is unarmed, unable to shed its own blood. At the same time, we, as the Benefactor, have gained unquestioned control of government. The Benefactor is recognized as an invincible power.

"Now, as I've mentioned before, Step Two is to begin a campaign of world betterment. But not only that. We must also gain the good will of Earth's vast hordes. What are governments, dictators, ruling powers after all? Artificial things set up to be knocked down sooner or later. The abiding thing, the everlasting thing, is—humanity! We must convince humanity, as a whole, that the Benefactor is for them, working for their good. Perhaps a good part of humanity already has faith in the Benefactor. But not until all are sided with us can we forge ahead.

"It is a titanic program. And it will produce titanic results. Results that will profoundly affect the future of mankind on this Earth. A world united—in brotherhood! No longer segregated, partitioned, antagonistic, jealous—but unified in purpose and aim!"

Dora, listening, thrilled to Renolf's use of the pronoun "we." In the past month he had come to refer to everything as "our." But it was as nothing to the thrill of having him suddenly tear off his headband and ask, in his normal, nonsuper, voice: "Well, darling girl, how have I done?"

Almost every day he had done that, but the ecstasy was always new to the girl. The ecstasy of clinging to him, kissing him, answering him: "Splendidly, Vince! Just as you should have!"

Then, because the super-Renolf drove

him so strenuously, there was always his sudden yawn, the tired droop of his eyes, and he would dash off to bed. But this day before the finale of Earth's complete frisking, he lingered to add a few words.

"Dora, it's going great! But lord! The task left for us yet! And till that task is done, loved one, we must go on as we have. The Benefactor, my superself, would not have it otherwise. And he has dominated me as fully as he has dominated Earth."

"But, Vince!" protested the girl poutingly, in a tone of voice she would not have dared use to the super-Renolf. "How long will that take? How long must you and I wait before the Benefactor will let us—get married?"

Vincent shook his head slowly. "Hard telling. Even he does not know that. As a good guess, at least three years."

"Three years!" Dora repeated in dismay. She looked in her lover's eyes, but he turned away.

At the door, he spoke over his shoulder: "Just let's pretend that we are nothing to each other. You are my secretary. It will be easier that way, won't it?"

The girl nodded dumbly.

VI.

THOSE THREE YEARS brought a great change over Earth. Traditionally a world of much unhappiness, bloodshed, and misadjustment, it heaved mightily; and the leopard changed its spots. Under the leadership of a superman, it corrected its most glaring faults. There had been resistance at first. Human nature instinctively opposes alteration. The Benefactor had had to exercise his program under threat at first. He had had to harp continuously that there was no choice. Willy-nilly, the Earth must do as he bid.

Then, gradually, there had built around him a nucleus of intellectual savants who saw the trend of his epochal work. The group had grown. From the lists of the intelligentsia compiled by Dora and himself, the Benefactor had conscripted brilliant minds to his side. They came, they saw, and they were conquered. Not by the terrific might of the Benefactor, but by his ideals—ideals that were practical.

Not many months after the disarmament, the Benefactor had welded his followers into an overseeing body. Like a perfect machine, it began its work. Several nations had been commandeered to aid materially. The rest had voluntarily subscribed.

That was the first sign of success. Before the three years had passed, national identity had lost itself in the new world spirit. And when he felt they were ready for it, the Benefactor blew the dust from his laboratory notebooks and spread among humanity a myriad of blessings—material blessings that worked hand in hand with the new world spirit to make life for all, even the lowliest, saner and happier.

The Benefactor gave his all. He had pushed the world ahead of what it would have been. He led the way to greater things. Gave his all—except two things.

One was the secret of his genius. Second was intra-atomic power. The first he withheld, fearing other men, given his godlike power, might become despotic and plunge the world into chaos. Dr. Hartwell had warned him against that. The second he kept secret, because with it man could leave the Earth and soar into the interplanetary voids.

"They are not ready for it," explained Renolf to Dora. "The adjustment to the New Order is still going on, will go on for perhaps generations. To suddenly open the way to other worlds would be disastrous—like a child, learning his lessons, suddenly given a magic

vehicle with which it may go to fairyland. The lessons would be promptly dropped, with not very wholesome results."

IT WAS 1943, and the third anniversary of the Geneva Conference.

The Benefactor, now universally accepted in name, stood before a select group of Earth's new leaders. In that same hall where he had first commanded the disarmament of a world, he stood before thousands of faces. Three years ago those faces had been frankly skeptical, even hostile. Had been skeptical of this self-named dictator's ability to change a world for the better. But now they were eager faces, and openly reverent.

"People of Earth!" began the Benefactor, his voice vibrating into a microphone that would carry his words to every nook of the world. "Three years ago the Benefactor came before the people of Earth, promising a New Order. With an irresistible power at hand, he was able to force himself upon the scene and dictate as he wished. But he was vowed to better Earth, and not plunder it for his own glorification. I leave it to you that he has not betrayed his trust."

A mighty roar of applause went up from the ocean of faces. And the unheard adulation of millions of listeners seemed to throb through the atmosphere. For a moment Renolf—even the super-Renolf—felt his heart beat in a thrill of ecstasy. Then he went on, calmly:

"But now the time has come when I, having accomplished my aim through force, must relinquish the reins. I have been a veritable dictator. Such I do not wish to remain. Forceful rule is a thing of the past. But I am not afraid to leave the Earth to itself now. Welded into one unit, this world is sufficient unto itself. You have a governing system that should withstand any of the unforeseen blows of fate. I leave you, people of Earth, to your own destiny!"

Renolf left amid a deafening applause, and with his leaving the Benefactor disappeared from human affairs. Once more Earth was to hear of the Benefactor, but under circumstances strange indeed——

IN their mountain home, Vincent and Dora faced one another. Renolf removed his headband. His young and handsome face lost the superinduced look of great wisdom with its removal. He was just a man, full of life and vigor. He suddenly pulled her to him in silent adoration.

Dora struggled out of his arms. "What do you want?"

"Come on, darling, we're going to get married!" Vincent cried joyfully. "Quietly, secretly. Some place where no one will suspect who we are. You heard my speech of farewell, didn't you? The Benefactor's work is over. We're free!"

But Dora's face did not light up in joy. She stood there woodenly. Then she arched her brows superciliously. "And who said I would marry you?"

"Why—why—Dora! What's this all about?" Vincent made an instinctive gesture to his forehead to make sure the headband was off. "Surely you aren't serious! What—what——"

Dora smiled disdainfully. "Well, after all, you haven't asked me yet!"

"Asked you!" repeated Vincent dumbly.

"Yes, it's customary for a man to ask a girl if she will marry him. Do you think just because you've been with your world reforming for so long, you can just grab my hand and rush me to a minister? Why, you haven't even courted me!"

Quite suddenly Vincent saw a twinkle of amusement in Dora's eye. She turned quickly, hiding it, but it was too late. Next moment she was crushed in his strong arms.

"Will you marry me then?"

The girl's answering articulation was mostly a sob.

A few minutes later they sat down. "I guess I'll make a decent husband at that," said Vincent. "Even though I have been a superman. And, darling, I've thought of a splendid sort of honeymoon."

"What, Vince?"

"We'll go out among the stars! Our ship is a space ship, you know. I had it built with that original purpose in mind. There are mysteries out there—mysteries that tortured me more than once as the super-Renolf. The menace that has impinged itself many times on my mind while I wore the headband—what and where is it? Why is Mars a dead world? Why is all the solar system dead except Earth? Because other civilizations must have discovered intra-atomic power at some time or another. Why, then, have they never visited Earth? Why do they not visit Earth now, if they are not all dead! Such mysteries remain to be solved in the void."

"What a honeymoon!" interposed the girl pragmatically. "Searching for lost civilizations on dead worlds!"

"But we shall be all alone, more alone than any couple has ever been. And that is the epitome of honeymoons, isn't it, loved one?"

"Yes, Vince!" Dora sighed in affirmation.

VII.

SATURN, ringed beauty of space, loomed already the size of a rosy sun. For a month their ship, christened the *Comet,* had flung away from Earth. With atomic propulsors flaming powerfully, leaving behind an incredible streamer of glowing sparks, it must have indeed resembled its namesake. Like an arrow of Sun fire, it plunged with mad speed through the interplanetary void. Man's first journey in the unknown ether lanes!

In their ship, designed by the superhuman genius of Dr. Hartwell's ten-brain unit working through Vincent Renolf, the two Earthlings were perfectly comfortable and safe. Dora gazed about the somewhat narrow confines of the *Comet's* fore cabin with a supreme happiness. It was all so dear to her. Would be dear to her memory for the rest of her life. The epitome of all honeymoons! Alone—incontestably alone—in a man-made contrivance hurtling in the empty cosmos. And love had made the harsh metallicness seem the tender caress of soft wool, had relegated the soul-awing visions of midnight into blessed dreams of a fairyland, had even muted the constant thunder of the atomic engines into a lullaby for their peaceful sleep.

Four weeks of celestial happiness. But with Saturn looming large, Dora asked the first concrete question that had come to her mind since they had left Earth. "Tell me, Vince, just what do you have in mind? We are almost on Saturn. See there—its rings are already distinguishable as composed of innumerable small bodies."

The man nodded. "We'll be within his miniature planetary system in twenty hours. As to what we are doing here: Firstly, we are trying to trace down the mysterious emanations identified in my mind—and in your father's too when he heard them—as coming from a menace. Secondly, we're here to find out the mystery of what happens to extra-terrestrial civilization. A sort of two-part purpose.

"Since my best efforts to trace the source of the emanations failed, I don't know where to look first. Rather odd that the signals burn out any sort of apparatus as delicate as a direction finder, but they do. So we will hope to run across the source—what we call the menace for lack of knowledge about it

—in exploring the planets to find out why their rational life has vanished so inexplicably."

Perplexed, the girl stared at him. "Why is that such a mystery? When a planet ages and loses its water and air, and its inner heat too, so that it is nothing but a lifeless husk, how can you expect the race populating it to survive?"

Renolf agreed in a rather puzzled way. "Yes, that's logical. Very logical. In fact, that must be the answer. Yet, somehow, before we left Earth, I had other ideas about it. Ideas that made it seem unreasonable for worlds to bury their own cultures. Those other ideas, have I lost them, or——"

Suddenly Vincent arose. He stepped heavily and moved ponderously toward a number of cupboards hung on one wall of the cabin. Their deceleration supplied them with three times normal gravity. In their laterally situated cabin, it acted as a floor attraction. That amount of gravity would have been detrimental in their life on Earth. But here in the space ship, it exercised and put strain upon muscles that might otherwise have begun to atrophy from little use. It made a splendid balance between their actual inactivity and the involuntary use of their muscular system to withstand such a force.

DORA watched him. She saw him rummage for a moment. Then he drew away. In his hand he held a leather band which carried opposite each end two small boxes of metal. In those boxes was an intricacy of miniature apparatus more complicated than that of a seventeen-jewel watch. They were receptors for a new kind of radiation —infinitely sensitive. A product of the super-Renolf's hyper-human scientific genius. At the other end of the radiation was a buried unit of ten-undying—yet dead—brains—ten masterful brains which worked as one in the mind of the man wearing the headband.

Vincent fumbled with the headband, the triple gravity making his fingers clumsy. Suddenly Dora, who had sat quiet, rose and faced him. "You are going to put it on?"

"Yes, of course. You see, honey, those ideas I had regarding the mystery of lost civilizations came to me while I had the headband on. I must put it on again and find out what they are."

"But, Vince!" The young wife's voice held a note of uneasiness. "It hasn't been for a month now that you've had it on. Do you remember our agreement?"

"Of course, vixen," he bantered. "For eight hours by the chronometer I'm yours. For eight hours I'm his. The rest of the traditional twenty-four hours of a day being for sleep, when I'm nobody's. How's that suit her royal highness?"

Then Vincent slipped on the headband and slipped over the tiny catch switches which opened the receptors. From across the tremendous gulf of frigid space came the superswift radiations from Earth. Carrying the memory sensations of the ten-brain unit, they brought to Renolf an incalculable wisdom.

Dora turned her face away. She did not care to see again the weird metamorphosis which changed her husband from a common mortal to a creature of inestimable lore. The bliss of their honeymoon was over. From now on they would have to put up with a third party. In her most secret heart, Dora sometimes wished her father had failed or——

Renolf spent a long half hour in moody thought. A process of new thought as far above ordinary thought as the reasoning of a man is above the ruminations of a clever dog. Dora occupied herself with gazing out upon the eerie mystery of the star-spangled

void. At first it had been awesome and frightening, horrifying in its brooding depth, terrifying in its aching emptiness. They had seemed to drift enchanted in an endless nightmare of spotted midnight. It gave the impression of life swiftly ebbing away in a titanic cauldron of timelessness and endlessness. Those first few days Dora had not dared to look too long at one time into the awful face of eternity.

Then it had changed. Familiarity breeds, if not contempt, at least callousness. And when the asteroids had swung beneath them—cold, barren rocks fulfilling an ancient destiny—Dora had gazed at them eagerly. Later, when Jupiter had enlarged to an orange, before dwindling again, Dora was a devout neophyte of the space ways. It would have suited her by then to head for the nearest star.

SUDDENLY, Dora started. The super-Renolf's emotionless, somber voice was ringing in her ears:

"The mystery of the solar system's lost civilizations! Let me explain. Organic life, as we know it in our chemistry, springs up on a planet when that body is propitious for life. Certain conditions—temperature, atmosphere, amount of received radiation—when coming together, stir the pot of creation. From this crucible of Nature's laboratory fly the sparks of organic life—the only kind of life possible in our conception, and in this kind of system of planets. Perhaps, on planets circling other, stranger suns, there are other kinds of animate life. But to us they would be utterly alien, subject to a totally different set of conditions.

"In our little Sun system, then, only organic life, as we know it on Earth, can arise. Yet it was possible for it to conceive itself on other bodies besides Earth. In fact, the only limiting conditions are that the body must be large enough to hold a fairly adequate atmosphere, and they must not be too far from the central Sun.

"The asteroids, and most of the planetary satellites, are thus too small to have ever blown a protective and life-giving atmosphere over a budding form of life. Possibly they have sparse and undeveloped forms of vegetable life, but not more.

"The rest of the bodies of the solar system have either been unable to produce life because of certain major deficiencies, or have nurtured an evolution, or will in the future do so. Pluto, Neptune, Uranus, and their satellites—and possible trans-Plutonian bodies—are dead, always have been, and always will be. They are too far out in chilling, deathly space, too far from the Sun. For one requisite of organic life is the radiation of the central luminary.

"The moons of Saturn and Jupiter, however, though remote from the Sun, can conceivably have produced organic life. Those two giant planets themselves radiate a tremendous amount of heat and light and ultra-violet radiation—proxy suns, in plain words. Enough to duplicate life-promotive energy forces. They themselves, the parent planets, are in the category of future abodes of life, when they have cooled and become solid.

"Saturn, by its density measurement, is hardly more than a yellow-hot mass of molten liquids. Jupiter is semisolid, but also partially liquid, as is proved by the fact that its equatorial regions rotate faster than its poles.

"But the moons of these two great planets cooled down ages ago. Of Saturn's ten moons, only three are of sufficient size to warrant considering them as having had an atmosphere. They are Rhea and Iapetus, both smaller than Earth's Moon, and Titan, larger than our Moon. Of Jupiter's nine moons, four are of a size capable of sustaining a breathable air envelope: Ganymede, larger than Mercury; Callisto, as

large as Mercury; Io, equal to Earth's Moon; and Europa, somewhat smaller.

"Those seven bodies of the solar system, plus Mars, Earth's Moon, Venus, and Mercury, make up the list of heavenly orbs on which organic life has been, or still is, possible. Of that group, Venus and Earth are in the most propitious condition at present. Venus should be inhabited, as Earth is. All the other bodies mentioned have passed through the propitious and evolutionary stage ages—eons—ago.

"I can picture from imagination a most glorious picture. Move time backward, say a few million years. Earth was but a steaming jungle, starting its evolutionary tableau. Rhea, Iapetus, Titan, Io and our Earth's Moon, were in the mellow twilight of a long age of sentient life. Mars, Ganymede, and Callisto—perhaps Mercury, on its night side—were perhaps in the period of intelligence's uprise, as man on Earth is now—simultaneous civilizations, not so far removed in degree. Doubtless they had interplanetary communication. Perhaps they existed together for a time as a great kingdom. No one knows.

"But now the mystery of it. Earth to-day harbors rational life, in a period when only one other body is in its prime —Venus. Yet what happened to those previous races of thinking creatures?"

The question hung in the air of the cabin, an enigma as mysterious as the brooding mysteries of space.

Dora essayed no answer. She felt her words would be futile in the superman's mentality. But Renolf voiced her opinions for her.

"Their air grew thin. Their water vanished into the parched greediness of space. Their parent worlds grew cold and harsh to warmth-needing life. Such is the apparent answer. But it is no true answer!

"For think once, in the ages of existence left to mankind on Earth before our planet becomes as Mars is, will he not arise to a position supreme above Nature? Should not his science, already creating wonders on Earth, become a mighty thing indeed in another million years? So mighty that it would be laughably easy to produce artificial heat and air and food? And what more does organic life need to exist? Let the parent planet die—man would then be sufficient by his own powers.

"Accordingly, there is one of two answers. Either those planets mentioned still support intelligent life—a result of their evolution—or for some unfathomable reason each civilization died off. The answer"—Renolf pointed to Saturn looming large—"may lie there. We will find it by visiting, in turn, each of the planets which may have sheltered rational life at one time or another. I have picked Saturn first because I wished merely to work from the outermost planet sunward."

The cabin of the *Comet* fell to silence. But a silence filled with the brooding of a superbrain. A multiple brain struggling with titanic, age-old secrets. Renolf wanted to wrest from the eternal void its most cherished mysteries. Would the super-Renolf succeed in even scratching at the door to that room of hidden things jealously guarded by hoary time and ageless space? And the mysterious, whispering menace—where was it lurking?

VIII.

SATURN'S largest moon belched out of space like a colossal cannon ball. At the controls, Renolf sent the *Comet* in a narrowing spiral around it. Then he lowered the craft till it skimmed over mountains worn flat by ceaseless atmospheric erosion. An apparatus, at the flick of his finger, automatically analyzed the outside air for density and constitution. Renolf read the results aloud:

"Density very low, one-half millimeter. Less than one thousandth of

Earth's. Which is to be expected. Countless eons of time have elapsed since cooling. Gas molecules obey no master—they wander into the void. Analysis of what is here shows a preponderance of oxygen. Perhaps five million years ago the pressure was, say, eighty millimeters—one tenth Earth's.

"Animate creatures, then, with very large lung capacity, or else a correspondingly slower metabolism, perhaps existed. That the atmosphere was at that time mainly oxygen is a foregone conclusion. In fact, every planet's atmosphere, when the crust has hardened, must be largely, or partly, oxygen.

"In some of my laboratory work on Earth, I found proof more than once that the oxygen atom is one of the most stable of them all. It is natural that the primal balls of blue-hot molten matter, which are the birth forms of planets, produce in their interior under stupendous pressure and heat a great deal of the stable oxygen atom. The bulk of it then combines chemically with solid matter upon cooling. The remainder—and there always is some left—makes up part of the atmosphere."

Below them the desolate landscape of a dead world drifted by: time-worn mountains, gasping lake and river beds, rolling hollows where once oceans spewed dancing whitecaps, livid rents betokening some great upheaval—such was Titan. And where were the signs of former civilization? Were they already lost in the limbo of racing time?

Suddenly Dora pointed downward with a tremulous cry. Renolf spun the *Comet* back and around. They stared eagerly. But it was nothing more than a dozen crumbly stone walls, almost level with the ground. Renolf switched on the nonferrous magnetism engine, which, producing diamagnetism, held the ship repulsed above ground. Then, with the gentlest of rear rocket jets, he maneuvered the *Comet* all around the spot.

It had obviously been a stone building. Probably as large in extent as an Earthly castle. Lichen-covered, round-edged, the ruins cried aloud their tremendous age. The obliterating hand of inexorable Time had all but puffed it away.

"An antiquity," commented Renolf as he shot the *Comet* away, "to which Earth's recorded history is a mere snap of the fingers."

They went on in the dismal barrenness. Up above giant Saturn, with his rings turned edgewise, hovered eternally. Titan turned but one face to the parent planet, like Mercury to the Sun. In a bath of lurid yellow, they saw, after that, several more of the stone ruins. Some were extensive, suggesting the former site of a small city.

"These must be the relics of a very early civilization, preserved after the rapid loss of air and water—which are Nature's destructive tools. And unless something unforseen happened, there should be much newer remains, of a grander, later civilization."

Dora was first again to see and point. Renolf looked. His eyes sparkled. He brought the ship hovering. Like a great transparent eggshell, a large hemispherical structure squatted incongruously in the desolateness. It was totally out of place—a flower in a desert, a radio in a Neaederthal Man's cave. It was truly Cyclopean. In diameter it could not have been less than five miles—and perfectly transparent!

Renolf sucked in his breath. "There we have it! Rational life totally shielded from Nature, absolutely independent of the outside. Air, food, water, heat—all produced within, by an incredible science!"

Dora's eyes widened. "Could there be people—beings in there now?"

The man shook his head. "No. See—the transparent protective dome is riddled here and there, probably by

meteors. At one time they must have had a subsidiary screen or force to demolish meteors, which on a thin-aired planet such as this is a constant menace. No, it is a tomb—a vast coffin. Despite the apparent newness of the thing, it is probably ages old. Just think what a marvelous substance that dome is made of. Eternities have failed to crumble or corrode it!"

SUDDENLY Renolf darted the *Comet* downward. Dora looked at him in bewilderment. Then she saw what he was up to. They were dropping toward a particularly large hole in the hemisphere. With the magical control of diamagnetism, Renolf slid the ship easily through the meteoric rent. He coasted the *Comet* slowly over the structures below the huge dome.

What had seemed to be an orderly arrangement of well-kept buildings from outside, now revealed itself as the jumble of a dilapidation. It was a junk heap. Here and there a tower of leaning metal stood freakishly upright. The rest was leveled, shattered, crumbled. In places, where walls had fallen away, were mazes of cracked machinery.

"Yet it is a tribute to their advancement," spoke Renolf, "that even this remains. Here, at least, they had metals and building materials that have withstood the ravages of time, the disintegrator. This represents, without doubt, Titan's latest and most evolutionized civilization."

"And the—people?" asked Dora in a hushed voice.

Renolf's eyes became bleak. "Scattered to dust, to atoms—millenniums ago. But the mystery of it!" His voice stirred from its calm apathy: "The mystery of their tame disappearance. Why did they not live on? What conceivable catastrophe could have killed them off? Even the mightiest of earthquakes, tidal waves, cannot totally extinguish a race as obviously highly advanced as this!"

"Isn't it possible," interposed Dora, "that they migrated to another planet?"

"Possible, but not probable," returned Renolf deprecatingly. "Independent of Nature for substance, they would have no incentive to go through the extreme trouble of migrating to another world. At the time Titan here was at its glory, so were all the other habitable worlds—Jupiter's four great moons, our Earthly Moon, and Mercury. Why should they move to other dying worlds? And to move to a young one—like Mars, Earth at that time—it would have been more trouble than it was worth."

Renolf brooded a moment, then continued: "No, all things point to the logical premise that once firmly established on their own native world, free of extraneous conditions, they would remain. Like gods they must have been, defying death to their race, even though their birth planet had long since ceased to give them sustenance. Then—yes, then what? Why had death won at the last?"

With this unanswered query echoing in the cabin, Renolf dabbed at the controls of the *Comet*. Like a silvery bullet, the ship soared up and away from death-haunted Titan. The glasslike hemisphere remained visible to the last. It shone in the Saturn light like a jewel—a jewel whose heart had bled white ages before.

Rhea, the second largest of Saturn's moons, was much closer to the ringed planet. But it was very small, a midget to even Earth's Moon. Renolf pursed his lips at the density reading. It was so tiny that even in its prime it could not have been a hundredth of Earth's.

"Yet it has a high percentage of oxygen," commented Renolf. "And to creatures of a huge lung capacity, in combination with a low metabolism rate, it might have been sufficient to support life. An animate life of pos-

sibly dragging tempo to Earthly senses. They might have been sluggish creatures—slow and ponderous in movement, slower than even snails. But they could have risen to an intellectual peak just as high as anywhere else, given time. And of that, Heaven knows, they had plenty."

IT WAS with something of a shock that they found on little Rhea transparent hemispherical domes exactly similar to those of Titan. As though it was a cosmic type of mushroom that had blown from planet to planet. Renolf guided the ship down below the dome through a convenient hole. His interest had risen to fever pitch. Dora looked at him with something of a vindicated air. Plainly, it came to her, the people of Titan had migrated.

Then Renolf's voice shattered her thoughts. "No, not the same after all. The dome is the same, yes, suggesting that the two races had intercommunication, and exchanged certain things. But the architecture—see that bulbous, punctured metal-tiered thing, for instance. Radically, utterly different from the slim towers of Titan's race. And the walls—notice they are decorated with tinted reliefs. Titan's walls were barren, harsh, in comparison. These people had a highly developed artistry. Those of Titan either had not, or had discarded it in some stage of their evolution."

Renolf was right; Dora could see. Even her less keen perceptions told her that. "But is it possible," she spoke defiantly, "that part of Titan's peoples moved here, developing a different architecture?"

Renolf smiled, whether in scorn or silent agreement, the girl could not tell. Then he plunged the ship into the void again. This time they swung past Saturn, above his rings, and swept far out into space. When the huge planet had dwindled to a moon-sized ball of yellow agate, another small satellite hove into view. Iapetus, about Rhea's size, was more than two million miles from the body it revolved around!

Though similar in most respects to the last satellite they had visited, they sought in vain for signs of former life. Dora wearied of the endless peering and began reading. She looked up hours later to find Renolf staring perplexedly downward.

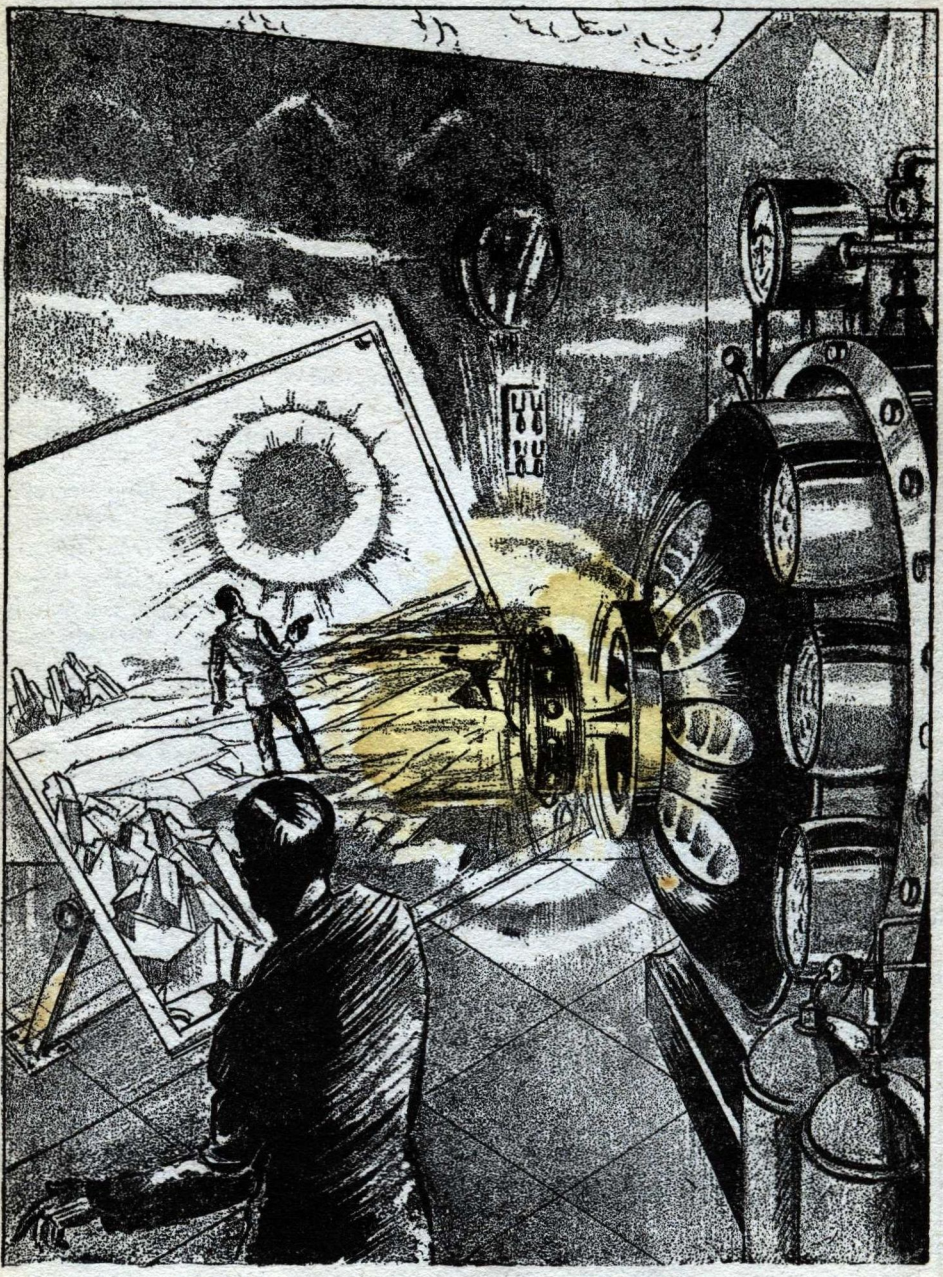
"Strange," he said, catching her eye. "Yet the solution must lie in the fact that this body lies so far from Saturn. With the meager actinic radiation it gets from the Sun and from Saturn, it simply wasn't able to support a thriving evolution. A starved wastrel. An abortive world. I can throw it in the category of the asteroids."

Dora stretched. Then the clock, a large one, chimed an hour. Renolf looked at it and then at the girl. Without a word he removed his headband. In another moment he was kissing his young wife passionately. It was the eight-hour period in which he belonged to her.

To be concluded.

The Cosmo-Trap

by D. L. James



"You fool!" I yelled. "You damned fool—come back here!"

ARGON?

Yes, I think it is argon—or possibly krypton or nitron.

Of one thing, at least I am sure—it is one of the so-called "noble gases" which were thought to be inert until disproved by Booth a year ago.

These reporters burn me up! Such silly, insinuating questions: Do I think Voorland is dead? Am I planning to save him? Could not the whole thing have been a cunning hoax?

Voorland was alive when I last saw him—very alive.

And I am staking everything on the chance that he is still alive. Surely, I wouldn't undergo these brain storms, in an attempt to rediscover and duplicate formulas and equipment, if I thought otherwise. Nor do I deserve any credit for making this attempt.

The truth is, I can't sleep comfortably at night from thinking of Voorland. So I must get him back because of purely selfish motives. Voorland is my friend, and without doubt I would try to help him anyway. But with the urge of insomnia the thing is imperative.

Now this argon—if it is argon—filled miles of hairlike glass tubes, wound on quartz cores in overlapping coils. These coils were mounted on a huge bronze disk that rotated at terrific speed in a field of magnetic stress at the common focuses of six one-ton electromagnets.

The above is, I think, a fair description of Voorland's primary apparatus, and I have offered it to a score of eminent physicists. After listening gravely and pondering deeply, they assure me that if such a crack-brained apparatus were to be assembled and demonstrated the result would be zero—or at least that no atomic disintegration sufficient to rip a hole in the fundamental secretæ of the universe could be expected.

And having theologized thus profoundly, they do nothing! Nothing at all!

Meanwhile, poor Voorland is waiting—and hoping.

So, in the short intervals that I spend outside the laboratory—those moments when I am supposed to sleep—I intend to write a full account of the entire affair, in the hope that some one with the necessary brains and initiative will help me pull my friend, Voorland, out of the hole he is in.

IT WAS on the second of March, nearly six months ago, that Voorland gave me a call on our experimental radiovision apparatus.

"Listen, Mac," he said, "come right up to the laboratory, will you?"

I threw in the vision switch. Voorland's face in the little fluorescent screen of the kinescope tube was filled with excitement; his gray eyes glittered, and a lock of hair was hanging neglected down over his forehead.

"What's wrong, Voorland?" I asked, noting his soiled shirt and crumpled collar. "You look—well, like you'd been rolling on the floor, or something."

"I'll explain later," he promised breathlessly. "Come right up, Mac."

"O. K." I agreed. "I'm practically there."

I suppose that Voorland is what would ordinarily be regarded as a rather odd character, although he had never thus impressed me. Two years previous he had purchased a tract of rough and worthless ground some ten miles from the little university town of Gainesville, and then had proceeded to carry on some building operations in a somewhat secret manner. I had known him since our days in college together, and to me he divulged the fact that he was preparing a place where he could carry on diverse research entirely undisturbed by outside distractions.

Voorland's laboratory, as he called it, was on top of a high hill in the center of his remote domain. It was a rather large building of brick. I was quite

familiar with it, for it had become Voorland's custom to summon me whenever he needed a bit of companionship. Any unusual experiment was deemed a sufficient reason. Nor did I ever note any tendency on his part to withhold essential facts—probably because he thought the chances of an obscure mathematician stealing his ideas was sufficiently improbable.

Slipping into a coat, for the air was raw and chilly—a typical winter's day for northern Florida, I took my car from the garage back of the university buildings, and was soon speeding northward.

Half an hour later I had entered through the gate in the high barbed-wire fence which completely inclosed Voorland's property. For a quarter of a mile farther the road ran through a dark cypress hammock interspersed with patches of scrub palmettoes, then circled up the slope of the hill toward the laboratory.

A tower of steel, perhaps sixty feet tall, on the roof of the building, caught my attention immediately. Here was something new, I thought, for it surely hadn't been there on my last visit. A square, boxlike structure occupied the apex of the tower, and I could see the thin rungs of a ladder leading upward from the roof of the building to it.

Parking my car in the usual place under some moss-festooned oaks near by, I approached the laboratory. Voorland met me at the door. He seemed to have calmed himself somewhat.

"Mac," he said, "this is a knock-out!"

"Spill it," I invited. "What new trick have you pulled off this time?"

"No trick," he said, smiling. "It's the real goods. Come in, Mac. You'll find it pretty warm in here. These transformers are rather overloaded."

THE AIR within the place was somewhat too warm for comfort, but not warm enough, I thought, to account for the drops of perspiration which were clinging to Voorland's face and bare arms.

"We'll go right up to the roof," he said, closing the door and locking it carefully behind me. "You noticed the tower?"

I nodded. "I'll say I did. What's it all about?"

"You ought to know," he answered impatiently. "It's what I mentioned this morning."

His words struck me as odd. The fact was that I hadn't talked with him that morning, nor had I seen him nor had a call from him for over a month past except the one I now came in answer to, and which had taken place less than an hour ago. However, I did not dwell on the subject.

Voorland led the way between a long line of benches littered with experimental apparatus, and up three flights of stairs to the roof. Above us reared the tower, a massive structure, heavily braced as if to support a considerable weight.

"Are you good at climbing?" asked Voorland.

"Go ahead," I told him.

As we climbed up that sixty-foot ladder I had opportunity to look about me, and appreciate just how great was the seclusion in which Voorland had buried himself. Even from this vantage point no human habitation could be seen. As far as appearances went, I thought, we might have been completely cut off from all civilization.

Raising a trapdoor in the floor of the boxlike structure which surmounted the tower, Voorland crawled through. I followed him.

The place was like a ceilingless room, completely open to the sky above, and perhaps thirty feet square.

"By jove!" I exclaimed, surveying the glittering mechanism which stood in

the center of the room. "What's all this?"

"This," said Voorland, "is what I've sweat blood over for several years back. I have just finished assembling the parts which were shipped in a month ago." His voice trembled slightly as he added: "Or I should say that I finished it a couple of hours past, and tried it out—twice. Once before I sent for you, once while I was waiting for you to come. I—I had to tell some one."

Now it is true that Voorland had explained to me, on numerous occasions, the object of his research. I knew that he held the view that gravity, light—in fact all manifestations depending on etheric stress of waves—indicate that space itself is filled with a very real substance far different from the accepted notion of a vacuum; and that if an actual vacuum were ever to be produced, the ether or space itself would necessarily have to be withdrawn or annihilated—leaving a perfect vacuum or hole in space. But just what it was that he expected of this present invention, I could not have told exactly.

"So you've had the thing working," I remarked, trying to avoid a complete disclosure of this vagueness of comprehension. Although I had never claimed to be a savant of artificial radioactivity, such as Voorland, I disliked the idea of admitting that the thing was a little out of my line. "Just what was the—er—upshot?"

Voorland was busily engaged in making certain adjustments about the apparatus.

"Watch," he advised laconically.

HE THREW in a switch on the wall, and immediately a large motor, which was part of the queer mechanism, came to life with a rising moan. A large horizontal disk, with equispaced nodules set about its periphery, began to revolve smoothly. A shrill whine mounted above the moan of the motor.

"Stand back," advised Voorland, grinning exultingly.

One by one, he adjusted the six huge magnets—as large as barrels—which were set in a circle around the disk. Soon the thing was a shimmering lake of orange flame.

Voorland laid aside the wrench he had been using.

"Now," he said, "we're ready to liberate a thing which cannot exist in three-dimensioned space. Consequently it drives back the ether or space, creating a perfect vacuum. Exactly what the stuff is, I'm not quite sure—a four-dimensional gas, I think. But I know what it will do."

"What?" I asked.

Without satisfying my curiosity, he directed me to approach a panel which was set in the wall.

"This valve," he explained, "controls the supply of gas to the tube coils. Notice the translator?"

He pointed toward a structure of metal which was standing near the machine I have already mentioned. It was somewhat like an overgrown picture frame. This frame, however, was quite empty, and was held in a slanting position facing the sky by struts or braces screwed to the floor.

"The atoms of gas," he continued, "after being twisted out of our space, travel along that conduit to the translator."

As he ceased speaking, he turned one of the controls on the panel.

Suddenly, the orange lake, which was the spinning disk, burst into a blinding glare of corusating flame. The steady moan of the motor deepened, became more labored.

A nimbus of lambent flame outlined the metal frame of the translator; flames of violet and amethyst raced along the conduit, which led from funnel-shaped cups at the periphery of the dazzling disk to one corner of the translator.

And the disk, itself, was a scintillating inferno of light.

Voorland was working carefully at the controls. Then, as if some critical adjustment had been attained, there came a clap like a flag whipping in a gale; and before our eyes, filling the vacancy in the translator flame, snapped a curtain of milky light, which blotted out the further wall of the laboratory with its phosphorescent glow.

Voorland was smiling triumphantly. "The translator screen," he explained.

The thing hung there—an opaque curtain of light—as unsubstantial as mist, yet creating a curious impression of solidity. From it came a silky hiss.

"It will clear up presently," said Voorland, giving his attention again to the controls.

And, even as he spoke, the milky radiance evaporated in wispy tendrils.

I gasped in astonishment.

NOW, in this flame-wreathed space hung a picture. At least I judged it to be a picture—but so vivid and brilliant was it, that for a moment I was half inclined to think that the scene depicted was real—was lying there, sun-drenched before me.

"By jove!" I exclaimed. "Such an illusion! Pal, you've solved the problem of visual depth in projection. Why, it looks real!"

Voorland laughed harshly.

I had spoken before realizing the strangeness of the scene spread before me. Then the utter wonder of it held me spellbound.

There appeared to be an undulating plain of leperous white in the foreground, stretching away for miles to the horizon. There it joined the dome of the sky—an infinitely remote inverted bowl of polished green jade—in which hung the sun, a corona-circled globe of bluish-white brilliance. To the left, a jumble of dark rocks hid the terrain beyond, casting still darker shadows athwart the foreground; and to the right, a jagged crack of ravine extended obliquely toward the horizon.

"Gosh!" I cried. "Is that some mad artist's attempt at futurism?"

Without answering, Voorland opened a steel locker in one corner of this aërial laboratory, and when he turned again toward me he was bearing a service pistol and a handful of cartridges. "Slip this into your pocket, Mac," he said; "I've got two—they might come in handy."

I looked at him in astonishment. Was he mad?

He was smiling grimly. "Snap out of it, Mac," he advised me. "Get wise—that's no picture."

"No picture!" I was trying to think of the most approved method of dealing with a madman. "What—what is it, then?"

"See those rocks—the big one, I mean, there at the end of the rabble?"

"Yes," I admitted, speaking in a very mild and soothing tone. "Yes, I see it perfectly."

"Well, I've been out there, an hour ago. Came back to get you. Thought you'd like to go along with me, Mac."

His gray eyes held mine for a moment. He didn't look crazy—and he certainly wasn't joking.

"You think I'm crazy," he declared. "Listen, Mac, I've opened a door—a door to the unknown. Out there is a world—a strange, new world. Here, before us, is the door leading to it. Right now the door is open. Want to come along? Or would you rather stop here?"

"You'll have to be more explicit," I answered, somewhat nettled. "This place—this world, as you call it—how can anybody get there? It's miles away, isn't it?"

"Mac," he said, "you surprise me. Don't you see what I've done? This stuff creates a perfect vacuum along its path. It's very directional—like a ray

—except that it extends in no three-spacial dimension; that's why I can keep it focused permanently on a moving object. What happens when you remove, or dissolve, the space between two objects?"

"Why," I answered, "that ought to bring them together."

"Exactly," he said. "Now watch."

As he spoke, Voorland was standing perhaps four feet from the translator, and directly in front of that sibilant, rustling curtain of strange forces. Before I sensed his intentions, he took a quick step forward, leaped into it—and vanished!

The thing was astonishing. To all appearances, he had vaulted into the sky.

NOT being an exceptionally quick-witted fellow, it took me some seconds to comprehend. Then, at last, I puzzled it out. Voorland was no longer with me there in that towerlike laboratory. But his path of removal had led along no accepted dimension of space. I was alone; and the thing was completely outside and beyond my understanding.

I looked again into the translator, at what I had dumbly thought to be a cleverly projected picture.

There, in it, was Voorland!

He seemed to be standing at a distance of perhaps thirty feet from me, in the brilliant shine of that ultraspacial luminary. He was turning slowly toward me. He saw me; and from the movement of his lips I knew that he was speaking, but I heard nothing of his voice. Something in his aspect reminded me of a slow-motion movie.

Then he beckoned me to join him.

Intrepidity is a quality I have always greatly admired—in other people. But I have found that if I am not to appear exactly the opposite I must act without too much forethought—all of which is just another way of saying that I would a hell of a lot rather have stayed where I was.

"You double-damned fool!" I yelled. "Come back here!"

Voorland gave no indication that he heard me. He had, in fact, turned, and was walking slowly away.

So, not being able on the spur of the moment to think of anything important enough to delay me, I jumped into the thing after him.

I was conscious of a slight bubbling sensation, and a twinge as of high-voltage current passing through my body. A queer sense of attenuation possessed me, as of being drawn out into an infinitely slender filament encompassing the cosmos. But the feeling was only momentary—and not as bad as I had anticipated.

A rush of air, blowing outward, hastened my departure; and the steady moan of the motor ceased to beat upon my ears with startling suddenness. But the passage was over within a breath, ending in a slight fall of perhaps six feet.

Silence, and a strange, unnatural scent in the air, met me as I landed with a thud on the ground—if it was ground—outside. The whole experience somehow reminded me of jumping out of a low window.

"Hey!" I yelled, scrambling to my feet.

Voorland stopped and turned toward me. "Come along," he invited, grinning. "Say—how do you like this place?"

"You half-wit! Don't you know any better——"

"Can it," he advised me laconically.

"But—where is this?"

"Right here—all around us."

"But——"

"How should I know?" He started walking again, toward the nearest jumble of rocks. "I could tell you where last week is, easier," he added, as I

stumbled along after him. "It's somewhere——"

"Somewhere!" I snorted. "Look here, you—don't you know——" I stopped, my thoughts rather hazy. "Look here, this ground—it's queer."

"Everything is queer—hadn't you noticed it?"

"It's not exactly—not soil, nor sand."

"Some sand," said Voorland, "and rocks."

"Not right here."

"No."

A thin, hot wind was blowing in our faces.

"Look here," I said hopefully, "there's air here to breathe. Couldn't this place be somewhere—er—near by?"

Voorland laughed shortly. "Depends on the way you look at it." He pointed toward that remote, encircling horizon. "Take a squint. Could such a place be on Earth?"

"But the sun," I reminded him, "there's the sun."

"Sun!" scoffed Voorland. "Does that look like our Sun?" He squinted through his fingers at that dazzling Hyperion which was beating down hotly upon us. "Don't you realize that this is a different universe—different cosmos—different natural laws—different everything?" He stopped suddenly, pointing to a huge rock that lay in our path. "There, that's the rock. This is as far as I've explored."

THE IDEA that he had been here before—the thought that he had ventured alone into this abnormal macrocosm—was somehow shocking. He was wiping his flushed face. Drops of perspiration running into my eyes reminded me of my own discomfort. I pulled off my coat. I must have dropped it there, for I cannot remember carrying it afterward. This, I thought, might be the Sahara; it was hot—hot!

Fear clutched me. I glanced warily around at that terribly silent terrain. No life. Nothing moved. No scudding clouds, no swaying grassy blades, no rustling leaf——

"How do we get back?" I whispered hoarsely.

"Same way we came," answered Voorland, "through the translator."

"But—where is it?"

"There," said he, pointing.

With my eyes, I followed the line of his extended arm. Three hundred yards away, poised in the air a few feet above the ground, was the opening through which we had come. At that distance it looked like a tiny, square mirror; and, vaguely, I could see, as if reflected in it, the spinning mechanism beyond.

"Listen," I said, "when I came through the thing, I felt a draft of air blowing this way. Did you notice it?"

Voorland was bending over, intently examining a small stone on the ground. "Through the translator? Hm-m-m, sure," he answered absently, "that's to be expected. Mac, look at this—did you ever see such perfect crystallization?" He was referring to the stone. "No evidence of erosion," he added.

"This ground," I said thoughtfully, "it's not silt—nor loam, nor clay."

"No, it doesn't appear to have been formed by the wearing down of rock. No erosive action. This rock, now, the corners are as sharp as needles."

"They're all that way," I remarked, looking around at this vast array of mineral fragments. Such a chaos of brute matter might well be the left-over material from the building of a universe. What a chance for a geologist! As far as I could see the rocks lay scattered, not in heaps, but spread out in irregular patches. The ground, as I have said, was rolling, consisting of alternate rounded hillock and depression.

A mile away yawned the crack, or

chasm, a shadow-filled gash, in vivid contrast to the brilliance thrown elsewhere by that flaming orb overhead.

Then I noticed a peculiarity in the distribution of jagged rock clusters. "These stones," I said, "have you noticed—they're all on the tops of the hillocks, none in the valleys between."

Voorland desisted from his close scrutiny of the rocks which were lying round about us. "That's right," he admitted after a moment of study. "Queer!"

"About that draft," I said suddenly, voicing a new and alarming thought, "when we go back, the air will be blowing against us, won't it?"

Voorland laughed. "No," he said, "you'll find that it's still blowing into the translator from this side, too. Quit fretting. This thing works both ways. Didn't I tell you I'd been here once before?"

"Twice," I corrected him.

"No," he said, "only once. I didn't come through the last time, merely tested it out to make some adjustments. The motor impressed me as being rather warm—too warm, that is, for such a short run."

"Look here," I said, "if that motor stops, where are we, then?"

Voorland seemed absolutely undisturbed. "Right here," he answered calmly, "for keeps."

"You damned crazy fool!" I fumed. "You're taking a chance like that?"

"It won't stop," he answered quietly.

"Don't you use the city power service?"

"Sure."

"And if the power goes off—— Say——"

"You rat!" Voorland's tone was suddenly biting. "Look about you! Don't you realize you've got a chance that no mortal man ever had before?"

HIS EYES were hot for a moment. Then, quickly, they cooled, and I knew that his mind had raced on to things which he, at least, considered more important.

"That scent," he mused, after a moment, "of what does it remind you?"

I sniffed the air. "It's like——" I paused, trying to recall an illusive memory.

Voorland was kicking the ground underfoot with the toe of his shoe. "That's odd," he said. "It's springy."

"Like rubber," I remarked.

"Or leather," he mused.

"Look here," I said suddenly, "let's go back. This thing's too much for us. Let's bring others, and——"

His hand on my arm silenced me. The look in his eyes was intent, yet strangely abstracted, as if he sensed something akin to sound. Presently, he spoke, to himself rather than to me: "There's nothing alive here," he mused. "No life——"

"No," I said, "just rocks—minerals."

"And yet, I seem to catch a suggestion——" He paused, and after an interval during which we stood staring about us, he added: "Let's explore that next little knoll over there."

So, for the next hour we roamed aimlessly about in that stark and silent place, the swollen sun beating relentlessly down upon us—and, moment by moment, a strange madness seemed to be growing within me.

"This whole thing's impossible," I muttered, "impossible, I tell you!"

"Shut up," said Voorland.

"It's a trap! A cursed trap, I tell you!"

But he paid little attention to me.

Then, as I trudged along after him, a sense, or feeling, that we were not alone came over me. It was not that I thought we were being spied upon, but rather that we were in the midst of a horde of thinking entities who absolutely ignored our presence.

Moment by moment, this impression

grew stronger, until, at last, the very air seemed to become thick with telepathic stimulus.

Then something moved!

I was walking close behind Voorland at the time. Suddenly he stopped—pointed.

With the queer waddling, or lopsided motion of a turtle—but much faster—the thing moved over the ground in front of us.

Before I could focus my eyes on it, it stopped.

"What is it?" I whispered, reaching for the pistol which Voorland had given me. Alas! I remembered having placed it in the outside pocket of my coat, and the coat was now—where?

Meanwhile, the thing lay there motionless. Voorland took a quick step forward.

"A stone!" he exclaimed.

"Stone!"

"Only a stone."

We both bent over the thing. It lay there, immobile, on that leperous ground.

"But it moved," I insisted.

"It walked," Voorland admitted. "I saw it walk—with legs."

He sank to his knees to examine it more closely.

"It's just a piece of granite," he said, "just a stone—highly crystalline."

He turned the thing over with one finger.

"No legs," he reported, grinning up at me.

"But you saw it move."

"Yes—it moved," he admitted grudgingly.

He took the stone in his hand and stood up.

Then it happened!

Something screamed—screamed mentally. I sensed the scream in that telepathic manner. And the scream was followed by a quick command.

VOODLAND was standing perhaps six feet from me. Then, so quickly as to defy visual interpretation, a thing grew up from the ground between us—a thick, ropey arm with a flabby hand at the end. It snatched the bit of rock from Voorland.

Then, the arm shortened, flowed in on itself, subsided back into the ground—leaving the stone lying between us.

And suddenly the stone hunched itself up an inch or two above the ground and waddled awkwardly, yet quickly, away.

"Legs!" cried Voorland. "It hasn't got legs—the ground has!"

Yes, I saw them clearly, fingerlike pseudopodia sprouting upward against the stone from that living horror underfoot.

Then we were running—running toward the translator. I could see it vaguely, a tiny square which hung serenely, like a frameless mirror, halfway up the slope of a hillock, a quarter of a mile away.

Suddenly, all around us, a movement and scurrying of the rocks threatened to cut off our retreat. Like a regiment of superturtles, huge as houses and tiny as grains of sand, they raced past us, sweeping from all sides toward that shadow-filled chasm.

"They think!" shouted Voorland. "They're conscious!"

"The ro-rocks," I panted, "they're alive!"

"No, only conscious," bawled Voorland, "but this stuff we're running on is alive. That's why it's not conscious. Don't you see? Things are reversed. Here, only inorganic things think."

I could hear him pounding along behind me, but I was too out of breath to answer.

"Mac," he yelled, a moment later, "Mac, that scent—remember that bottle of protoplasmic culture——"

Yes, I remembered, now. But I was too intent on getting out of that amœba-

like world to really sense the full horror of his words.

With my usual intrepidity, I was running a little ahead of Voorland. Ah, there was the thin plane of the translator, like an open window, waiting to receive me. I gave a tremendous leap upward and into it.

Almost the next moment, it seemed, I was picking myself up from the floor —from the floor of Voorland's aërial laboratory!

"Thank Heaven," I gasped, as the steady moan of the motor burst upon me.

I stepped back just in time to make way for Voorland who arrived only a second or two behind me, landing with a thud on the floor.

"Thank Heaven," I muttered again, as he jumped to his feet, grinning.

"But they coöperate," he was saying, as if continuing his recent discussion. "I mean those rocks and that other thing. But the rocks are the masters. Look! I managed to snitch one of them!"

Triumphantly he held out his hand, displaying a small and jagged bit of rock.

But it was not the sight of that accursed rock that caused me to gasp in horror and dismay.

Voorland was standing with his back to the translator. As he ceased speaking, something flashed, like the monstrous tentacle of a devilfish in through the screen from that world we had disturbed—a thick, ropey arm, with a flabby hand at the end.

It snatched—once—at the rock Voorland held in his hand.

In the seconds that followed, so many things occurred that it is difficult to relate them in proper sequence.

I remember seeing Voorland struggle momentarily, then lose his balance and pitch backward through the screen of the translator. Then, apparently, that pseudopodial arm had become entangled in the struts which held the frame in position, for when it withdrew there was a rending and splintering sound, and the translator itself toppled and fell —forward.

And as it fell, it enveloped within itself the motor, the whirling disk, the six huge magnets, everything!

There was a moment of silence—a sudden stillness. For, in falling, the thing had struck the power cable feeding the motor severing it, and hushing at last the motor's deep moan.

I surveyed the wreckage. My eyes, unaccustomed to the sudden blotting out of that brilliant glare, were playing me tricks. There was no need to pry up one corner of the translator and look underneath, for the thing was now but an empty frame of metal—and yet, I did.

Then the horrid truth struck me.

For underneath was nothing whatever save the sheared-off base of the machine, solidly fastened with eight bolts to floor; and I realized that the door which Voorland had opened in space had closed with a tremendous, devastating force—leaving him stranded in that dread world beyond.

HOW can I still hope to rescue Voorland, after six months of inaction? Is he not long-since starved in that strange world of silence and flaming sun? No, I don't think so! Things are not so hopeless as they seem, for it was only ten days ago that I, myself, returned—a difference in time rate, I judge. Yes, only ten days ago. I found a new instructor in mathematics filling my place at the university; and the power company was just preparing to turn off the current at the laboratory. As nearly as I can judge, I still have a matter of three or four years, Earth time, before I must give up all hope.

Outlaws

by Manly Wade WELLMAN

A tremendous hand shot out, closed over the up-raised fingers——

On Callisto

A Novelette of the Spaceways

IT WAS not uncommon for philosophers and statesmen of the early twenty-eighth century to comment that respect for law and order was evidence, not of civilization's advance but of the fear of punishment.

After centuries of policed quiet on Earth and Mars, a new frontier had been opened upon Ganymede, the habitable third moon of Jupiter and the latest possibility for settlement by colonists. And with that frontier had come space-roving outlaws, as bloodthirsty and violent as ever the pirates and buccaneers of the darkling seventeenth century.

They were always swooping down upon the freighters that plied between the inner planets and the struggling Ganymedean colonies, then swooping away again, with spoil and captives. But swooping away—where? Nobody knew in what corner of the universe they nested, least of all the meager crew of the space freighter *Rook,* from Mars with supplies for the colonists, overhauled by a strange cruiser that cut the *Rook's* trail near the Jovian system.

Caught and held helpless by magnetic grapples, the unarmed freight craft could do nothing to keep boarders in space armor from forcing open a panel with radio-automatic lock solvers. Then there was brief, futile fighting in the main compartment, seven freighter hands against forty-odd invaders.

The issue was settled within a minute. The defenders all lay dead save one, the commanding officer, who had been stricken senseless almost at the moment of the fight's beginning by a cut from a ray saber—that ingenious weapon which, shaped like an ancient cavalry sword but carrying a glowing charge of scorching power, could cripple or even kill at a touch.

The captors gathered around him. Most of them were doffing their cumbersome space helmets, disclosing bearded, fierce faces. A few sharp slaps on the jowl with a damp cloth brought the fallen man to his senses. He looked up into the broad, flat countenance of Maun, burly skipper of the captors.

"What's your name?" barked Maun. "Speak civil, and don't lie."

The captured officer rose a little unsteadily, returning Maun's scowling stare, unafraid. He was a young terrestrial, tall and lean, with curly black hair. His features were tanned and ruggedly handsome, and when he replied he bared flashing white teeth.

"Why should I lie?" he snapped back. "I'm captain of this freighter, and my name's Hall Tarrant."

One of the rovers, with the skull-lean, coppery face of a Martian, spoke: "That's true, skipper. I've seen this man on Ganymede."

Tarrant glanced at the fellow. "I saw you there, too," he said shortly. "In jail for petty thievery. You'll be there again some day, for murder."

"Silence, Tarrant!" blustered Maun, shoving his heavy head forward. "I'll do the talking. Now, we may save your life. We need space wranglers—navigators. Join on with us."

"Join you?" Tarrant grinned wispily. "Or what?"

Maun spurned one of the rumpled corpses at their feet. "Or that."

Tarrant's grin widened, but without mirth.

"No choice, eh? Well, who wants to die at my age? I'm with you."

A spontaneous cheer went up and faces everywhere grinned rough welcome. Maun caught Tarrant's hand and shook it.

"So it's a go?" queried Tarrant. "Shall I help loot?"

"The right spirit," applauded Maun. He bent over the dead body of one of his crew and plundered it of the belt which bore two electroautomatic pistols and a ray saber. "Put that on, man, and now for the fun!"

TIGHTENING THE BELT around his hips, Tarrant stepped quickly to a near-by bulkhead. Quickly he flung open a panel and gazed into the dark recess beyond.

"It's safe now," he assured some one inside, then stepped back. A woman came into view at his summons. She kept her face and body muffled in a huge blue cloak, but her hair showed, abundant and golden.

"Pretty, pretty!" crowed Maun, touching a lock of that hair. "Let's see your face, honey!"

He tried to twitch her cloak away, but Tarrant struck his hairy hand down. Maun snarled an oath.

"She was our only passenger," said Tarrant, "and she's mine."

"No!" roared Maun. "The ship goes to the home port, according to rule, but movable valuables go to the captors. We share and share alike. That includes women, and the skipper takes his share first!"

Again he put out his hand, but Tarrant barred his way. "I've heard of your rules," said the new rover. "One says that any one can claim what he sees first. I'm one of you now, and I saw her before any of you—so I claim her!"

Maun spat. "If you can keep her," he amended.

"Fair enough," agreed Tarrant evenly, and drew his ray saber.

The onlookers murmured approval. "Single combat settles all differences," spoke one voice. "Cut him down, skipper."

"I will," snorted Maun balefully. "Strip to the waist, you!"

He kicked out of his own space suit and ripped off his jersey. Tarrant shed his blouse. The outlaw skipper's powerful, shaggy torso seemed twice as big as Tarrant's, but the younger man's lean, knotted chest and shoulders bespoke better condition and greater agility.

"Turn on your ray full force," gritted out Maun. "This is to the death."

Each turned the knob on the pommel of his saber. The tubelike blades glowed as with inner flame. The onlooking rovers fell back against the bulkheads on either side, leaving Tarrant, Maun and the silent, cloak-hidden woman in the center.

At once Maun rushed, striking a flaillike blow that nearly ended the fight at the beginning. But his adversary coolly deflected it and sped his riposte so quickly that Maun had to writhe backward. Following with a slash in the low lines, Tarrant moved his blade to catch Maun's next wild attack, whirled his hilt, sped a counter and again forced the skipper to give ground.

"You're slovenly, Maun," said Tarrant fiercely. "You need a lesson or two. Guard your head!"

He struck so suddenly at Maun's pate that the latter barely parried the cut within bare inches. "Guard your left flank!" cried Tarrant. "Your right flank! Your belly! Shoulders! Legs!"

He progressed from one attack to another, keeping Maun busy defending himself. The skipper retreated again, gained a moment and slashed desperately at Tarrant's cheek. But the next mo-

ment the ray saber flew from Maun's hairy hand and clattered upon the metal deck, its glowing blade oxidizing the surface.

"And a good old trick," commented Tarrant. "Pick up your saber, Maun. The lesson has just begun."

Maun stooped, retrieved his weapon, then, without straightening again, lashed out at Tarrant's feet. The other sprang lightly into the air to avoid the attack, reëngaged Maun's blade and drove him back and back with a series of thrusts and slashes until the skipper had retreated clear across the circle and had his back against the onlookers at the bulkhead.

And Maun suddenly brightened. Into his free hand, held out behind for balance, a friend had thrust the butt of an electroautomatic. With a yell of triumph he grasped it, looped his finger through the trigger switch and swung it up.

But he was too late. Too swift for any parry, Tarrant's blade smote home on Maun's brow.

Smoke gushed from the scorched flesh. Saber and pistol fell from the skipper's hands. His big body shuddered violently. Then his knees buckled and he pitched to the floor, the smell of roasting flesh rising. Tarrant sprang back, amid snarls from the watchers.

"He's killed the skipper. Shoot him!"

"No, grab him and chuck him out into space!"

They surged at him from all sides. He swung his blazing blade in a quick circle and for a moment they gave back. Then: "Stand where you are!" commanded a silver-hard voice.

It was the woman in the cloak. They had all but forgotten her. Now she took a stride forward to Tarrant's elbow, dropping the garment that screened her.

A gasp of astonishment went around the circle, and as one man the rovers stiffened to salute.

"IT'S 'HERSELF'!"

The rat-faced rover who mouthed the words stared pallidly.

"Yes," said the silver voice, mocking and assured. "Jahree Herself. You all know me, I think?"

"But you were on Mars," protested another, aghast. "For a holiday——"

"Yes, I radioed you the code warning of this freighter's coming—then shipped as a passenger, to see how you conducted yourselves. And I find you trying to mob a recruit who killed his enemy in fair fight."

They cringed before her scornful words. Tarrant relaxed his guard at last, permitting himself to gaze sidelong at his deliverer.

During the journey he had had little time to talk to this one passenger. He had seen that she was attractive, knew that her papers were in order—that was all. Now he looked at her, looked closely for the first time.

She was beautiful, not as a girl, but as a vital, mature woman. She was of more than average height and her rich figure was hardly concealed by the uniform she had apparently donned to greet her friends, the rovers. It was that of an officer in the terrestrial space navy and fitted her perfectly.

Her face was almost noble, with a straight nose and firm chin. Her eyes, still shooting stern glances at the rovers, were large and brilliant, but as hard as blue steel. It was her mouth, dark-red and as full as though it had been slightly bruised, that added a redeeming touch of softness.

Those hard eyes rested now upon Tarrant and relented a trifle.

"Sorry, Captain Tarrant," she said. "My men's manners are slovenly."

"You command these?" he queried. mystified and shocked.

"These and hundreds like them. I'm Jahree—called Herself, boss of the rovers." She drew her body up

proudly. "Put up your saber, the fight's over."

He hesitated. "I thought you were a passenger, in danger," he protested. "I joined to be able to protect a helpless woman."

"Otherwise you'd have died like a hero?" Her eyes sparkled mockingly. "But you've joined, and we accept you. Put up, I say. We're going home."

"Where's home?" he demanded.

"You'll never know unless you stick."

"Very well," he said, smiling as disarmingly as he could.

"Good man!" applauded Jahree. She spoke crisply to her followers. "Loot now, but leave Captain Tarrant's personal effects alone, and don't touch the cargo."

Gladly the party rushed here and there, despoiling the cabins and closets or stripping the dead of clothing, money and weapons. At Jahree's nod Tarrant walked, a little helplessly, into the quarters he had occupied as captain. The handsome woman's manner was cordial as she accompanied him, yet he noticed that three armed rovers took up a post just outside the door.

Jahree sat down behind his desk and motioned him to a chair opposite her. "I watched you all the way out from Mars, captain," she began, very cordially. "I like the way you handle a ship. You're the sort we need."

"I'm flattered," he rejoined respectfully. "I hope you're not disappointed."

She laughed. "If you fly as you fight you'll be superb. You didn't know, of course, that Maun was considered a vivid enterprise with his ray saber."

Tarrant made a deprecating gesture. "Perhaps he was overrated."

"Perhaps. But the men will have a tall tale to tell at our home roost."

"Where's home?" he asked again.

Again she laughed. "Still curious. Well, there's no harm in telling now. We live on Callisto—Jupiter's fourth moon."

HE STARED in surprise. "Callisto?" he echoed. "But it's cold and dark, that far from Jupiter, and there's no atmosphere to speak of." He paused suddenly. "Sorry if I was rude, but it's impossible. We never even dreamed of hunting rovers there."

"Oh, it's cold and dark and short of air," agreed the rover chieftainess. "At least, all those conditions exist—outside."

Tarrant nodded. "I see. You've built a sealed city, like those on Earth's Moon and the Martian satellites. Surprising—I don't see how outlaws, without proper tools and supplies, could manage to construct——"

"They didn't." She smiled triumphantly. "You're familiar with the law of gravity, captain—the nearer to the center of attraction, the greater the pull and therefore the heavier the weight?"

"Of course."

"Have you forgotten how a few vestiges of atmosphere remain in the deepest craters of the Moon, that an object weighs more at Earth's flattened poles than at the bulging equator?"

A light began to dawn in his mind. "I think I see," he said suddenly.

"There's a little air, even at Callisto's upper crust. Deeper down——"

"You live in a hidden cavern," broke in Tarrant eagerly. "Sorry for interrupting—I'm still rude."

"One would think you're not generally courteous to ladies," Jahree suggested with a slow smile.

"Ladies don't often overpower me with new scientific knowledge," he replied.

"That's a sort of compliment," she said gayly. "But to resume: When my father organized the rovers from among disgruntled colonists fifteen years ago—I was just a girl then—they stumbled into this set of deep-sunk caverns. There were a few specimens of native life there, now mostly exterminated."

"Native life? Of high culture?"

"I wouldn't call a Callistan aborigine cultured. I'm not even sure that they're of human caliber. We still have a few as slaves—you can see for yourself."

The freighter was now manned by the rovers and was following the cruiser on a new course. Glancing at the instruments on the wall of his quarters, Tarrant saw on the port-finder's television screen the part of the universe for which the craft was now headed. Jupiter and his satellites were close at hand, looming like a scattering of odd-sized balls on a velvety sky, and in the very center of the screen showed the fourth satellite—Callisto. They were, in truth, heading for it. Tarrant rose, turned dials, and otherwise regulated the reflection. The sphere seemed to come closer and grow clearer in detail.

As he had remarked, Callisto moved too far from Jupiter for comfort. The native light and heat of the big planet, a million and more miles away, could do little to augment the distant Sun, which here appeared barely a tenth as large as from Earth.

Tarrant gazed sharply at the image of Callisto's barren, dimly illuminated face. It was as sterile, seemingly, as the Moon of his native Earth, and again he pondered that chances of human habitation here were slim. Even the explanation given him by the beautiful chieftainess seemed slightly fantastic.

She was speaking, and he turned back to listen respectfully.

"By the way," she said, "I mean to call you by your first name, rover fashion. It's Hall, isn't it?"

He treated her to one of his flashing smiles.

"And when I speak to you?" he suggested.

She stiffened a trifle. "I'm Herself," she replied, her voice hardening, "to you or to any other man in this herd."

Tarrant gazed into her eyes intently. "I should think," he said at last, his voice soft but steady, "that informalities work both ways—Jahree."

She started as if he had struck at her. He widened his smile; it had carried his point with many a woman before. And once more it did so.

"I never met a man who dared remind me of that, Hall," she said at length "However, you can be trusted." She smiled dazzlingly "You're a gentleman, you know—not like the other clods."

"Then we're friends, Jahree," he answered, and took the hand she held out to him.

II.

BARELY THREE HOURS had passed since the *Rook's* capture. Now, with a skillful rover pilot at its controls, it quartered the dim, desert face of Callisto. A vast, shadowy gorge yawned below. Into this the craft dropped.

Down it went, down, while long minutes passed. Tarrant, wandering back and forth among the instruments in the control room, saw rovers anxiously checking gauges that showed the rate and extent of the journey. At length the pilot struck a quick combination of the keys of his control board and the ship halted. Simultaneously its bottom settled on a solid surface.

The lock panels flew open and some of the rovers emerged, flashing lights. Other flashes, seemingly far away, answered. Tarrant, following Jahree into the open, looked upward. The top of the gorge, which from above had seemed so great, now appeared as a tiny rift, through which a scrap of starry sky peeped. Apparently this retreat was well toward the center of the satellite. It was warm—internal heat, he guessed—and the air was as good as on Earth's surface.

More and brighter lights flickered up here and there, on stands in the open

and in doorways. With their aid Tarrant could make out the interior of a vast, dim cavern, the walls of which soared up into lofty darkness beyond the range of the brightest beams. On the smooth rocky floor rested several war craft and among them sauntered armed men. The freighter had landed near one of the walls, and into this wall, he saw, small caves ran, their mouths emitting warm glows. Toward one of these he was urged by the pressure of Jahree's white hand on his arm.

"The officers live here," she informed him. "Those other doors are to the barracks of the rank and file, and to store depots. Come, I'll introduce you."

Just inside they met a tall, bearded terrestrial, who saluted Jahree and glared at Tarrant.

"What does Herself report?" he inquired formally.

"We captured a needed cargo," she replied. "See that it's stored, and look out for medicines and cleansing materials." She gestured toward Tarrant. "Here's a new officer, Hall Tarrant. Hall, this is Captain Ian Fetcho."

"Junior captain?" suggested Fetcho.

"Not he," said Jahree. "He killed Maun in single combat. That, with his other qualities, puts him in Maun's place. Only Brule and Sunday Sam rank him."

"Righto," acquiesced Fetcho, but his eyes above his beard were still hostile to Tarrant. He saluted Jahree again, then strode out into the big main cavern.

"He's jealous of me," ventured Tarrant.

"Perhaps," conceded Jahree, rather bleakly. "Two or three of my officers have been foolish enough to fall in love with me. I never encouraged them."

THEY walked down a lamp-lighted corridor in the natural rock and then through a metal doorway. Beyond it was a suite of rooms that had been developed from a series of joined caves, lighted with radium bulbs and furnished with what looked like the plunder of officers' quarters on a score of captured ships.

In the first and largest room half a dozen men were gathered, stern, level-eyed fellows in faded uniforms. They were Jahree's other captains, and she introduced them to Tarrant—Tischenke, Brule, Sunday Sam, Rackham, Snorf and Gorgol. All were terrestrials save the last. He was Martian, and his bald head was bonier, his limbs more fragilely thin, his body more bulbous and puffy, than even the general run of his kind. He rolled his popeyes and widened his toadlike mouth in a sardonic grin as Tarrant bowed.

"Space wrangler and duelist, eh?" he said in a breathless, rattling voice. "Man of weapons, action—there are many such here, but only one scientist."

"Yourself, captain?" prompted Tarrant courteously.

"Exactly," replied the Martian pompously. "Perhaps you'd be bored by a visit to my laboratories."

"Not at all," Tarrant answered him. "I've heard of you—it seems that you did some interesting things on Mars some time ago."

"I did," said Gorgol. "I was famous for my experiments in many fields—but I had to kill a meddlesome assistant, and then I transferred my talents here. I'd be glad to entertain you." He gazed meaningly at Tarrant, while his twiglike fingers fumbled at a slender, polished walking stick.

His words were polished, scholarly, courteous, but his tone was of bitter irony.

A servant announced dinner and the group gathered at the table. The food served was from the stores of the *Rook*—Tarrant recognized it at once. Jahree presided at the head of the board and waved Tarrant to a seat at her right hand. "Sunday Sam," the senior captain, glanced at him sharply as he ac-

cepted. Apparently Sam, too, did not like to see a newcomer so frankly favored. The meal progressed amid a buzz of pleasant conversation, however, and at the end of it several captains invited Tarrant to join a session of gambling.

"But he's visiting my laboratory," interposed Gorgol. "Go on, you others, start the play. We'll join you."

And he led Tarrant away, down a hall and into a new apartment. As they entered, a great form heaved itself up from a bench to confront them.

"An ape!" cried Tarrant, half in alarm.

The Martian snickered. "In a manner of speaking, yes," he agreed. "In reality, he's of the once-ruling class of Callisto—an apelike generation. Kamba, this is Captain Tarrant."

The great, shaggy creature, seven feet tall and tremendously muscled, bowed solemnly.

Tarrant stared in growing amazement. "He understands?"

"Perfectly." Gorgol's sardonic smile grew. "As you saw at first glance, he does resemble the terrestrial ape. Note his strong, ungainly lines, his bestial face, his great fangs. Once his brain was apish, too. It took Gorgol, the scientist, to change that, with surgery and chemical injections—eh, Kamba?"

The Callistan gazed at Gorgol with deep-set, lustrous eyes.

"He doesn't thank me," went on the Martian mockingly. "If he could speak he'd curse me—no, he wouldn't. He'd be afraid."

"If you've given him human understanding," said Tarrant, a little harshly, "why don't you treat him as a human?"

"But I bought him for a slave," said Gorgol nastily. "And a slave he is, aren't you, Kamba? Ah, stop staring at me, you ugly brute—get out!"

Gorgol raised his walking stick. The tall simian backed quickly into another chamber. Gorgol leered at Tarrant.

"I do as I please with him. I taught him to think. He's human inside—notice how he combs his hair and wears shoes?—but he's no gentleman."

Tarrant fought to keep the scowl from his face. This sardonic Martian was plainly insane in some degree, else he would not have the heart to heap mental torture upon that strange, cunning beast—no, nor would he dare tempt the attack of those sinewy limbs.

Gorgol fastened his eyes upon Tarrant. His gaze had hypnotic power, and the terrestrial braced his own mental forces to withstand it.

"As each captain is commissioned, I bring him here for a talk," Gorgol was purring. "You've risen quickly, no doubt you congratulate yourself; but don't be too secure in the favor of Herself. The men follow her, obey her—but they fear me!"

He waved Tarrant on into a spacious chamber, with stands, benches and shelves of vessels and instruments for experimentation. Then he followed, continuing: "I'm not satisfied here, my friend. My field is science, and I want the broader field I enjoyed on Mars. I'd sell out the whole colony for a full pardon."

Tarrant gazed at him. "Aren't you in danger, talking like that?"

Gorgol laughed. "Even if the issue were forced this moment, I could face it," he boasted. "You think the rovers could exist without me? They plunder ships, but they can't subsist on plunder alone."

"How then?" prompted Tarrant.

"That's where I come in. I supervise the manufacture of synthetic food, clothing, ammunition, fuel—all sorts of supplies, from the elements we mine in these caves. Without me they'd have to starve or surrender." The Martian swaggered across the floor, turned at a point half a dozen paces from Tarrant. "And even if I could be spared, do you think they could put me out of the way?"

Tarrant liked Gorgol less and less every moment. "Jahree and her captains seem capable of it," he answered shortly.

"You need to be convinced? Watch, then."

In the most dramatic manner, Gorgol took a long stride forward—and disappeared into thin air.

TARRANT had traveled far on many worlds and had seen much to astound him, yet he found it difficult to maintain a tranquil expression. Maintain it he did, for he did not doubt for an instant that the invisible Martian could see him and was watching him intently.

"Well?" Gorgol's voice issued from nothingness.

Tarrant smiled. "You're clever, Gorgol," he said in a casual tone. "Too bad that you're so theatrical."

"Eh?" The disembodied voice was a mite querulous. "Have you ever seen this——"

"Never before. Yet I don't fall down and worship." Again Tarrant smiled. "I see it as a scientific novelty, nothing more."

"You're very confident, my friend." Gorgol sounded irritated.

"Shall I rationalize it?" offered Tarrant. "In the first place, we're in your laboratory. It stands to reason that you've rigged up this illusion of invisibility on your own grounds—it won't work elsewhere. In the second place, you're too eager to impress me. That," and Tarrant added contempt to his coolness, "takes you out of the class of rulers and puts you into that of actors. You might have mystified the ancients, who believed in magic. As for me, I'm only mildly interested."

At that the Martian appeared again, seemingly stepping backward out of invisibility. His smile was not sardonic now. He bowed, as if in respect.

"Captain Tarrant," he said silkily, "permit me to congratulate you. Since I don't impress you, may I beg you to be a friend and ally? They tell me that you were forced to join us. Perhaps you want to get away as much as I."

"Perhaps," said Tarrant, who was by no means as sure of his ground as he pretended. "Let's talk it over later—they'll be waiting for us."

Silently Gorgol nodded assent and they returned through the caverns to the main apartment.

The other captains sat at the table on which their food had been served. Jahree still presided, but had changed from her uniform to a clinging gown of crimson silk-metal, cut in Martian fashion. Her feminine charm, half hidden by masculine attire, was now as manifest as strong perfume. It seemed to pervade the apartment. Unconsciously Tarrant thrilled at sight of her.

Sunday Sam looked up at the newcomers. "Sit down," he invited. "We're playin' indemnity."

"An old game, isn't it?" asked Tarrant, dropping into a chair.

"About twenty-sixth century, I believe. Looking for new amusements, we've gone in for revivals. Know how to play?"

"Not very well."

"The dealer names table stakes and pot, then deals one card all around," explained Sam. "Each man may have as many cards as he likes, one at a time, until he gets a card of the opposite color to his first. That retires him. If all the cards are of one color, he totals them. When all are satisfied, we show down. High total wins table stakes and gets the deal, also the right to name next stake and addition to the pot. We go on, until there have been as many deals as there are players. Then we total all scores and the highest grand total gets the pot. Understand?"

"It doesn't sound skillful," said Tarrant.

"No," grunted Snorf, "but it's fast. Sit in and see."

"I've about four hundred value units on the Martio-Terrestrial League," Tarrant announced. "Until they're gone, I'm with you."

AN INDEMNITY DECK lay on the table, divided into the four suits that had distinguished the cards for the past dozen centuries. However, it had no court cards and each suit ran up to fifteen. The players cut for deal and Fetcho won. He set stakes and pot at a hundred units each and Tarrant was obliged to lay half of his resources on the table. Then the first round was dealt. He held a fourteen of clubs.

Every one called for a second card, Tarrant chiming in. He got a nine of spades, bringing his total to twenty-three. Four of the others threw aside their cards, having received seconds of opposite color.

"Thirds?" called Fetcho.

"Yes," said Gorgol, his huge eyes gleaming avidly. He swore as he picked up the card dealt him, for it retired him also.

"That's a good total, keep it as it is," advised a whisper in Tarrant's ear. He looked up to see Jahree at his shoulder.

"Won't you play?" he offered, rising, but she shook her head.

"My captains won't take my money," she explained. "It's no sport."

Tarrant abode by her advice and refused a third card. Both Tischenke and Snorf called for thirds, and only the latter survived. "Show," he said, laying down his total of twenty-one in red.

"I win by a dinky two points," announced Tarrant, showing in turn. Amid a congratulatory buzz he raked in the money, named a hundred units each for stake and pot, and dealt. Again he won the round, this time by a substantial score. The third round brought victory to Tischenke, but Tarrant got a high score and had won sixteen hundred units before the cards passed from his hands.

Tischenke set stakes and pot at two hundred each and Gorgol won. Greedily, the Martian swept in his winnings and named three hundred each for stakes and pot. It was the largest stake of the game, which went to the last hand without Tarrant recovering the deal. But his scores, though not winning ones, had nearly all been good, so that he faced the final deal with a total of nine hundred and eighteen, higher by seven points than that of his closest rival, Gorgol.

His first card was, by coincidence, the same as his first in the initial deal —fourteen of clubs. Welcoming it as a good omen, he joined the general cry for seconds.

His second card proved to be the deuce of clubs, which, though it did not retire him, represented the most meager of gains. Gorgol, his rival for the now considerable pot, evidently fared well, for he grinned over the two cards he held and called for a third.

That, too, patently increased the Martian's score. Tarrant knew that he could not hope to top Gorgol with his present holdings and asked for a third in turn. It was the seven of spades. Other thirds were dealt, retiring all but Tarrant and Gorgol.

"Give me a fourth," said Gorgol to Sam, the dealer, and grasped the proffered card. He gazed at it eagerly and grinned the broader as he added it to his sheaf.

"A fourth here, too," requested Tarrant. Every eye watched him pick up his new card. It was the six of clubs. "Show down," he called, and exposed his hand. "I have twenty-nine."

"And I thirty-one," cried Gorgol in triumph, showing a quartette of crim-

son-pipped cards. "The stakes are mine."

"But the pot is Tarrant's," broke in Jahree, lounging up to the table again.

The Martian pouted. "A lot of my money went with that pot," he mumbled sulkily. "I can't afford to gamble soon again."

"In that case," said Tarrant, "I'll make you a proposition."

Gorgol glanced at him shrewdly. "Yes?"

"Let's resurrect another ancient game—poker, as played on Earth nine hundred years ago." Tarrant paused for a moment. "We'll throw one cold hand, and I'll put up all the money in this pot I've won."

Gorgol scowled. "Haven't I just said I couldn't afford——"

"You needn't play with money. There are more than five thousand units here. Against them you can stake—your slave, Kamba."

"Kamba?" repeated Gorgol in amaze-

With a yell of triumph, he grasped the weapon, looped his finger, ready for the kill.

ment. "He isn't worth ten units."

"My offer stands," insisted Tarrant.

"All on one hand of poker?" demanded Sunday Sam, and the other captains stared at Tarrant in mingled admiration and surprise. Gorgol hesitated, but his zest for gambling was too keen.

"Very well," he agreed, "but let Herself deal."

Tarrant nodded consent and Rackham, jumping up, brought a poker deck from a sideboard. The others rose to watch better as Gorgol and Tarrant faced each other across the table. Jahree began dealing, face up.

Gorgol's first card was the trey of hearts, Tarrant's the queen of clubs. The second motion of Jahree's firm, white hands brought Gorgol a five of hearts, Tarrant a nine of diamonds. Next came a four of hearts to Gorgol and a jack of diamonds to Tarrant.

"Straight flush coming!" exulted the Martian, and his eyes gleamed as his next card fell, a six of hearts.

With deliberate motions, Jahree separated the two top cards. Two quick lunges, and she threw them on the table —to Gorgol, the ten of spades; to Tarrant, the nine of hearts.

"Tarrant wins!" she cried. "A pair of nines!" And the captains applauded.

Gorgol's face turned almost black. Then he rose and bowed.

"Kamba shall report to your quarters, captain," he said tonelessly.

Then, turning, he ran from the room.

The night's gaming was finished. One by one the captains saluted Jahree, said good night and left. Tarrant remained to the last, carefully folding the paper notes he had won. Turning to go, he found Jahree still waiting.

"I stopped to say that you shall have Maun's old quarters," she said, a little slowly—almost shyly, he thought. "An orderly waits outside to lead you."

He smiled at her. "Your dealing brought me luck."

"Luck?" Her dazzling smile answered his. "Perhaps I stacked that deck. My hand is skillful." She held it out.

"Dare I?" He bowed quickly and kissed her fingers.

As he left the apartment she was standing silently where he had left her.

III.

WHEN Tarrant arrived at his new quarters, deeper into the network of caverns, he found that Gorgol was as good as his word. The giant form of Kamba greeted him at the door, bowed low and ushered him in. Once inside, the creature extended a long, thin rod that proved to be a whip with a loaded butt and a tight-woven lash. An attached card bore the words, in Martian script: "You may find this useful in disciplining Kamba. I did." It was signed, "Gorgol."

Tarrant broke the whipstock across, then threw the splintered pieces into a corner. "No whip for you, Kamba," he assured the huge creature.

The Callistan looked at his new master with brilliant eyes. Call him a beast if you wish, thought Tarrant, but there's a lively brain inside. "Look here, Kamba," he said, "can you read?"

The apish head nodded.

"And write and figure?"

Again the nod.

"But you can't speak?"

This time Kamba shook his head.

"Well, that's not really a misfortune, my boy. You can think the more. I never had a slave, Kamba, and I won't start with you. You're my personal orderly and, if you can see it that way, my friend. Satisfactory?"

Slowly, almost timidly, a mighty, hairy hand reached out, terrestrial fashion. Tarrant's own muscular fingers looked frail as they lay in that giant grasp. He laughed at the contrast, and Kamba laughed, too, softly and timidly —the one human sound he could make.

The apartment proved to have two sleeping rooms. The smaller of these Tarrant turned over to Kamba, who obediently occupied it. Alone in the larger bedroom, the young man threw himself on the bed, but lay awake for some time considering his position.

In the past few hours he had entered

upon a strange trail How would it end? Here he was, upon a world where he had not thought it possible to exist, surrounded by lawless men whose ranks he had been forced to join and whose friendship he was unable to trust. To be sure, their beautiful chieftainess had interested herself in him, but why?

Tarrant was no self-worshiper, and he could hardly feel that he had captured her completely. He might be a novelty to her, or a victim to tantalize. Of course, he had been audacious once or twice and she had seemed pleased; yet he was anything but sure of his position.

Even if she were sincere in her apparent liking for him, what about Gorgol? Tarrant had refused to be impressed by the Martian's scientific hocus-pocus, and perhaps had made a dangerous enemy thereby. And Gorgol was quite evidently powerful, else he would not have been so frank in his talk of rebellion against Jahree. Tarrant had been more mystified than he had shown by that disappearing trick. It would pay to investigate it, but with the utmost care. Gorgol had every characteristic of an ugly customer.

The others he had met would also bear watching. Fetcho was jealous and so, apparently, was Sunday Sam. Tarrant had drawn sour looks from most of the others after his successful gaming. Of the entire colony, he was inclined to repose the most trust and regard in the uncouth creature he had won by the turn of a hand of poker. That thought remained in his mind as he sank off to sleep at last.

He woke in a panic, to find a huge form towering above him. In a trice he was sitting up, snatching from under his pillow the electroautomatic pistol he always kept there. Then he laughed—it was Kamba bearing a tray. Tarrant rose, washed and sat down to breakfast.

The foods were synthetic—curiosities even in the twenty-eighth century. One plate was stacked with thin, transparent leaves, resembling cellophane in appearance and crisp and salty to the taste. In a tall glass of acid drink all the colors of the spectrum came and went. There was also a mound of pinkish jelly that had the flavor of spiced meat.

"Whatever Gorgol's shortcomings," observed Tarrant to Kamba as he ate with relish, "he certainly sets an excellent table from his laboratories."

The Callistan nodded understanding and agreement.

TARRANT had barely finished eating and dressing when the buzz of a bell announced a visitor. Kamba ushered in a smiling Jahree, dressed in her uniform of yesterday.

"Ready for inspection?" she inquired briskly.

Tarrant buckled on ray saber and pistol and together they emerged into the cavern corridors. Jahree took his arm and beamed up at him as though they were lady and gentleman strolling for pleasure.

"Your reputation has reached your men already," she told him. "The fact that you killed Maun, outplayed Gorgol and are an expert space wrangler colors you attractively. They are ready to serve you well."

They passed through caves—some roughly carved out of the rock, with parties of men gouging away loads of various ores, others fitted as shops with workers repairing equipment or arranging stores of supplies. Some of the men were terrestrials, a few were Martians, and Tarrant noticed one or two Callistan slaves like Kamba.

At length they came into a wide, domed cavern as large as a drill hall, where he was introduced to his men. They were well-armed, well-set-up and well-disciplined, he judged as he studied their straight, silent ranks. Even as he congratulated Jahree on their quality, he meditated that all the men and

weapons in the Ganymedean colonies would have a hard time reducing this outlaw fortress. His words of praise seemed to pique the chieftainess.

"I'm afraid," she said, "that you think of me only as a commander."

"Far from it," he hastily protested. "You're also a charming hostess."

"That's better," she cried, smiling once more. "Leave your men with the noncoms and come along."

He nodded to a subordinate officer and accompanied her back into the corridors. "I'm afraid I'm too idle," he said hesitantly.

"No. Come and call on me."

"I'll be honored," he said, his tone growing eager. "When?"

"At once. After lunch." Her voice trembled a bit, like a girl's. He glanced sharply, detecting a flush upon her cheeks.

"Very good." He was near his own quarters now and drew himself up to salute. She saluted in turn, then gave him her hand. It was cold as ice, and quivered in his grasp.

"Until soon," she murmured softly, and left him. He stood a moment looking after her.

"Congratulations, Captain Tarrant," muttered a sardonic voice at his elbow. "You are quite successful."

He turned quickly, but saw nobody. Was it imagination? He put his hand on the knob of his door.

"May I come in also?" inquired the voice, seemingly from emptiness in front of him. Now he recognized it.

"Certainly, Gorgol," he said carelessly. "Step inside." He opened the door and felt the slight breeze of a body preceding him.

The unseen Martian chuckled smugly. "You can't taunt me with being in my laboratory now. I've made new developments, you see."

"Will you have lunch?" invited Tarrant, adopting again the unimpressed manner that had piqued Gorgol the previous day. "Kamba, lay another place."

"With pleasure," said the disembodied voice. A chair moved back from the luncheon table, then creaked with the addition of unseen weight. Sitting in turn, Tarrant idly watched a morsel of food rise from the plate, then vanish. "Your appetite is good?" he inquired politely.

"Oh, yes." Another chuckle. "I'm Gorgol—same mind, same body, same voice—only I'm out of sight—the most novel, dangerous spy or assassin ever conceived. Why, Tarrant, I might kill you this moment and you couldn't defend yourself."

"You came to kill me?" suggested Tarrant, helping himself to food and drink.

"No. Only to show you that I'm not a mere trickster who can produce mysteries only in a laboratory."

Tarrant smiled. "That proves I was right in calling you an actor," he taunted. "Gorgol, I'm entertained—not overawed. I'm not even greatly impressed."

"What do you mean?" The voice was petulant again.

"I mean that, however novel invisibility may be—and already the novelty is wearing off for me—it's by no means impossible." Tarrant smiled again, playing well the part of a mocker. "I'm not a scientist, yet I know that objects are made visible only by reflecting light to the eye. If you don't reflect the beams of that radium lamp, it's by some mechanism, I'm assured."

"Excellent, Tarrant," cried the Martian from his invisible hiding. He had apparently regained his sardonic self-possession. "But have you considered all scientific facts? What are the theoretical causes of invisibility?"

"Any schoolboy knows. One is the sending of light rays back to their source, by an absolutely perfect mirror. Another is the absorption of all light by a surface of absolute black.

The third is the letting of rays through by transparency."

"And none of these," said Gorgol, "is my principle."

"That's easily seen," nodded Tarrant. "If you were hidden by a mirror or coating of absolute black, you'd cast a shadow. And you could hardly achieve transparency without an elaborate chemical change in your body."

"True," said Gorgol in triumph. "That uses up all the possibilities, eh?"

Tarrant shook his head. "Not quite. Light rays aren't being reflected from you or absorbed by you, nor are they passing through you." His voice rose suddenly. "They're swinging around you!"

"Eh!" grunted Gorgol, startled. His chair moved quickly back. Tarrant rose, shot out a hand and clutched an invisible wrist.

"So I've guessed your secret!" he laughed.

THERE WAS silence while Gorgol struggled, but Tarrant's superior Earth-born strength held him easily. "I've guessed it," he repeated. "You were too anxious to impress me. Your hints spoiled the mystery."

"You win," conceded Gorgol sulkily. Tarrant heard the click of a switch. Simultaneously the Martian's form appeared and, a moment later, dropped back into its chair.

Tarrant lighted a cigarette to conceal his elated grin. Gorgol, brilliant scientist though he was, had yet proved a sorry fool. Stung by his failure to impress Tarrant yesterday, he had tried again and had been led into exposing his secret. To be sure, Gorgol had not completely explained the device, but Tarrant was confident that this would come soon.

"Well, Gorgol," began the terrestrial, "last night you suggested that we escape together."

Gorgol, who a few hours ago had suggested rebellion with supreme confidence, now licked his dry lips and peered fearfully around the room. His eyes quailed before the gaze of Kamba.

"Get that beast out of here!" he cried nervously.

"You may go, Kamba," said Tarrant, and the Callistan obeyed, with one last cold stare at Gorgol.

"He'd like to kill me," chattered the Martian. "He's bold, now that he's out of my power."

"Forget Kamba," said Tarrant crisply. "Talk about escape. With your invisibility it should be easy to get back to law and order."

"Easy for you, but not for me," demurred Gorgol. "Remember, I'm a fugitive criminal. I must get a pardon."

"Yes? What have you in mind?"

"I'll be frank," said Gorgol, more earnestly than Tarrant had ever heard him. "You know my secret, in part at least. I'd rather have you with me now than against me later. What do you think?"

"I think you're being wise," responded Tarrant heartily, and the Martian did not realize that there had been no pledge of alliance in that or any other remark of his companion. "What's the invisibility principle?" continued Tarrant.

Gorgol rose and turned. Fastened to his back by a looped belt was a perpendicular rod the size of a walking stick, extending from neck to hip.

"My power unit," he explained. "As you guessed, it operates to bend the light rays. They curve naturally—all mankind has known that since the twentieth century. By turning on my power, designated among my experiments as 306-X, I create a field that repels light—sets up a visual vacuum, so to speak, around which the rays make a sharp curve to continue their original course beyond. Thus you can look apparently through me at objects behind."

Tarrant's heart thumped excitedly as

he heard the secret set forth, but he maintained his matter-of-fact tone. "In other words, I see around the corner. All clear. What next?"

"I'm getting to that," went on Gorgol, turning back to him. "I've equipped two space cruisers with 306-X units. Throw a switch and they're invisible to all who are outside. You command one, I the other. Two men—Martians whom I trust—will assist us. We can bomb and destroy these caves, sparing not a man."

"Not a man?" Tarrant frowned. "That's a bit hard."

"It's necessary. Most of all it's imperative that we kill Herself."

Tarrant could not help but look his shocked amazement.

"We must," insisted Gorgol. "I'll cut off her head, show it to the Ganymedean governors. That will clinch my pardon——"

"Why not just capture her?"

The Martian snorted away the idea. His huge eyes glowed cruelly.

"Then I'd appear in the rôle of a policeman," he demurred. "No, I want to dominate the governors, show them the kind of man I am. Let me roll her head at their feet. They'll gape with awe!"

Yet again Tarrant reflected that he had rightly classified the fellow as an exhibitionist. The picture of triumph that Gorgol painted was by no means a pleasant one. Tarrant remembered his last sight of Jahree and shook his head.

"Too barbaric," he said.

"More than barbaric," cried Gorgol exultantly. "It's primitive—beautifully primitive!"

Tarrant leaned back in his chair. "Suppose," he suggested, "that I'd grab you and tear off that invisibility machine, then turn you in to Jahree."

Gorgol did not flinch. "I'd be killed, and with me would go your one chance of escape," he said. "You don't fool me, any more than you fool the others who watch you so closely. You want to go home."

Tarrant shrugged. "Let's make an appointment to meet at your laboratory and talk over this 306-X power more fully."

"Good man!" cried the Martian. "Let's go now."

"I can't. I have an engagement. Shall we say after dinner to-night?"

They agreed on that and both left, Gorgol heading for his laboratory, Tarrant for Jahree's quarters.

THE CHIEFTAINESS let him in herself, and again he marveled at her beauty. She wore a new gown, sleeveless and low cut, of gleaming stuff that seemed to turn from blue to gold and then to orange as the lights shifted upon it. Her hair was caught up under a silver band that made her look more youthful. She put a hand in his. Each felt the throb of the other's pulse.

"What shall we do?" she asked. "Won't you just sit and talk—tell me about yourself?"

The front room of her apartment was a peculiar combination of military office and boudoir sitting room. He sat beside her on a divan, clasped his hands behind his black head and grinned. "Talk about myself?" he echoed. "There's nothing to tell. Shall I get technical about space engines I have known?"

"Heaven forbid," she said. "Be interesting. How about women you have known instead?"

He grimaced. "They run into thousands, and live on many worlds—Earth, Mars, Ganymede——"

"And Callisto," she added.

"But I've seen only you on Callisto, and don't know you at all."

"You'd like to know me better?"

She leaned close as she spoke. A mist of perfume smote his nostrils. He chose not to answer the question.

"I dare say," he said, "that I should

begin my chronicle with my first experience of woman's wiles, at the ripe age of seven."

She drew back again, regarding him from under lowered lids. "Your story will be long, I'm afraid. Tell me, which of all your thousands of women might you have loved?"

"One," he said. "She had dark hair, copper skin——"

"Spare me the catalogue of her charms," pleaded Jahree, lifting a white hand. "What kept you from loving her?"

"She married my best friend."

"And you turned off your affections like a faucet?"

"Yes, and became a space wrangler. I've never had time since to fall in love."

She laid her hand on his arm. "Are you being complimentary?"

"I don't know what you mean," he said, feeling sure that he did.

"Don't you find me attractive?" she insisted softly.

"Of course, but you're Herself and I'm——"

"Forget that I'm Herself!" she interrupted heatedly. "I foster my overbearing attitude with the others; they're all dirt. But you're different, and I'm lonely. The weight of loneliness crushes me. I need——"

They turned toward each other at the same moment. Tarrant found her in his arms. She lifted her face to his. As if drawn by a magnet he bent down. They kissed—she was like shuddering flame in his arms—he knew that she swayed him as he had never been swayed before. Abruptly he released her and rose to his feet.

"Where are you going?" she demanded.

"Perhaps I'd better find work to do," he replied.

She, too, rose. "Your place is here. I won't let you go. From the first moment we met you have been on my mind."

"I!" he cried, protesting.

"You shall be chief," she hurried on. "I'll withdraw from command, you take over——"

"What's this about?" he broke in. "I don't want to command."

"Neither do I." She was almost in tears. "I'm sick of being chieftainess. I've held the job because it was the only way to keep louts like Fetcho and Sam and the others at their distance. Now you're here. You can stand up for me—I can be just a woman."

She sat down again, put out her hand and drew him down beside her.

IV.

GORGOL AND TARRANT met next morning in the gigantic roofless cavern that served the rover colony as main entrance, rocket port and parade ground. The only others on the dimly lighted floor were two Martians, muffled in heavy space armor and armed with rifles and pistols, who stood silently to attention near the entrance to Jahree's quarters.

"Where are your ships?" asked the terrestrial.

"Success!" cried Gorgol delightedly. "Even when you know they're here you cannot find them. Those two armed men are our accomplices. Each stands guard at the lock panel of one of the ships. Here, take these goggles—they show you more."

Tarrant took the goggles. Their thick lenses were dull, semiopaque gray in color. "I don't see how any device can make visible an object around which light bends without touching," he objected.

"They don't make the ships visible, they only show the field of the curved rays," explained Gorgol. Tarrant donned the goggles and indeed saw two

indistinct, cloudy blotches behind the sentinels.

"These glasses will be invaluable for keeping in touch with each other," said the Martian. "I have only one other pair, here in my pocket. But come, let's seek out Herself."

"Still convinced that you must have her head to show?"

"Positive," was the reply as Gorgol turned to lead the way to Jahree's quarters. The chieftainess herself opened at their knock.

"Come in, Gorgol," she said cordially. "Come in, Captain Tarrant. Have you a message for me?"

They stepped in. "As important a message as you ever received," answered Gorgol sardonically. "Close the door, Tarrant, and remain on guard."

Jahree stared at the Martian. "What's the meaning of this?" she demanded as Tarrant pulled the door shut.

"You're to be of use to society at last," said Gorgol. "Your severed head will admit me again to my place among honored scientists."

"Indeed?" said Jahree, as if she only half comprehended. "What will my men say to that?"

"What they say need not concern us," the Martian replied brutally. "You shall die first, quickly and quietly. The others will be wiped out by bomb and gun. Then you can talk it over among yourselves on whatever new plane of existence you may come together."

Jahree shrank back from him. "Is this—murder?" she gasped.

"A harsh word," purred Gorgol, suave again. "I prefer assassination."

"You're too melodramatic, Gorgol," put in Tarrant at his elbow.

"I'm in command, captain," snorted back the Martian.

Tarrant laughed. "Are you? Look around."

He opened the door wide as he spoke, and Gorgol spun to stare.

On the threshold stood the two Martians who had been guarding the invisible ships—disarmed and surrounded by Jahree's captains!

Gorgol's dried-peach complexion grew pale as mustard. His great mouth gasped, his eyes flamed fire. "You've betrayed me!" he shrieked.

"I have," said his companion coldly. "The idea of murdering a woman was too much."

Gorgol's face churned into a grimace of hate as he fumbled for the butt of his electroautomatic.

"It won't work," said Tarrant. "I removed the battery when I was at your laboratory last night. Don't be violent. I'm three times your strength."

Gorgol glared from Tarrant to Jahree. His frame trembled violently.

Jahree spoke: "You felt that I was entitled to explanations. I'll return the compliment. Hall—Captain Tarrant—came to me yesterday with the whole story. We decided to let you walk into the trap."

Gorgol lifted protesting hands. "But you can't do without me!"

Jahree curled her lip scornfully. "The store of synthetic food is enough to tide us over until we seize the Ganymedean colonies with your invisible ships. Then, as masters of the only human habitations beyond Mars and Earth, we can treat for peace, freedom and recognition with the authorities on the inner planets. But, to quote your own words, you shall die first—quickly and quietly."

Gorgol had stood listening, his hands in the pockets of his tunic. Suddenly he drew them into view. One of them clutched an apple-sized sphere of metal. He sprang away toward the inner door that led to the cavern corridors.

"Don't move!" he yelled wildly, flourishing the sphere overhead. "Don't try to draw a weapon or follow me—or I'll drop this and blow us all to atoms!"

Jahree and Tarrant stood stock-still. Gorgol backed to the door, flung it open and paused upon the very sill.

"I have a few tricks left," he exulted. "Revenge——"

He lifted the sphere to hurl it.

AT THAT MOMENT a dark, giant form reared in the doorway behind him. One tremendous hand shot out and closed over the upraised fingers that clutched the bomb, another grasped the Martian by his skinny throat. As easily as a mother takes a plaything from the loose clutch of her sleeping child, Kamba wrested the bomb from Gorgol. Then a sudden contraction and twist of the other hand—a smothered cry—and the Martian's lifeless body, head askew on broken neck, crumpled to the floor.

The Callistan stepped into the room, laid the bomb carefully on a table, then came to salute.

"Well done, Kamba," approved Tarrant. "I didn't realize, even when I stationed you there, what a help you might be."

Jahree, gazing at the still quivering body of Gorgol, swayed toward Tarrant. He quickly caught her in his arms, his touch soothing her trembling.

"No danger at all," he comforted her. "Kamba, carry that body out and report back."

The Callistan first drew from Gorgol's pocket the second pair of goggles and laid them on the table beside the bomb. Then, lifting the dead Martian, he departed.

Jahree had recovered. "Let's look at the invisible ships," she said. "Is the principle hard to understand or operate?"

Tarrant shook his head. "Not very. I learned all about it in half an hour. An invisible ship works just like a visible one. When do we start for Ganymede?"

"At once." She walked to the door. "You command one ship, I'll take the other."

"And the crews?"

"We'd better have the captains." She had become very much the quick-planning chieftainess. "They're more intelligent and trustworthy. You have the juniors—Tischenke, Rackham and Snorf—and there'll be no question of your authority. Brule, Fetcho and Sam go with me. Noncoms will be in charge here."

"Sure you trust me?" said Tarrant.

Jahree, looking up at him, smiled. "Trust you?" she repeated. "I love you!"

Together they stepped out into the main cavern.

V.

SILENT as the stars in their courses, the two ships sped from Callisto toward Ganymede. In the control room of the foremost Captain Tischenke fiddled with the invisibility apparatus. Rackham looked on at his elbow.

"Let it alone," ordered Tarrant, glancing up from the control board. "Even a little of that power will disrupt the television."

"Who are you so anxious to look at?" retorted Tischenke testily.

As if in answer a face materialized on the largest screen—Jahree.

"All right, Hall?" came her cheery voice from the receiver.

"All right," he replied into his microphone.

"Why do you insist on leading?" she asked.

"Why not?" was his bantering reply.

"Have your way," she said. "You're going too fast to be overhauled. Lead on."

"Easy to see who's boss now," muttered Tischenke to Rackham, who nodded, scowling.

Tarrant dialed Jahree out. "Sure you two understand your jobs?" he asked Tischenke and Rackham.

"Sure," they growled together.

"Let's hear what they are, then."

"I'm to work the bombing controls and center my fire on the governor's quarters and ammunition storage," said Tischenke in the tone of a sulky schoolboy reciting before a disliked teacher.

"And I handle the forward disintegrator against their antispacecraft defenses," added Rackham grudgingly.

"Where's Captain Snorf?" asked Tarrant, as if noticing for the first time that the fourth officer was not in the control room.

Neither replied.

"Go look for him, Rackham," directed Tarrant, and Rackham went out, but first he and Tischenke whispered hurriedly together. Tarrant seemed not to hear.

Alone with his commander, Tischenke's face grew crafty. He dropped one hand on his pistol and began to advance upon Tarrant's back. The latter, busy at his instruments, paid no attention until Tischenke's shadow fell across his board. Then, striking a combination of keys to hold the ship's course, he turned. "Well?" he demanded.

He found himself looking into the muzzle of Tischenke's weapon.

At once Tarrant raised his hands, then stood slowly up. "What do you think you're doing?" he asked quietly.

Tischenke, who would have sent a bullet into an unsuspecting back without a qualm, suddenly found it hard to face Tarrant's level stare. "Don't move!" he cried sharply at his commander.

"I won't," Tarrant assured him. "What are you up to?"

Tischenke moistened his lips with his tongue. "I'm going to kill you," he snarled. "Rackham and Snorf and I have decided to put you out of the way. We've had enough of a stranger ruling us simply because he's wormed his way into Herself's affections."

Tarrant did not flinch. "Since you've mentioned Herself," he said evenly, "how do you plan to explain my death to her?"

Tischenke grimaced. "We'll mangle you in the machinery, and it'll pass as an accident. And when a new captain is appointed we'll all move up one place —just as we should have done when Maun died."

Tarrant, still holding up his hands, flashed the smile with which he always greeted danger and difficulty.

"You don't know how easy this makes it for me," he said.

"Makes what? How?" Tischenke mouthed, and his weapon wavered momentarily. Tarrant tightened his muscles for a leap. Tischenke stepped back half a pace and brought the gun to bear again. His finger trembled on the trigger switch. The slightest pressure would send an explosive charge into Tarrant's brain.

"Don't shoot until I've explained," said Tarrant.

Tischenke scowled. "Be quick, then," he snapped.

Tarrant's grin widened. "I was hesitating over killing you," he said. "You see, I planned to finish all three of you, then take the ship to Ganymede, turn it in and stop being an outlaw. You wonder why I'm talking? Because, if I die, it won't hurt me for these things to be known."

"And if you don't die?" asked his captor.

"If I don't die," continued Tarrant, "you will. The others will never hear the story."

"But you will die," snarled Tischenke, whose back felt cold chills at Tarrant's casual recital.

"You're a fool, Tischenke. Already Snorf and Rackham are dead."

"Likely!" Tischenke spat.

"You don't believe me. The corridor door is open behind you. Look what's coming in."

Tischenke almost turned, but recov-

ered himself and menaced Tarrant with the pistol.

"That trick won't do!" he raged.

Tarrant laughed outright. "It's no trick," he assured the other. "I stowed away my servant, Kamba, on this ship. He's as strong as twenty men. Already he's done for the others. Now he's coming after you."

"Liar!" shrieked Tischenke.

He lined his sights on Tarrant's forehead. Tarrant deliberately took his eyes from Tischenke's, looking past him.

"Ready, Kamba!" he called. "Grab his gun hand——"

"I won't look," gibbered Tischenke. "You can't make me——"

His trigger finger was numb. For a moment it did not obey the command of his brain. In that moment something overwhelmed him like an avalanche. A pythonlike grip crushed his ribs. A moment of tense pain, a sudden flash of light that blinded him, and he slid into eternity.

Kamba released the broken body and looked across it at his master, who nodded quiet commendation.

"You're a genius at such jobs," Tarrant praised him. "That was a close call—closer even than the Gorgol business. I could only stall by saying whatever came into my head. A moment more and I'd have stalled my last. How about the others?"

Kamba snapped his fingers twice.

"Dead? We're butchers, I suppose, but it's the price of liberty. Get the remains out of here—somebody's calling on the television."

The Callistan silently scooped up Tischenke's corpse and vanished. Tarrant returned to his instruments and twisted a dial. Again he saw Jahree's face.

"I keep wondering about you," she said. "Is everything all right, dear? Forgive me for asking again."

"Yes," said Tarrant, "everything's all right."

GUARDS with ready rifles and bomb throwers surrounded the strange cruiser as it dropped into the rocket port of the Martio-Terrestrial Colony on Ganymede. A moment later, however, they relaxed with smiles of recognition as the lock panel flung open and Tarrant sprang out.

"Guard things inside, Kamba," he called over his shoulder. Then, to the guards, "Watch the ship, but stay outside. It's full of things you won't understand."

Fastening the panel behind him, he fairly tore into the nearby administration building and into the office of Governor Dawes Wilson. Wilson looked up in startled welcome at the man he had thought lost, then grew more and more astounded at the story Tarrant flung out in staccato sentences. Rising, he gazed through a port at the newly landed ship.

"You don't mean that you can make it disappear at will!" he protested.

"I mean just that, sir. There's no time to demonstrate now. But do you see anything in the sky?"

Wilson gazed up into the heavens, that now blazed with the light from both the Sun and Jupiter. "No. No craft, if that's what you mean."

"Exactly. Now slip on these."

Wilson donned the goggles Tarrant offered him. "I make out a cloudy form swinging overhead," he reported.

"They're closer than I thought," groaned Tarrant. "We haven't a second to waste. Come!"

He ran, Wilson at his heels, to the open turret at the top of the administration building. There was a long-range bomb thrower, its lean muzzle angling upward. Leaping into the seat before the bombing controls, Tarrant first slipped on the ear phones of the radio set. Then he unceremoniously snatched the goggles from the face of the governor and put them on. Dialing

in a certain wave length, he spoke into the microphone: "Outlaw cruiser ahoy! Do you hear me? Don't come any nearer. You're spotted, and if you try to attack or run you'll be bombed!"

A feminine voice answered him, uneasy with surprise. "Who's that? Hall?"

"Captain Hall Tarrant," he answered.

"Hall!" cried Jahree. "Your ship's down. We can see it—are you captured?"

"Surrender, Jahree," he urged in a voice that trembled. "I'm back on the job you took me from. Surrender—you haven't a chance. I can lay a bomb on you whenever I want to."

"Hall!" her voice rose in an agonized cry that vibrated the diaphragms of his ear phones. "They've taken you from me! I'll bomb this colony into the ground——"

"You can't parley," said Wilson hoarsely behind Tarrant. "Let them have it."

"Yes," muttered Tarrant. "Let them have it."

Seizing a lever in each hand, he threw them in. With a muffled report a great bomb soared upward. Holding the radio controls that guided the projectiles, Tarrant sent it toward the smoky blur he saw through the glasses.

"Hall! Hall!" cried the voice of Jahree. "Answer me if——"

"You've hit something," announced Wilson, gazing upward. "Ah! Direct hit. I see it breaking up. Fine work, my boy—it's in sight, falling, falling, and it's down—a mile from here!"

Tarrant sprang up. He tore the glasses from his bloodless face.

"Is there a surface car at hand?" he cried in a choked voice.

"Yes, at the door, but why——"

"I must get to that wreck!"

Half a minute later he was skimming across the plain in the car. Wilson, wondering, followed in another vehicle with armed guards.

THEY FOUND TARRANT working like a demon among the shattered metal scraps of the fallen cruiser. Even as they left their car and joined him he dragged a body from the wreckage. It was a woman, who wore a tattered, bloody uniform.

"Hall?" they heard her mumble.

"Yes, yes," he said, supporting her in his arms. "How are you?"

"Not so—well." Her mouth trickled blood, she lay limp and shattered. "You—are all—right?"

"Not a scratch." His voice was tender. "I can't explain, but I did what I thought I must do. Forgive me."

"Forgive?" She could barely speak. "Forgiveness is—all I—have left. After all, I—shouldn't have tried—to hold you against—duty. I wanted—you—felt that was—enough. Well, good luck——"

She sighed and her head sagged limply back.

For a moment nobody spoke. Then Wilson laid a hand on Tarrant's shoulder.

"The other outlaws, lad. Didn't you say they were on Callisto, without officers?"

Tarrant carefully laid Jahree's body upon the ground and drew her hands together upon her breast. When he looked up his pale face was calm.

"I'll lead the punitive expedition if you wish," he replied. "The sooner I have work, the better."

Science-fiction To-day

I have let Brass Tacks wander over more pages than usual this month for several reasons. It seems to me that we have reached another epochal milestone in our development. The letters show it.

If you have read them closely, you will find more than one promising subject for discussion and debate intelligently presented. I am going to be very disappointed if we do not accept these opportunities for genuine scientific discussions.

Also, I am pleased to note the response to idea stories by writers whose thoughts explore new byways. It proves our audience is a thinking audience. Style, while desirable, is not all important to us.

Again, I am pleased and impressed by the scores of letters from new readers. And from others who have read science-fiction for years, but have felt impelled to write a letter for the first time.

These things mean a lot to me. The appreciation you have shown when we have progressed another step toward our mutual desires. The obvious desire on the part of our reading circle—to help introduce new readers so that I, in my turn, may take another step forward.

It all helps. But the surge of confidence I feel in Astounding Stories to-day is directly due to the fine reaction and support you are giving me.

In the last two years and a half we have seen science-fiction adopted and exploited in newspaper cartoon strips. I have been proud to note the number of plots they have purloined from the creative efforts of Astounding writers.

I have no fear of this by-product. It is bound to bring about a public consciousness to our field, such as has never before existed. And the real creators, the thinkers, are giving us the finest fiction they can write.

I had to move Nat Schachner's story forward to the May issue. He will be in good company with John Russell Fearn's "Mathematica Plus" and Raymond Z. Gallun's "The Weapon," both good presentations.

I'll be short of space if I don't stop! But I do want to say that we are feeling the healthy signs of progress which our field of fiction deserves. It is beginning to be "whispered about" that Astounding Stories is a unique and fascinating magazine. Help to pass that rumor along, will you?

If you do that, I think we can do the rest.—The Editor.

At the Mountains of Madness

(*Conclusion*)

by H. P. LOVECRAFT

IX.

I HAVE SAID that our study of the decadent sculptures brought about a change in our immediate objective. This, of course, had to do with the chiseled avenues to the black inner world, of whose existence we had not known before, but which we were now eager to find and traverse.

From the evident scale of the carvings we deduced that a steeply descending walk of about a mile through either of the neighboring tunnels would bring us to the brink of the dizzy, sunless cliffs about the great abyss, down whose side paths, improved by the Old Ones, led to the rocky shore of the hidden and nighted ocean. To behold this fabulous gulf in stark reality was a lure which seemed impossible of resistance once we knew of the thing—yet we realized we must begin the quest at once if we expected to include it in our present trip.

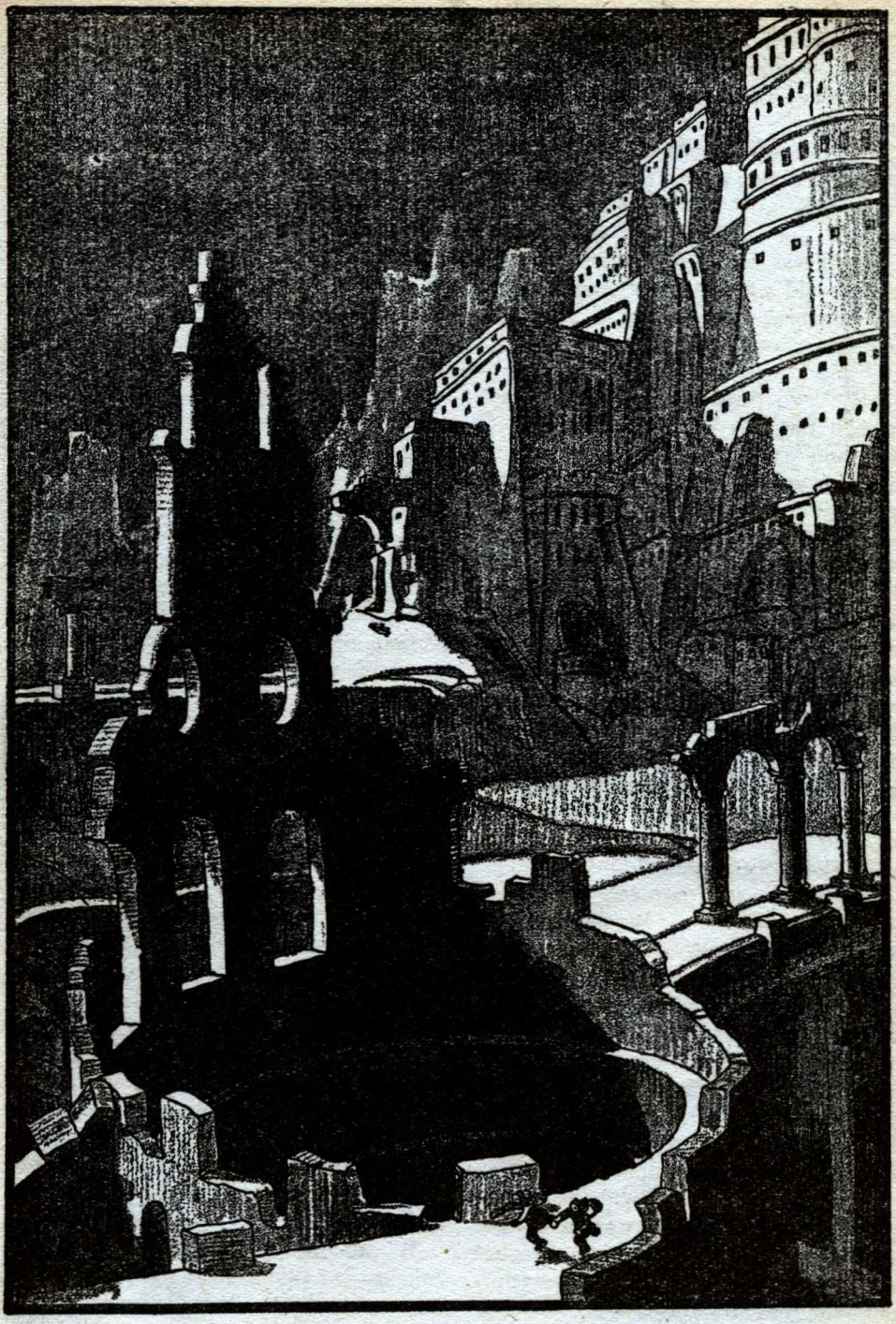
In was now eight p. m., and we had not enough battery replacements to let our torches burn on forever. We had done so much of our studying and copying below the glacial level that our battery supply had had at least five hours of nearly continuous use, and despite the special dry cell formula would obviously be good for only about four more—though by keeping one torch unused, except for especially interesting or difficult places, we might manage to eke out a safe margin beyond that.

It would not do to be without a light in these Cyclopean catacombs, hence in order to make the abyss trip we must give up all further mural deciphering. Of course, we intended to revisit the place for days and perhaps weeks of intensive study and photography—curiosity having long ago gotten the better of horror—but just now we must hasten.

Our supply of trail-blazing paper was far from unlimited, and we were reluctant to sacrifice spare notebooks or sketching paper to augment it, but we did let one large notebook go. If worst came to worst, we could resort to rock chipping—and, of course, it would be possible, even in case of really lost direction, to work up to full daylight by one channel or another if granted sufficient time for plentiful trial and error. So, at last, we set off eagerly in the indicated direction of the nearest tunnel.

According to the carvings from which we had made our map, the desired tunnel mouth could not be much more than a quarter of a mile from where we stood; the intervening space showing solid-looking buildings quite likely to be penetrable still at a subglacial level. The opening itself would be in the basement—on the angle nearest the foothills—of a vast five-pointed structure of evidently public and perhaps ceremonial nature, which we tried to identify from our aërial survey of the ruins.

No such structure came to our minds as we recalled our flight, hence we concluded that its upper parts had been greatly damaged, or that it had been totally shattered in an ice rift we had no-



And then came a sound—a horrible sound—which enabled us to run like mad for the same outer air——

ticed. In the latter case the tunnel would probably turn out to be choked, so that we would have to try the next nearest one—the one less than a mile to the north.

The intervening river course prevented our trying any of the more southern tunnels on this trip; and indeed, if both of the neighboring ones were choked it was doubtful whether our batteries would warrant an attempt on the next northerly one—about a mile beyond our second choice.

AS WE threaded our dim way through the labyrinth with the aid of map and compass—traversing rooms and corridors in every stage of ruin or preservation, clambering up ramps, crossing upper floors and bridges and clambering down again, encountering choked doorways and piles of débris, hastening now and then along finely preserved and uncannily immaculate stretches, taking false leads and retracing our way (in such cases removing the blind paper trail we had left), and once in a while striking the bottom of an open shaft through which daylight poured or trickled down—we were repeatedly tantalized by the sculptured walls along our route.

We had wormed our way very close to the computed site of the tunnel's mouth—having crossed a second-story bridge to what seemed plainly the tip of a pointed wall, and descended to a ruinous corridor especially rich in decadently elaborate and apparently ritualistic sculptures of late workmanship—when, about eight thirty p. m., Danforth's keen young nostrils gave us the first hint of something unusual.

If we had had a dog with us, I suppost we would have been warned before. At first we could not precisely say what was wrong with the formerly crystal-pure air, but after a few seconds our memories reached only too definitely. Let me try to state the thing without flinching. There was an odor—and that odor was vaguely, subtly, and unmistakably akin to what had nauseated us upon opening the insane grave of the horror poor Lake had dissected.

Of course, the revelation was not as clearly cut at the time as it sounds now. There were several conceivable explanations, and we did a good deal of indecisive whispering. Most important of all, we did not retreat without further investigation; for having come this far, we were loath to be balked by anything short of certain disaster.

Anyway, what we must have suspected was altogether too wild to believe. Such things did not happen in any normal world. It was probably sheer irrational instinct which made us dim our single torch—tempted no longer by the decadent and sinister sculptures that leered menacingly from the oppressive walls—and which softened our progress to a cautious tiptoeing and crawling over the increasingly littered floor and heaps of débris.

Danforth's eyes as well as nose proved better than mine, for it was likewise he who first noticed the queer aspect of the débris after we had passed many half-choked arches leading to chambers and corridors on the ground level. It did not look quite as it ought after countless thousands of years of desertion, and when we cautiously turned on more light we saw that a kind of swath seemed to have been lately tracked through it. The irregular nature of the latter precluded any definite marks, but in the smoother places there were suggestions of the dragging of heavy objects. Once we thought there was a hint of parallel tracks, as if of runners. This was what made us pause again.

It was during that pause that we caught—simultaneously this time—the other odor ahead. Paradoxically, it was both a less frightful and a more frightful odor—less frightful intrinsically, but

infinitely appalling in this place under the known circumstances—unless, of course, Gedney—— For the odor was the plain and familiar one of common petrol—every-day gasoline.

OUR motivation after that is something I will leave to psychologists. We knew now that some terrible extension of the camp horrors must have crawled into this nighted burial place of the æons, hence could not doubt any longer the existence of nameless conditions—present or at least recent—just ahead. Yet in the end we did let sheer burning curiosity—or anxiety—or autohypnotism—or vague thoughts of responsibility toward Gedney—of what not—drive us on.

Danforth whispered again of the print he thought he had seen at the alley turning in the ruins above; and of the faint musical piping—potentially of tremendous significance in the light of Lake's dissection report, despite its close resemblance to the cave-mouth echoes of the windy peaks—which he thought he had shortly afterward half heard from unknown depths below.

I, in my turn, whispered of how the camp was left—of what had disappeared, and of how the madness of a lone survivor might have conceived the inconceivable—a wild trip across the monstrous mountains and a descent into the unknown, primal masonry——

But we could not convince each other, or even ourselves, of anything definite. We had turned off all light as we stood still, and vaguely noticed that a trace of deeply filtered upper daylight kept the blackness from being absolute.

Having automatically begun to move ahead, we guided ourselves by occasional flashes from our torch. The disturbed débris formed an impression we could not shake off, and the smell of gasoline grew stronger. More and more ruin met our eyes and hampered our feet, until very soon we saw that the forward way was about to cease. We had been all too correct in our pessimistic guess about that rift glimpsed from the air. Our tunnel quest was a blind one, and we were not even going to be able to reach the basement out of which the abyssward aperture opened.

The torch, flashing over the grotesquely carved walls of the blocked corridor in which we stood, showed several doorways in various states of obstruction; and from one of them the gasoline odor—quite submerging that other hint of odor—came with especial distinctness. As we looked more steadily, we saw that beyond a doubt there had been a slight and recent clearing away of débris from that particular opening. Whatever the lurking horror might be, we believed the direct avenue toward it was now plainly manifest. I do not think any one will wonder that we waited an appreciable time before making any further motion.

And yet, when we did venture inside that black arch, our first impression was one of anticlimax. For amidst the littered expanse of that sculptured crypt —a perfect cube with sides of about twenty feet—there remained no recent object of instantly discernible size; so that we looked instinctively, though in vain, for a farther doorway.

In another moment, however, Danforth's sharp vision had discovered a place where the floor débris had been disturbed. We turned on both torches full strength. Though what we saw in that light was actually simple and trifling, I am none the less reluctant to tell of it because of what it implied.

It was a rough leveling of the débris, upon which several small objects lay carelessly scattered, and at one corner of which a considerable amount of gasoline must have been spilled lately enough to leave a strong odor even at this extreme superplateau altitude. In other words, it could not be other than a sort of camp—a camp made by quest-

ing beings who, like us, had been turned back by the unexpectedly choked way to the abyss.

Let me be plain. The scattered objects were, so far as substance was concerned, all from Lake's camp, and consisted of: tin cans as queerly opened as those we had seen at that ravaged place, many spent matches, three illustrated books more or less curiously smudged, an empty ink bottle with its pictorial and instructional carton, a broken fountain pen, some oddly snipped fragments of fur and tent cloth, a used electric battery with circular of directions, a folder that came with our type of tent heater, and a sprinkling of crumpled papers.

It was all bad enough, but when we smoothed out the papers and looked at what was on them we felt we had come to the worst. We had found certain inexplicably blotted papers at the camp which might have prepared us, yet the effect of the sight, down there in the prehuman vaults of a nightmare city, was almost too much to bear.

A MAD GEDNEY might have made the groups of dots in imitation of those found on the greenish soapstones, just as the dots on those insane five-pointed grave mounds might have been made; and he might conceivably have prepared rough, hasty sketches—varying in their accuracy—or lack of it—which outlined the neighboring parts of the city and traced the way from a circularly represented place outside our previous route—a place we identified as a great cylindrical tower in the carvings and as a vast circular gulf glimpse in our aërial survey—to the present five-pointed structure and the tunnel mouth therein.

He might, I repeat, have prepared such sketches; for those before us were quite obviously compiled, as our own had been, from late sculptures somewhere in the glacial labyrinth, though not from the ones which we had seen and used. But what this art-blind bungler could never have done was to execute those sketches in a strange and assured technique perhaps superior, despite haste and carelessness, to any of the decadent carvings from which they were taken—the characteristic and unmistakable technique of the Old Ones themselves in the dead city's heyday.

There are those who will say Danforth and I were utterly mad not to flee for our lives after that; since our conclusions were now—notwithstanding their wildness—completely fixed, and of a nature I need not even mention to those who have read my account as far as this. Perhaps we were mad—for have I not said those horrible peaks were mountains of madness? But I think I can detect something of the same spirit—albeit in a less extreme form—in the men who stalk deadly beasts through African jungles to photograph them or study their habits. Half paralyzed with terror though we were, there was nevertheless fanned within us a blazing flame of awe and curiosity which triumphed in the end.

Of course, we did not mean to face that—or those—which we knew had been there, but we felt that they must be gone by now. They would by this time have found the other neighboring entrance to the abyss, and have passed within, to whatever night-black fragments of the past might await them in the ultimate gulf—the ultimate gulf they had never seen. Or if that entrance, too, was blocked, they would have gone on to the north seeking another. They were, we remembered, partly independent of light.

Looking back to that moment, I can scarcely recall just what precise form our new emotions took—just what change of immediate objective it was that so sharpened our sense of expectancy. We certainly did not mean to face what we feared—yet I will not

deny that we may have had a lurking, unconscious wish to spy certain things from some hidden vantage point.

Probably we had not given up our zeal to glimpse the abyss itself, though there was interposed a new goal in the form of that great circular place shown on the crumpled sketches we had found. We had at once recognized it as a monstrous cylindrical tower in the carvings, but appearing only as a prodigious, round aperture from above.

Something about the impressiveness of its rendering, even in these hasty diagrams, made us think that its subglacial levels must still form a feature of peculiar importance. Perhaps it embodied architectural marvels as yet unencountered by us. It was certainly of incredible age, according to the sculptures in which it figured—being indeed among the first things built in the city. Its carvings, if preserved, could not but be highly significant. Moreover, it might form a good present link with the upper world—a shorter route than the one we were so carefully blazing and probably that by which those others had descended.

AT ANY RATE, the thing we did was to study the terrible sketches—which quite perfectly confirmed our own—and start back over the indicated course to the circular place; the course which our nameless predecessors must have traversed twice before us. The other neighboring gate to the abyss would lie beyond that. I need not speak of our journey—during which we continued to leave an economical trail of paper—for it was precisely the same in kind as that by which we had reached the cul-de-sac, except that it tended to adhere more closely to the ground level and even descend to basement corridors.

Every now and then we could trace certain disturbing marks in the débris or litter underfoot; and, after we had passed outside the radius of the gasoline scent, we were again faintly conscious—spasmodically—of that more hideous and more persistent scent. After the way had branched from our former course, we sometimes gave the rays of our single torch a furtive sweep along the walls; noting in almost every case the well-nigh omnipresent sculptures, which indeed seem to have formed a main æsthetic outlet for the Old Ones.

About nine-thirty p. m., while traversing a vaulted corridor whose increasingly glaciated floor seemed somewhat below the ground level and whose roof grew lower as we advanced, we began to see strong daylight ahead and were able to turn off our torch. It appeared that we were coming to the vast, circular place, and that our distance from the upper air could not be very great.

The corridor ended in an arch, surprisingly low for these megalithic ruins, but we could see much through it even before we emerged. Beyond, there stretched a prodigious round space—fully two hundred feet in diameter—strown with débris and containing many choked archways corresponding to the one we were about to cross. The walls were—in available spaces—boldly sculptured into a spiral band of heroic proportions; and displayed, despite the destructive weathering caused by the openness of the spot, an artistic splendor far beyond anything we had encountered before. The littered floor was quite heavily glaciated, and we fancied that the true bottom lay at a considerably lower depth.

But the salient object of the place was the titanic stone ramp which, eluding the archways by a sharp turn outward into the open floor, wound spirally up the stupendous cylindrical wall like an inside counterpart of those once climbing outside the monstrous towers or zikkurats of antique Babylon. Only the rapidity of our flight, and the perspective which confounded the descent

with the tower's inner wall, had prevented our noticing this feature from the air, and thus caused us to seek another avenue to the subglacial level.

Pabodie might have been able to tell what sort of engineering held it in place, but Danforth and I could merely admire and marvel. We could see mighty stone corbels and pillars here and there, but what we saw seemed inadequate to the function performed. The thing was excellently preserved up to the present top of the tower—a highly remarkable circumstances in view of its exposure—and its shelter had done much to protect the bizarre and disturbing cosmic sculptures on the walls.

AS we stepped out into the awesome half daylight of this monstrous cylinder bottom—fifty million years old, and without doubt the most primally ancient structure ever to meet our eyes—we saw that the ramp-traversed sides stretched dizzily up to a height of fully sixty feet.

This, we recalled from out aërial survey, meant an outside glaciation of some forty feet; since the yawning gulf we had seen from the plane had been at the top of an approximately twenty-foot mound of crumbled masonry, somewhat sheltered for three fourths of its circumference by the massive curving walls of a line of higher ruins. According to the sculptures the original tower had stood in the center of an immense circular plaza, and had been perhaps five hundred or six hundred feet high, with tiers of horizontal disks near the top, and a row of needlelike spires along the upper rim.

Most of the masonry had obviously toppled outward rather than inward—a fortunate happening, since otherwise the ramp might have been shattered and the whole interior choked. As it was, the ramp showed sad battering; whilst the choking was such that all the archways seemed to have been half cleared.

It took us only a moment to conclude that this was indeed the route by which those others had descended, and that this would be the logical route for our own ascent, despite the long trail of paper we had left elsewhere. The tower's mouth was no farther from the foothills and our waiting plane than was the great terraced building we had entered, and any further subglacial exploration we might make on this trip would lie in this general region.

Oddly, we were still thinking about possible later trips—even after all we had seen and guessed. Then, as we picked our way cautiously over the débris of the great floor, there came a sight which for the time excluded all other matters.

It was the neatly huddled array of three sledges in that farther angle of the ramp's lower and outward-projecting course which had hitherto been screened from our view. There they were—the three sledges missing from Lake's camp—shaken by a hard usage which must have included forcible dragging along great reaches of snowless masonry and débris, as well as much hand portage over utterly unnavigable places.

They were carefully and intelligently packed and strapped, and contained things memorably familiar enough: the gasoline stove, fuel cans, instrument cases, provision tins, tarpaulins obviously bulging with books, and some bulging with less obvious contents—everything derived from Lake's equipment.

After what we had found in that other room, we were in a measure prepared for this encounter. The really great shock came when we stepped over and undid one tarpaulin, whose outlines had peculiarly disquieted us. It seems that others as well as Lake had been interested in collecting typical specimens; for there were two here, both stiffly frozen, perfectly preserved,

patched with adhesive plaster where some wounds around the neck had occurred, and wrapped with care to prevent further damage. They were the bodies of young Gedney and the missing dog.

X.

MANY PEOPLE will probably judge us callous as well as mad for thinking about the northward tunnel and the abyss so soon after our somber discovery, and I am not prepared to say that we would have immediately revived such thoughts but for a specific circumstance which broke in upon us and set up a whole new train of speculations.

We had replaced the tarpaulin over poor Gedney and were standing in a kind of mute bewilderment when the sounds finally reached our consciousness —the first sounds we had heard since descending out of the open where the mountain wind whined faintly from its unearthly heights. Well-known and mundane though they were, their presence in this remote world of death was more unexpected and unnerving than any grotesque or fabulous tones could possibly have been—since they gave a fresh upsetting to all our notions of cosmic harmony.

Had it been some trace of that bizarre musical piping over a wide range, which Lake's dissection report had led us to expect in those others—and which, indeed, our overwrought fancies had been reading into every wind howl we had heard since coming on the camp horror—it would have had a kind of hellish congruity with the æon-dead region around us. A voice from other epochs belongs in a graveyard of other epochs.

As it was, however, the noise shattered all our profoundly seated adjustments—all our tacit acceptance of the inner antarctic as a waste utterly and irrevocably void of every vestige of normal life.

What we heard was not the fabulous note of any buried blasphemy of elder earth from whose supernal toughness an age-denied polar sun had evoked a monstrous response. Instead, it was a thing so mockingly normal and so unerringly familiarized by our sea days off Victoria Land and our camp days at McMurdo Sound that we shuddered to think of it here, where such things ought not to be. To be brief—it was simply the raucous squawking of a penguin.

The muffled sound floated from subglacial recesses nearly opposite to the corridor whence we had come—regions manifestly in the direction of that other tunnel to the vast abyss. The presence of a living water bird in such a direction—in a world whose surface was one of age-long and uniform lifelessness—could lead to only one conclusion; hence our first thought was to verify the objective reality of the sound. It was, indeed, repeated, and seemed at times to come from more than one throat.

Seeking its source, we entered an archway from which much débris had been cleared; resuming our trail blazing—with an added paper supply taken with curious repugnance from one of the tarpaulin bundles on the sledges—when we left daylight behind.

As the glaciated floor gave place to a litter of detritus, we plainly discerned some curious, dragging tracks; and once Danforth found a distinct print of a sort whose description would be only too superfluous. The course indicated by the penguin cries was precisely what our map and compass prescribed as an approach to the more northerly tunnel mouth, and we were glad to find that a bridgeless thoroughfare on the ground and basement levels seemed open.

The tunnel, according to the chart, ought to start from the basement of a large pyramidal structure which we seemed vaguely to recall from our aërial survey as remarkably well-preserved.

Along our path the single torch showed a customary profusion of carvings, but we did not pause to examine any of these.

SUDDENLY a bulky white shape loomed up ahead of us, and we flashed on the second torch. It is odd how wholly this new quest had turned our minds from earlier fears of what might lurk near. Those other ones, having left their supplies in the great circular place, must have planned to return after their scouting trip toward or into the abyss; yet we had now discarded all caution concerning them as completely as if they had never existed.

This white, waddling thing was fully six feet high, yet we seemed to realize at once that it was not one of those others. They were larger and dark, and, according to the sculptures, their motion over land surfaces was a swift, assured matter despite the queerness of their sea-born tentacle equipment. But to say that the white thing did not profoundly frighten us would be vain. We were indeed clutched for an instant by a primitive dread almost sharper than the worst of our reasoned fears regarding those others.

Then came a flash of anticlimax as the white shape sidled into a lateral archway to our left, to join two others of its kind which had summoned it in raucous tones. For it was only a penguin—albeit of a huge, unknown species larger than the greatest of the known king penguins, and monstrous in its combined albinism and virtual eyelessness.

When we had followed the thing into the archway and turned both our torches on the indifferent and unheeding group of three, we saw that they were all eyeless albinos of the same unknown and gigantic species.

Their size reminded us of some of the archaic penguins depicted in the Old Ones' sculptures, and it did not take us long to conclude that they were descended from the same stock—undoubtedly surviving through a retreat to some warmer inner region whose perpetual blackness had destroyed their pigmentation and atrophied their eyes to mere useless slits.

That their present habitat was the vast abyss we sought, was not for a moment to be doubted; and this evidence of the gulf's continued warmth and habitability filled us with the most curious and subtly perturbing fancies.

We wondered, too, what had caused these three birds to venture out of their usual domain. The state and silence of the great dead city made it clear that it had at no time been a habitual seasonal rookery, whilst the manifest indifference of the trio to our presence made it seem odd that any passing party of those others should have startled them.

Was it possible that those others had taken some aggressive notion or tried to increase their meat supply? We doubted whether that pungent odor which the dogs had hated could cause an equal antipathy in these penguins; since their ancestors had obviously lived on excellent terms with the Old Ones—an amicable relationship which must have survived in the abyss below as long as any of the Old Ones remained.

Regretting—in a flare-up of the old spirit of pure science—that we could not photograph these anomalous creatures, we shortly left them to their squawking and pushed on toward the abyss whose openness was now so positively proved to us, and whose exact direction occasional penguin tracks made clear.

NOT LONG AFTERWARD a steep descent in a long, low, doorless, and peculiarly sculptureless corridor led us to believe that we were approaching the tunnel mouth at last. We had passed two more penguins.

Then the corridor ended in a prodigious open space which made us gasp involuntarily—a perfect inverted hemisphere, obviously deep underground, fully a hundred feet in diameter and fifty feet high, with low archways opening around all parts of the circumference but one, and that one yawning cavernously with a black, arched aperture which broke the symmetry of the vault to a height of nearly fifteen feet. It was the entrance to the great abyss.

In this vast hemisphere, whose concave roof was impressively though decadently carved to a likeness of the primordial celestial dome, a few albino penguins waddled—aliens there, but indifferent and unseeing. The black tunnel yawned indefinitely off at a steep, descending grade, its aperture adorned with grotesquely chiseled jambs and lintel.

From that cryptical mouth we fancied a current of slightly warmer air and perhaps even a suspicion of vapor proceeded; and we wondered what living entities other than penguins the limitless void below, and the contiguous honeycombings of the land and the titan mountains, might conceal.

We wondered, too, whether the trace of mountaintop smoke at first suspected by poor Lake, as well as the odd haze we had ourselves perceived around the rampart-crowned peak, might not be caused by the tortuous-channeled rising of some such vapor from the unfathomed regions of earth's core.

Entering the tunnel, we saw that its outline was—at least at the start—about fifteen feet each way—sides, floor, and arched roof composed of the usual megalithic masonry. The sides were sparsely decorated with cartouches of conventional designs in a later, decadent style; and all the construction and carving were marvellously well-preserved.

The floor was quite clear, except for a slight detritus bearing outgoing penguin tracks and the inward tracks of those others. The farther one advanced, the warmer it became; so that we were soon unbuttoning our heavy garments. We wondered whether there were any actually igneous manifestations below, and whether the waters of that sunless sea were hot.

After a short distance the masonry gave place to solid rock, though the tunnel kept the same proportions and presented the same aspect of carved regularity. Occasionally its varying grade became so steep that grooves were cut in the floor.

Several times we noted the mouths of small lateral galleries not recorded in our diagrams; none of them such as to complicate the problem of our return, and all of them welcome as possible refuges in case we met unwelcome entities on their way back from the abyss.

The nameless scent of such things was very distinct. Doubtless it was suicidally foolish to venture into that tunnel under the known conditions, but the lure of the unplumbed is stronger in certain persons than most suspect—indeed, it was just such a lure which had brought us to this unearthly polar waste in the first place.

We saw several penguins as we passed along, and speculated on the distance we would have to traverse. The carvings had led us to expect a steep downhill walk of about a mile to the abyss, but our previous wanderings had shown us that matters of scale were not wholly to be depended on.

After about a quarter of a mile that nameless scent became greatly accentuated, and we kept very careful track of the various lateral openings we passed. There was no visible vapor as at the mouth, but this was doubtless due to the lack of contrasting cooler air. The temperature was rapidly ascending, and we were not surprised to come upon a careless heap of material shudderingly familiar to us. It was composed of furs

and tent cloths taken from Lake's camp, and we did not pause to study the bizarre forms into which the fabrics had been slashed.

Slightly beyond this point we noticed a decided increase in the size and number of the side galleries, and concluded that the densely honeycombed region beneath the higher foothills must now have been reached.

The nameless scent was now curiously mixed with another and scarcely less offensive odor—of what nature we could not guess, though we thought of decaying organisms and perhaps unknown subterrane fungi.

Then came a startling expansion of the tunnel for which the carvings had not prepared us—a broadening and rising into a lofty, natural-looking elliptical cavern with a level floor, some seventy-five feet long and fifty broad, and with many immense side passages leading away into cryptical darkness.

THOUGH this cavern was natural in appearance, an inspection with both torches suggested that it had been formed by the artificial destruction of several walls between adjacent honeycombings. The walls were rough, and the high, vaulted roof was thick with stalactites; but the solid rock floor had been smoothed off, and was free from all débris, detritus, or even dust to a positively abnormal extent.

Except for the avenue through which we had come, this was true of the floors of all the great galleries opening off from it; and the singularlty of the condition was such as to set us vainly puzzling.

The curious new fetor which had supplemented the nameless scent was excessively pungent here; so much so that it destroyed all trace of the other. Something about this whole place, with its polished and almost glistening floor, struck us as more vaguely baffling and horrible than any of the monstrous things we have previously encountered.

The regularity of the passage immediately ahead, prevented all confusion as to the right course amidst this plethora of equally great cave mouths. Nevertheless we resolved to resume our paper trail blazing if any further complexity should develop; for dust tracks, of course, could no longer be expected.

Upon resuming our direct progress we cast a beam of torchlight over the tunnel walls—and stopped short in amazement at the supremely radical change which had come over the carvings in this part of the passage. We realized, of course, the great decadence of the Old Ones' sculpture at the time of the tunneling, and had indeed noticed the inferior workmanship of the arabesques in the stretches behind us.

But now, in this deeper section beyond the cavern, there was a sudden difference wholly transcending explanation—a difference in basic nature as well as in mere quality, and involving so profound and calamitous a degradation of skill that nothing in the hitherto observed rate of decline could have led one to expect it.

This new and degenerate work was coarse, bold, and wholly lacking in delicacy of detail. It was countersunk with exaggerated depth in bands following the same general line as the sparse cartouches of the earlier sections, but the height of the reliefs did not reach the level of the general surface.

Danforth had the idea that it was a second carving—a sort of palimpsest formed after the obliteration of a previous design. In nature it was wholly decorative and conventional, and consisted of crude spirals and angles roughly following the quintile mathematical tradition of the Old Ones, yet seeming more like a parody than a perpetuation of that tradition.

Since we could not afford to spend any considerable time in study, we re-

sumed our advance after a cursory look.

We saw and heard fewer penguins, but thought we caught a vague suspicion of an infinitely distant chorus of them somewhere deep within the earth. The new and inexplicable odor was abominably strong, and we could detect scarcely a sign of that other nameless scent.

Puffs of visible vapor ahead bespoke increasing contrasts in temperature, and the relative nearness of the sunless sea cliffs of the great abyss. Then, quite unexpectedly, we saw certain obstructions on the polished floor ahead—obstructions which were quite definitely not penguins—and turned on our second torch after making sure that the objects were quite stationary.

XI.

STILL another time have I come to a place where it is very difficult to proceed. I ought to be hardened by this stage; but there are some experiences and intimations which scar too deeply to permit of healing, and leave only such added sensitivenss that memory reinspired all the original horror.

We saw, as I have said, certain obstructions on the polished floor ahead; and I may add that our nostrils were assailed almost simultaneously by a very curious intensification of the strange, prevailing fetor, now quite plainly mixed with the nameless stench of those others which had gone before us.

The light of the second torch left no doubt of what the obstructions were, and we dared approach them only because we could see, even from a distance, that they were quite as past all harming power as had been the six similar specimens unearthed from the monstrous star-mounded graves at poor Lake's camp.

They were, indeed, as lacking in completeness as most of those we had unearthed—though it grew plain from the thick, dark-green pool gathering around them that their incompleteness was of infinitely greater recency. There seemed to be only four of them, whereas Lake's bulletins would have suggested no less than eight as forming the group which had preceded us. To find them in this state was wholly unexpected, and we wondered what sort of monstrous struggle had occurred down here in the dark.

Penguins, attacked in a body, retaliate savagely with their beaks; and our ears now made certain the existence of a rookery far beyond. Had those others disturbed such a place and aroused murderous pursuit? The obstructions did not suggest it, for penguin beaks against the tough tissues Lake had dissected could hardly account for the terrible damage our approaching glance was beginning to make out. Besides, the huge blind birds we had seen appeared to be singularly peaceful.

Had there, then, been a struggle among those others, and were the absent four responsible? If so, where were they? Were they close at hand and likely to form an immediate menace to us? We glanced anxiously at some of the smooth-floored lateral passage as we continued our slow and frankly reluctant approach.

Whatever the conflict was, it had clearly been that which had frightened the penguins into their unaccustomed wandering. It must, then, have arisen near that faintly heard rookery in the incalculable gulf beyond, since there were no signs that any birds had normally dwelt here.

Perhaps, we reflected, there had been a hideous running fight, with the weaker party seeking to get back to the cached sledges when their pursuers finished them. One could picture the demonic fray between namelessly monstrous entities as it surged out of the black abyss with great clouds of frantic penguins squawking and scurrying ahead.

I say that we approached those sprawling and incomplete obstructions slowly and reluctantly. Would to Heaven we had never approached them at all, but had run back at top speed out of that blasphemous tunnel with the greasily smooth floors and the degenerate murals aping and mocking the things they had superseded—run back, before we had seen what we did see, and before our minds were burned with something which will never let us breathe easily again!

BOTH of our torches were turned on the prostrate objects, so that we soon realized the dominant factor in their incompleteness. Mauled, compressed, twisted, and ruptured as they were, their chief common injury was total decapitation.

From each one the tentacled starfish head had been removed; and as we drew near we saw that the manner of removal looked more like some hellish tearing or suction than like any ordinary form of cleavage.

Their noisome dark-green ichor formed a large, spreading pool; but its stench was half overshadowed by that newer and stranger stench, here more pungent than at any other point along our route.

Only when we had come very close to the sprawling obstructions could we trace that second, unexplainable fetor to any immediate source—and the instant we did so Danforth, remembering certain very vivid sculptures of the Old Ones' history in the Permian Age one hundred and fifty million years ago, gave vent to a nerve-tortured cry which echoed hysterically through that vaulted and archaic passage with the evil, palimpsest carvings.

I came only just short of echoing his cry myself; for I had seen those primal sculptures, too, and had shudderingly admired the way the nameless artist had suggested that hideous slime coating found on certain incomplete and prostrate Old Ones—those whom the frightful Shoggoths had characteristically slain and sucked to a ghastly headlessness in the great war of resubjugation.

They were infamous, nightmare sculptures even when telling of age-old, bygone things; for Shoggoths and their work ought not to be seen by human beings or portrayed by any beings.

The mad author of the *Necronomicon* had nervously tried to swear that none had been bred on this planet, and that only drugged dreamers had ever conceived them. Formless protoplasm able to mock and reflect all forms and organs and processes—viscous agglutinations of bubbling cells—rubbery fifteen-foot spheroids infinitely plastic and ductile—slaves of suggestion, builders of cities—more and more sullen, more and more intelligent, more and more amphibious, more and more imitative! Great Heaven! What madness made even those blasphemous Old Ones willing to use and to carve such things?

And now, when Danforth and I saw the freshly glistening and reflectively iridescent black slime which clung thickly to those headless bodies and stank obscenely with that new, unknown odor whose cause only a diseased fancy could envisage—clung to those bodies and sparkled less voluminously on a smooth part of the accursedly resculptured wall in a series of grouped dots—we understood the quality of cosmic fear to its uttermost depths.

It was not fear of those four missing others—for all too well did we suspect they would do no harm again. Poor devils! After all, they were not evil things of their kind. They were the men of another age and another order of being. Nature had played a hellish jest on them—as it will on any others that human madness, callousness, or cruelty may hereafter drag up in that hideously dead or sleeping polar waste—and this was their tragic homecoming.

They had not been even savages—for what indeed had they done? That awful awakening in the cold of an unknown epoch—perhaps an attack by the furry, frantically barking quadrupeds, and a dazed defense against them and the equally frantic white simians with the queer wrappings and paraphernalia! Poor Lake. Poor Gedney. And poor Old Ones! Scientists to the last—what had they done that we would not have done in their place? Lord, what intelligence and persistence! What a facing of the incredible, just as those carven kinsmen and forbears had faced things only a little less incredible! Radiates, vegetables, monstrosities, star spawn—whatever they had been, they were men!

THEY had crossed the icy peaks on whose templed slopes they had once worshiped and roamed among the tree ferns. They had found their dead city brooding under its curse, and had read its carven latter days as we had done. They had tried to reach their living fellows in fabled depths of blackness they had never seen—and what had they found?

All this flashed in unison through the thoughts of Danforth and me as we looked from those headless, slime-coated shapes to the loathsome palimpsest sculptures and the diabolical dot groups of fresh slime on the wall beside them—looked and understood what must have triumphed and survived down there in the Cyclopean water city of that nighted, penguin-fringed abyss, whence even now a sinister curling mist had begun to belch pallidly as if in answer to Danforth's hysterical scream.

The shock of recognizing that monstrous slime and headlessness had frozen us into mute, motionless statues, and it is only through later conversations that we have learned of the complete identity of our thoughts at that moment.

It seemed æons that we stood there, but actually it could not have been more than ten or fifteen seconds. That hateful, pallid mist curled forward as if veritably driven by some remoter advancing bulk—and then came a sound which upset much of what we had just decided, and in so doing broke the spell and enabled us to run like mad past squawking, confused penguins over our former trail back to the city, along ice-sunken megalithic corridors to the great open circle, and up that archaic spiral ramp in a frenzied, automatic plunge for the sane outer air and light of day.

The new sound, as I have intimated, upset much that we had decided; because it was what poor Lake's dissection had led us to attribute to those we had just judged dead. It was, Danforth later told me, precisely what he had caught in infinitely muffled form when at that spot beyond the alley corner above the glacial level; and it certainly had a shocking resemblance to the wind pipings we had both heard around the lofty mountain caves.

At the risk of seeming puerile I will add another thing, too, if only because of the surprising way Danforth's impression chimed with mine. Of course, common reading is what prepared us both to make the interpretation, though Danforth has hinted at queer notions about unsuspected and forbidden sources to which Poe may have had access when writing his "Arthur Gordon Pym" a century ago.

It will be remembered that in that fantastic tale there is a word of unknown but terrible and prodigious significance connected with the antarctic and screamed eternally by the gigantic, spectrally snowy birds of that malign region's core. *"Tekeli-li! Tekeli-li!"* That, I may admit, is exactly what we thought we heard conveyed by that sudden sound behind the advancing white mist—that insidious, musical piping over a singularly wide range.

WE WERE in full flight before three notes or syllables had been uttered, though we knew that the swiftness of the Old Ones would enable any scream-roused and pursuing survivor of the slaughter to overtake us in a moment if it really wished to do so.

We had a vague hope, however, that nonaggressive conduct and a display of kindred reason might cause such a being to spare us in case of capture, if only from scientific curiosity.

After all, if such a one had nothing to fear for itself it would have no motive in harming us. Concealment being futile at this juncture, we used our torch for a running glance behind, and perceived that the mist was thinning. Would we see at last, a complete and living specimen of those others? Again came that insidious musical piping—*"Tekeli-li! Tekeli-li!"*

Then, noting that we were actually gaining on our pursuer, it occurred to us that the entity might be wounded. We could take no chances, however, since it was very obviously approaching in answer to Danforth's scream, rather than in flight from any other entity. The timing was too close to admit of doubt.

Of the whereabouts of that less conceivable and less mentionable nightmare —that fetid, unglimpsed mountain of slime-spewing protoplasm whose race had conquered the abyss and sent land pioneers to recarve and squirm through the burrows of the hills—we could form no guess; and it cost us a genuine pang to leave this probably crippled Old One —perhaps a lone survivor—to the peril of recapture and a nameless fate.

Thank Heaven we did not slacken our run. The curling mist had thickened again, and was driving ahead with increased speed; whilst the straying penguins in our rear were squawking and screaming and displaying signs of a panic really surprising in view of their relatively minor confusion when we had passed them.

Once more came that sinister, wide-ranged piping—*"Tekeli-li! Tekeli-li!"* We had been wrong. The thing was not wounded, but had merely paused on encountering the bodies of its fallen kindred and the hellish slime inscription above them. We could never know what that demon message was—but those burials at Lake's camp had shown how much importance the beings attached to their dead.

Our recklessly used torch now revealed ahead of us the large open cavern where various ways converged, and we were glad to be leaving those morbid palimpsest sculptures—almost felt even when scarcely seen—behind.

Another thought which the advent of the cave inspired was the possibility of losing our pursuer at this bewildering focus of large galleries. There were several of the blind albino penguins in the open space, and it seemed clear that their fear of the oncoming entity was extreme to the point of unaccountability.

If at that point we dimmed our torch to the very lowest limit of traveling need, keeping it strictly in front of us, the frightened squawking motions of the huge birds in the mist might muffle our footfalls, screen our true course, and somehow set up a false lead.

Amidst the churning, spiraling fog, the littered and unglistening floor of the main tunnel beyond this point, as differing from the other morbidly polished burrows, could hardly form a highly distinguishing feature; even, so far as we could conjecture, for those indicated special senses which made the Old Ones partly, though imperfectly, independent of light in emergencies.

In fact, we were somewhat apprehensive lest we go astray ourselves in our haste. For we had, of course, decided to keep straight on toward the dead city; since the consequences of loss in

those unknown foothill honeycombings would be unthinkable.

The fact that we survived and emerged is sufficient proof that the thing did take a wrong gallery whilst we providentially hit on the right one. The penguins alone could not have saved us, but in conjunction with the mist they seem to have done so. Only a benign fate kept the curling vapors thick enough at the right moment, for they were constantly shifting and threatening to vanish.

Indeed, they did lift for a second just before we emerged from the nauseously resculptured tunnel into the cave; so that we actually caught one first and only half glimpse of the oncoming entity as we cast a final, desperately fearful glance backward before dimming the torch and mixing with the penguins in the hope of dodging pursuit. If the fate which screened us was benign, that which gave us the half glimpse was infinitely the opposite; for to that flash of semivision can be traced a full half of the horror which has ever since haunted us.

OUR EXACT MOTIVE in looking back again was perhaps no more than the immemorial instinct of the pursued to gauge the nature and course of its pursuer; or perhaps it was an automatic attempt to answer a subconscious question raised by one of our senses.

In the midst of our flight, with all our faculties centered on the problem of escape, we were in no condition to observe and analyze details; yet even so our latent brain cells must have wondered at the message brought them by our nostrils. Afterward, we realized what it was—that our retreat from the fetid slime coating on those headless obstructions, and the coincident approach of the pursuing entity, had not brought us the exchange of stenches which logic called for.

In the neighborhood of the prostrate things that new and lately unexplainable fetor had been wholly dominant; but by this time it ought to have largely given place to the nameless stench associated with those others. This it had not done—for instead, the newer and less bearable smell was now virtually undiluted, and growing more and more poisonously insistent each second.

So we glanced back—simultaneously, it would appear; though no doubt the incipient motion of one prompted the imitation of the other. As we did so we flashed both torches full strength at the momentarily thinned mist; either from sheer primitive anxiety to see all we could, or in a less primitive but equally unconscious effort to dazzle the entity before we dimmed our light and dodged among the penguins of the labyrinth center ahead.

Unhappy act! Not Orpheus himself, or Lot's wife, paid much more dearly for a backward glance. And again came that shocking, wide-ranged piping —*"Tekeli-li! Tekeli-li!"*

Danforth was totally unstrung, and the first thing I remember of the rest of the journey was hearing him lightheadedly chant a hysterical formula in which I alone of mankind could have found anything but insane irrelevance. It reverberated in falsetto echoes among the squawks of the penguins; reverberated through the vaulting ahead, and—thank Heaven—through the now empty vaultings behind. He could not have begun it at once—else we would not have been alive and blindly racing. I shudder to think of what a shade of difference in his nervous reactions might have brought.

"South Station Under—Washington Under—Park Street Under—Kendall—Central—Harvard——" The poor fellow was chanting the familiar stations of the Boston-Cambridge tunnel that burrowed through our peaceful native soil thousands of miles away in New England, yet to me the ritual had neither

irrelevance nor home feeling. It had only horror, because I knew unerringly the monstrous, nefandous analogy that had suggested it.

We had expected, upon looking back, to see a terrible and incredible moving entity if the mists were thin enough; but of that entity we had formed a clear idea. What we did see—for the mists were indeed all too malignly thinned—was something altogether different, and immeasurably more hideous and detestable. It was the utter, objective embodiment of the fantastic novelist's 'thing that should not be'; and its nearest comprehensible analogue is a vast, onrushing subway train as one sees it from a station platform—the great black front looming colossally out of infinite subterraneous distance, constellated with strangely colored lights and filling the prodigious burrow.

But we were not on a station platform. We were on the track ahead as the nightmare, plastic column of fetid black iridescence oozed tightly onward through its fifteen-foot sinus, gathering unholy speed and driving before it a spiral, rethickening cloud of the pallid abyss vapor.

It was a terrible, indescribable thing, vaster than any subway train—a shapeless congeries of protoplasmic bubbles, faintly self-luminous, and with myriads of temporary eyes forming and unforming as pustules of greenish light all over the tunnel-filling front that bore down upon us, crushing the frantic penguins and slithering over the glistening floor that it and its kind had swept so evilly free of all litter.

Still came that eldritch, mocking cry —*"Tekeli-li! Tekeli-li!"* And at last we remembered that the demonic Shoggoths—given life, though, and plastic organ patterns solely by the Old Ones, and having no language save that which the dot groups expressed—had likewise no voice save the imitated accents of their bygone masters.

XII.

DANFORTH AND I have recollections of emerging into the great sculptured hemisphere and of threading our back trail through the Cyclopean rooms and corridors of the dead city; yet these are purely dream fragments involving no memory of volition, details, or physical exertion.

There was something vaguely appropriate about our departure from those buried epochs; for as we wound our panting way up the sixty-foot cylinder of primal masonry we glimpsed beside us a continuous procession of heroic sculptures in the dead race's early and undecayed technique—a farewell from the Old Ones, written fifty million years ago.

Finally, scrambling out at the top, we found ourselves on a great mound of tumbled blocks, with the curved walls of higher stonework rising westward, and the brooding peaks of the great mountains showing beyond the more crumbled structures toward the east.

The sky above was a churning and opalescent mass of tenuous ice vapors, and the cold clutched at our vitals.

In less than a quarter of an hour we had found the steep grade to the foothills—the probable ancient terrace—by which we had descended, and could see the dark bulk of our great plane amidst the sparse ruins on the rising slope ahead.

Halfway uphill toward our goal we paused for a momentary breathing spell, and turned to look again at the fantastic tangle of incredible stone shapes below us—once more outlined mystically against an unknown west. As we did so we saw that the sky beyond had lost its morning haziness; the restless ice vapors having moved up to the zenith, where their mocking outlines seemed on the point of settling into some bizarre pattern which they feared to make quite definite or conclusive.

THERE now lay revealed on the ultimate white horizon behind the grotesque city a dim, elfin line of pinnacled violet whose needle-pointed heights loomed dreamlike against the beckoning rose color of the western sky. Up toward this shimmering rim sloped the ancient tableland, the depressed course of the bygone river traversing it as an irregular ribbon of shadow.

For a second we gasped in admiration of the scene's unearthly cosmic beauty, and then vague horror began to creep into our souls. For this far violet line could be nothing else than the terrible mountains of the forbidden land—highest of earth's peaks and focus of earth's evil; harborers of nameless horrors and Archæan secrets; shunned and prayed to by those who feared to carve their meaning; untrodden by any living thing of earth, but visited by the sinister lightnings and sending strange beams across the plains in the polar night.

If the sculptured maps and pictures in that prehuman city had told truly, these cryptic violet mountains could not be much less than three hundred miles away; yet none the less sharply did their dim elfin essence jut above that remote and snowy rim, like the serrated edge of a monstrous alien planet about to rise into unaccustomed heavens.

Looking at them, I thought nervously of certain sculptured hints of what the great bygone river had washed down into the city from their accursed sloping—and wondered how much sense and how much folly had lain in the fears of those Old Ones who carved them so reticently.

I recalled how their northerly end must come near the coast at Queen Mary Land, where even at that moment Sir Douglas Mawson's expedition was doubtless working less than a thousand miles away; and hoped that no evil fate would give Sir Douglas and his men a glimpse of what might lie beyond the protecting coastal range. Such thoughts formed a measure of my overwrought condition at the time—and Danforth seemed to be even worse.

Yet before we had passed the great star-shaped ruin and reached our plane our fears had become transferred to the lesser, but vast enough, range whose recrossing lay ahead of us.

From these foothills the black, ruin-crusted slopes reared up starkly and hideously against the east, again reminding us of those strange Asian paintings of Nicholas Roerich; and when we thought of the damnable honeycombings inside them, and of the frightful amorphous entities that might have pushed their fetidly squirming sway even to the topmost hollow pinnacles, we could not face without panic the prospect of again sailing by those suggestive skyward cave mouths where the wind made sounds like an evil musical piping over a wide range.

To make matters worse, we saw distinct traces of local mist around several of the summits—as poor Lake must have done when he made that early mistake about volcanism—and thought shiveringly of that kindred mist from which we had just escaped—of that, and of the blasphemous, horror-fostering abyss whence all such vapors came.

ALL WAS WELL with the plane, and we clumsily hauled on our heavy flying furs. Danforth got the engine started without trouble, and we made a very smooth take-off over the nightmare city.

At a very high level there must have been great disturbance, since the ice-dust clouds of the zenith were doing all sorts of fantastic things; but at twenty-four thousand feet, the height we needed for the pass, we found navigation quite practicable.

As we drew close to the jutting peaks the wind's strange piping again became manifest, and I could see Danforth's hands trembling at the controls. Rank

amateur though I was, I thought at that moment that I might be a better navigator than he in effecting the dangerous crossing between pinnacles; and when I made motions to change seats and take over his duties he did not protest.

I tried to keep all my skill and self-possession about me, and stared at the sector of reddish farther sky betwixt The walls of the pass.

But Danforth, released from his piloting and keyed up to a dangerous nervous pitch, could not keep quiet. I felt him turning and wriggling about as he looked back at the terrible receding city, ahead at the cave-riddled, cube-barnacled peaks, sidewise at the bleak sea of snowy, rampart-strown foothills, and upward at the seething, grotesquely clouded sky.

It was then, just as I was trying to steer safely through the pass, that his mad shrieking brought us so close to disaster, by shattering my tight hold on myself and causing me to fumble helplessly with the controls for a moment. A second afterward my resoluion triumphed and we made the crossing safely —— Yet I am afraid that Danforth will never be the same again.

I have said that Danforth refused to tell me what final horror made him scream out so insanely—a horror which, I feel sadly sure, is mainly responsible for his present breakdown. We had snatches of shouted conversation above the wind's piping and the engine's buzzing as we reached the safe side of the range and swooped slowly down toward the camp, but that had mostly to do with the pledges of secrecy we had made as we prepared to leave the nightmare city.

ALL that Danforth has ever hinted is that the final horror was a mirage. It was not, he declares, anything connected with the cubes and caves of those echoing, vaporous, wormily honeycombed mountains of madness which we crossed; but a single fantastic, demonic glimpse, among the churning westward zenith clouds, of what lay back of those other violet westward mountains which the Old Ones had shunned and feared.

He has on rare occasions whispered disjointed and irresponsible things about "the black pit," "the carven rim," "the proto-Shoggoths," "the windowless solids with five dimensions," "the nameless cylinders," "the elder pharos," "Yog-Sothoth," "the primal white jelly," "the color out of space," "the wings," "the eyes in darkness," "the moon-ladder," "the original, the eternal, the undying," and other bizarre conceptions; but when he is fully himself he repudiates all this and attributes it to his curious and macabre reading of earlier years. Danforth, indeed, is known to be among the few who have ever dared go completely through that worm-riddled copy of the *Necronomicon* kept under lock and key in the college library.

The higher sky, as we crossed the range, was surely vaporous and disturbed enough; and although I did not see the zenith I can well imagine that its swirls of ice dust may have taken strange forms. Imagination, knowing how vividly distant scenes can sometimes be reflected, refracted, and magnified by such layers of restless cloud, might easily have supplied the rest—and, of course, Danforth did not hint any of these specific horrors till after his memory had had a chance to draw on his bygone reading. He could never have seen so much in one instantaneous glance.

At the time, his shrieks were confined to the repetition of a single, mad word of all too obvious source: *"Tekeli-li! Tekeli-li!"*

THE END

From Dr. E. E. Smith

Editor Astounding Stories
Dear Tremaine:

Am inclosing herewith a brief note of appreciation of Weinbaum; which being short I hope you will have room for in Brass Tacks sometime. I think he is real good and hope you are getting some more of his stuff.

Also, I want to congratulate you on the way you are bringing Astounding along. You're doing fine. Keep up the good work! Cordially yours.—Smith.

January Only Starts the Year!

Dear Editor:

After reading the swell stories in the last few issues I can't help writing to you to express my gratification at the progress Astounding is making. There are so many stories in each issue and they are consistently good. Too, it seems that Astounding is keeping the spirit of science-fiction aflame for the other so-called science-fiction magazines, both of which are getting irregular in their publications. But Astounding is one upon which we can always depend.

When I say swell story, maybe I should give my definition of "swell." It doesn't make a bit of difference to me how Astounding Stories are written—whether they've got old plots, poor wordings, poor mechanics or a misconstrued theory of impossible sequences—but a story that still stands out in my mind for weeks and months after I have read it is what I call a swell story. Of course, everybody has a different standard of what a story must come up to and everybody has a different view and opinion.

The stories in the last few issues that fall under my line of reasoning are: *The Red Peri*—Weinbaum; *I Am Not God*—Schachner; *Davey Jones' Ambassador*—Gallun; *Mad Moon*—Weinbaum; *Smothered Seas*—Farley and Weinbaum; *The Isotope Men*—Schachner; *Strange City*—Van Lorne. We must have a sequel to *The Red Peri* and also one for *Strange City*.

Weinbaum is by far my favorite author. If all the stories were by him it would suit me to a T. Isn't it about time a story from E. E. Smith was forthcoming? He is still one of my favorites although his stories are few and far between.

If the January issue is a good example of the coming issues, let's have 'em.—W. C. Barnes, 732 South 1st Ave., Sioux Falls, South Dakota.

Open Letter to Stanley G. Weinbaum

c/o Brass Tacks
Astounding Stories
Dear Stanley:

At first, when Trweel burst like a demolition bomb into the readers' consciousness, I was afraid that, of course, you were a nova—it didn't seem possible that a real first-magnitude star could have appeared unheralded in the firmament. However, your brilliance did not fade, and in *The Red Moon* it even hit a new high. Your little parcat—usually playing hooky when he was most needed, and with his singularly apt wisecracks—too apt for him to be entirely brainless—was undoubtedly one of the finest touches of the year.

Also, as a critical and not easily satisfied reader, I want to thank you for that "indefinable something" you have brought into science-fiction—a something it has never had before and of which it was badly in need. We have all too many imitators, reminiscent of somebody or other, recipients of the mantle of so and so, second, third, etc. Whozisses. Therefore it gives me a lot of real pleasure to hail you as a real contributor to my favorite field of fiction.

Long may you wave, and may your think-tank never run shy of bubbles.—Edward E. Smith, 33 Rippon Ave., Hillsdale, Michigan.

Note: Dr. Smith was unaware of Weinbaum's death when he wrote this letter.—Editor.

I'm Sure We Will, Donn.

Dear Editor:

Have just subscribed for the new year and I'm wishing you luck in obtaining good stories. The last year was very good—not more than four or five I disliked. Why didn't some one tell me about the magazine a long time ago? I'm sore that they didn't. I've almost got 1934 complete from the second-hand magazine stores.

Well, here are a few of my impressions of the past year: Congratulations to Weinbaum for every one of his human stories. Please bring *Prowler of the Wastelands* back again. Best cover is October, 1935, which illustrated *I Am Not God*. All these humorous clubs are the bunk. *Islands of the Sun* was perfect. *Alas All Thinking* was very good. No thanks for *The Invaders*. If it is possible, make 1936 better than 1935.—Donn Brazier, 3169 North 41st St., Milwaukee, Wisconsin.

Getting Clubby!

Dear Editor:

Come, all you Astounderites, and let's organize a real club that will satisfy me and all. We could name it the Junior Spacemen or something. Now isn't that an astounding idea? Maybe the editor will even consider. Those who want to join could pay a small fee and in return receive a membership pin and card.

Now let's get down to Brass Tacks. To begin with, I see nothing wrong with Brown's covers. *Stranger From Fomalhaut*, like all other W26 stories, was good. *Smothered Seas* was fair. *The Isotope Men* was excellent. *Strange City* was also pretty good. I'd like more stories like *Islands of the Sun*, which pictures the solar system differently. The two-part stories are my meat. As for the smooth edges and gum binding, I don't give a whoop 'cause I buy the magazine for its contents. If this letter sneaks into Brass Tacks, I should like to hear from anybody interested in astronomy or a new club. —L. A. Kennedy, 45 South 4th St., Stealton, Pennsylvania.

An Appeal to Reason!

Dear Mr. Tremaine:

Concerning discussions, can you remember way back in last December's Astounding when a certain man wrote a letter to Brass Tacks in which he discussed the conservation of energy? None of his statements were dogmatic—in fact, they were couched in the friendliest terms. Yet the story that the letter introduced to the magazine brought a deluge of argument upon his head, which argument through the passing months became very bitter indeed.

Contrast this state of affairs with that classic in literary combat occurring between E. E. Smith and Sir Philip Wollston. What a difference! How interesting Brass Tacks would be if every discussion introduced into its columns brought forth such a tactful and wholly delightful bombardment of opinion.

I appeal to the readers and writers of these columns—in the name of Hubert Allcock, Ramon F. Alvarez del Ray, and E. E. Smith—to inaugurate such an example of amiable disagreement, i. e., a good-natured growling—that the discussions will turn Brass Tacks into a department truly worthy of the high standard which the magazine itself bears.

On criticisms: It is the art of defining the merits of an artistic or literary production. This does not imply censure altogether. The best criticism contrasts the merits of a production with its demerits, and then recommends a procedure whereby the demerits may be eliminated. Milton Rothman forgot this for a moment when he wrote: "I don't like the red ship."

On the laws of Newton: I made this statement in an examination: "Newton inferred that for every reaction, there was an action which caused it. He did not infer that every action was balanced by a reaction, and this inference cannot be predicated." The regents' board marked my statement wrong, but I was backed up by several teachers of physics, one of them a university professor. What do the readers of Brass Tacks think? Can it be possible that I am wrong?

Van Lorne's story was the best in the January issue. I have read it seven or eight times and will probably read it as many times again before the February issue comes out. You have an engaging writer here, Mr. Editor—one whose style does not easily pall.—Robert Lee Hanna, 741 Park Ave., Dunkirk, New York.

Weinbaum Was Jessel.

Dear Mr. Tremaine:

The card for "John Jessel" reminded me of something I meant to tell you last time I saw you. John Jessel wrote *The Adaptive Ultimate*, published in the November Astounding.

Jessel is really Stanley G. Weinbaum. Weinbaum felt that he was doing so much writing for Astounding that perhaps some of the excess stories would be turned down for lack of space. And, also, since he had written interplanetary stories exclusively for you, he thought that perhaps you wouldn't go for a biological story such as *The Adaptive Ultimate*. Therefore, he requested me to use the John Jessel pen name.

It was gratifying to learn that Weinbaum's stories were good enough to sell to you, even without his by-line.

In case you want to print a little something about Weinbaum—in view of his unfortunate death—he was born in 1902, in Louisville, Kentucky, and educated in Milwaukee, Wisconsin. Just before his death he completed his portion of *The Dictator's Sister*, a science-fiction story which collaborated with Ralph Milne Farley. As soon as the story's completed, you'll have first look at it.

Here's looking toward an even better Astounding Stories during 1936.—Julius Schwartz, 255 East 188th St., New York City.

Don't You Like New Thoughts?

Dear Editor:

I have just procured the February issue of Astounding Stories and certainly appreciate the trimmed edges. It is an improvement I had despaired of ever witnessing in a science-fiction magazine.

Many of your readers are asking for more thought-variant stories, which I am happy to perceive you have discontinued. They were, at best, inane ravings, inert and lifeless.

Another group has asked for Hawk Carse and John Hanson. Hawk Carse, I admit readily, is probably the best science-fiction series ever published, but if Weinbaum begins a series with his superb *Red Peri*, he will, I have no doubt, overshadow Gilmore completely.

With the series by Clifton B. Kruse being published so frequently in your magazine, I see no reason why any one could possibly wish for the continuance of the John Hanson series.

For the last five or six issues I have been enjoying every story thoroughly. As a matter of fact, I enjoy reading your magazine as much of late as I did my first science-fiction stories, which means that as far as I am concerned, you have reached perfection. *The Adaptive Ultimate*, *The Red Peri*, *Smothered Seas*, and *Strange City*, were outstanding.

I was very sorry to see Doid leave us but am glad to have Wesso reappear. Marchioni is slowly improving, but I am very sorry to see Brown degrading the interior. Schneeman is very putrescent. Why do you not try to obtain one Muller to collaborate with Wesso and Marchioni? In any event, do not disgrace your pages with Paul.—W. W. Wolford, 1583 East 82nd St., Cleveland, Ohio.

Be Sure to Read This.

Dear Editor:

I wonder if there are any other persons in the field of science-fiction who think the way I do about science. I believe that something is

wrong with our modern-day science, something that smacks strongly of the shackles of convention. Perhaps the readers might understand just what I mean by rereading *Lo!*

Mr. Fort states therein that the results of scientific experiments are very complimentary to the experimenter, or words to the effect. I have found this very true in my work at the local college, where scientific "experiments," as they are called, strangely enough, are so bound by conventional methods of procedure that they are rendered useless as concerns educational advancement.

We are told what we are to believe in the field of science, and no room is left for individual thought. We are instructed to find that a certain thing or statement of some Ph.D. is true, and if our results are other than those noted in the book, we are wrong, even though we have the test tube right before us as proof of our correctness.

Let me give some examples. Our professor in chemistry, himself a Ph.D., made the positive statement that concentrated sulphuric acid would not act on zinc. Imagine that! His error was pointed out in detail, and one student even went so far as to require him to write the statement on paper and sign his name to it.

This being done, the entire class hailed off to the laboratory. where some zinc metal was treated with highly concentrated and C. P. sulphuric acid. The result was quite as common sense would dictate, a very violent reaction!

In a similar case, I noted that the laboratory manual in use directed us to find that sulphuric acid would act on tin metal without special treatment. This experiment was performed, and under no conditions was I able to make them react, even after trying many times. The professor swore or affirmed that *he* had made them react many times, but was unable to explain why it did not work for any member of our class! He closed the question posthaste by saying that we did it wrong, and refused to carry it further.

Have any of my fellow readers had similar experiences? I should like to know, as I am interested in forming—yes, dear editor, another one—a League of Unconventional Science, or some such title, composed of the followers of Charles Fort and others who were real scientists.—Joseph E. Watson, 613 Randolph St., Charleston, West Virginia.

"Well, Maybe——"

Dear Editor:

When a kick is made, let it be a good one. I want you to print our magazine on rag paper with diamond-polished gilt edges and embossed Morocco covers, issued twice daily with stories that please everybody without exception, priced at nothing, or less, complete with Dr. Smith's stereo-radio-audio-vocalizers attached to make it available when blind, drunk, or asleep, plus some Weinbaum fool-killer adjusted to remove any pert criticisms at the source. Then I might condescend to stimulate interest.

The truly insufferable part of the magazine is the heartbreaking paucity of readers', fans', and critics' cliques. The editorial staff should bend every effort without delay to arrange a club for every reader and design a concrete sea-going space ship for the first world beater in two such clubs in the course of active obstruction, all by himself.

And, of course, the cover, the title, the personality, so to speak, should be spiritualized until the clergy would be proud to be seen reading it, anywhere.

Having been a reader of the magazine ever since last month, I feel that I ought to know how to handle the above part of your business better than you do. Of course, I would not be responsible for the financial end of the job—a good critic never is.

Just so feelings won't be hurt, I will consider buying next month's issue also; but, remember, I expect you soon to remove every trace of the factors in science-fiction that call for intelligent appreciation.

Kindly print at the bottom of this letter nine pages of editorial comment; everything you say will be used against you. If any of the readers are impertinent enough to disagree with any of the above suggestions—well!—R. W. Hall, Orangeburg, New York.

He Thinks We're Slipping!

Dear Editor:

I have been reading Astounding since the old days of the Clayton Pubs. Haven't missed an issue. What a change! Over a period of a few short years, you've built the magazine up to the best in the field. Yet, lately, I've sensed a slow, slipping back to where you started from. In the December, January, and February issues, such stories as *The Mad Moon, Forbidden Light, Moon Crystals, Laboratory Co-operator-3, Don Keltz of the I. S. P.,* are nice stories, but they belong in various love-story, fantasy, and adventure magazines, not in Astounding.

Such stories as *Human Machines, Avalanche, Smothered Seas, Blue Magic,* and *Death Cloud,* are all right for a science-fiction magazine, but give me stories like *The Isotope Men, Strange City, Nova Solis, Mathematica,* and an occasional *The Fourth-Dimensional Demonstrator.*

What I am trying to get at is that the majority of stories are too one-sided. Either the dominating factor is love, science, humor, or tragedy. The really successful sort combines the various ideas, in the proper proportions according to the type of fiction desired. In other words, a science-fiction story should have these qualities but should be built around a framework of actual science.

I should like other Brass Tackers' opinions on the subject, so let's hear what you've got to say.—Warren J. Woolsey, 510 9th St., Brooklyn, New York.

Our Percentage is Better!

Dear Editor:

Seldom, if ever, have I written a letter to any science-fiction magazine of which more than about ten per cent was dedicated to praise. However, I am at last breaking down. The trimmed edges of the February Astounding was a sight I have long awaited. I also see that both Wesso and Marchioni have illustrations in this issue. This also improves the February issue. Speaking of illustrators, why do you allow Schneeman to desecrate Astounding with his pictures? Or do the readers actually enjoy his art work?

Several of your readers have requested an interplanetary story of the old-fashioned type. When do we get it?

I am very sorry to hear of the death of Stanley G. Weinbaum. Farewell to him, and his characters whom we loved so well.

I have heard that you have accepted one of Manley Wade Wellman's stories. I hope that the report is true because I thoroughly enjoy his writing.

Mr. Editor, if you are in sympathy with the readers' demands for more science-fiction, why not comply by publishing not a semimonthly, but a quarterly. In this way, should the venture for a reason prove a failure, Astounding monthly would not suffer.

I'll come down to Brass Tacks: I enjoyed Fearn's *Mathematica,* and eagerly await the sequel, *Mathematica Plus.* When I commenced reading DeWitt Miller's *The Shapes,* I thought it would be just another new author with a hackneyed plot, but I was agreeably surprised. It was a swell story. The same goes for *The Seeing Blindness.* Still hoping to see one of Wesso's paintings decorating the front cover of Astounding.—Phil McKernan, 827 Greenwood Ave., San Mateo, California.

Thought-Variants? Coming!

Dear Editor:

Congratulations for giving us trimmed edges! The magazine really looks high-class now. And you say that you have many more things on the program! Perhaps a quarterly! I hope so! But perhaps I am looking too far into the future.

Of the stories in the February issue I liked the serial *Blue Magic* best. It had adventure balanced with science to just the right degree. *Mathematica* was a real thought-variant. I like Fearn's stories—they actually make a person think.

In this controversy about science versus adventure the important thing seems to me to be left out—imagination. A story can be bursting with science or adventure and still be mediocre without this third quality.

I think that it was imagination along with the science and adventure that made *Colossus, Twilight, Old Faithful, Star Ship Invincible,* and all of Smith's and J. W. Campbell's stories so famous. Fearn seems to be able to make his stories have this quality to a high degree. I cast my vote for stories with more imagination —real thought-variants.

I may be dense but I am always puzzled when readers ask you to get Paul to illustrate your stories. He is good in his own way, but he isn't an artist. He is a cartoonist and should be drawing a comic strip rather than illustrating science-fiction stories.

Perhaps this suggestion of Mr. Van Houten's that Astounding go on the radio is not so bad after all. It would be a great advertisement and would no doubt interest many new readers.

I want: a story by Frank K. Kelly; more full-page illustrations; a thought-variant story that will keep the readers discussing it for months, like *Colossus* back in the good old days; also a quarterly, a sister magazine, a semi-monthly, etc.—L. P. Wakefield, 2832 Marshall Way, Sacramento, California.

We Will Gladly Grant Your Request!

Dear Editor:

Stanley G. Weinbaum is dead, and with him, science-fiction has lost something it can ill afford to lose. Perhaps Stanley was the best science-fiction writer of all time, and it is certain that, had he lived, he would have made a mark, not only in Astounding Stories, but in the entire fiction world, from the pulps to the slicks, that would have come second to none.

I knew him personally and his death is a personal loss. But that is not the purpose of this letter. I feel and I know that any and all readers of science-fiction will agree that his regrettable and untimely end has robbed us of something fine. We know that, because the stories that he gave us are stories that will long linger in our memory as yarns unparalleled in excellence. It is in recognition of these stories that I am interested.

Stanley G. Weinbaum was a member of the Fictioneers, a group of authors in his locality who have built up a unique organization. It was partly the inspiration of this group of authors that spurred Weinbaum on to the success he attained. And he helped each and every one of us in our own work more than we can tell. And thus, in recognition for his work, his friendship, his help, and in memoriam, we propose to gather together the best of his science-fiction works, selected preferably by science-fiction readers themselves, and publish sufficient copies to supply his admirers with a work dedicated to his memory.

Our purpose in this is decidedly not mercenary, and all expenses incurred will be defrayed by the Fictioneers. However, I believe that science-fiction fans should have a chance to participate in erecting a work to his memory. Thus, I ask that any one of your readers interested in possessing a copy of this book write me approving of the plan, and at the same time giving an opinion on which of his stories should be included. Any and all profits, if any, should be turned over to Mrs. Weinbaum in recognition of the sad loss she has suffered.

If you feel that you are in a position to offer your help, by publishing this letter, and by relinquishing book publication rights on such stories of his as may be selected for book publication, I would appreciate hearing from you in that regard, humbly thankful for any suggestions you may be able to offer.

Fantasy Magazine, its readers, William Crawford, editor of Marvel Tales, and the Fictioneers are already moving toward completion of the memorial plans. We hope that the science-fiction magazines and their readers will assist us in this work in memory of a man who would have been "one to be heard from" had fate seen fit to spare him.—Raymond A. Palmer, 1406 West Washington St., Milwaukee, Wisconsin.

Wonder if You Remember Clearly?

Dear Editor:

Congratulations on the trimmed edges of Astounding! It's a one hundred per cent improvement.

Now if you would only get Hawk Carse and John Hanson back, it would be the perfect magazine!

The Red Peri was a swell story, but to think that you had the colossal nerve to compare it to Hawk Carse! Words fail me!—J. J. Johnston, Mowbray, Manitoba.

Two Magazines Cost Twice as Much!

Dear Editor:

Smothered Seas, by Ralph Milne Farley and Stanley G. Weinbaum, was certainly a big hit with me. It was a successful mixture of science and human interest. I have never read any story like it, although I have only been reading science-fiction for two years.

There is one thing I noticed about the latest issue of Astounding. That thing was the absence of Dold. That thing makes a big difference in your magazine. Marchioni is twice as good as the other artists, with the exception of Dold. Whoever drew the illustrations for *Smothered Seas* is certainly rotten. Why not have Marchioni do the inside work and Brown do the covers, while Dold is gone?

Let's have some more stories by Williamson. *The Galactic Circle* and *The Legion of Space* were his best.

More science than human interest is what I want in Astounding. Why not put out two magazines—one full of science and the other full of human interest? Then everybody will be pleased.—G. Kruse, Jr., Box 134, Manhattan, Kansas.

Here It Is—and I Like It.

Dear Editor:

It has been long since I wrote you, though you seem to be standing the strain of my neglect pretty well.

You have more than fulfilled your promise of getting better and better, and the Editor's page is a distinctly worthy feature which I read each month with relish.

You've given us Weinbaum, Campbell, Smith, Schachner, Williamson, Haggard, Gallun, and many others of like ranking. I am sure every reader is grateful for the opportunity of reading the works of these men and I know, I, as a struggling young writer admire their work immensely.

I have seen nothing by Harry Bates, R. F. Starzl, Francis Flagg, Charles Cloukey, Carl W. Spohr, and Lawrence Manning in your pages lately. Don't let these fellows lay down on the job. They all have what it takes to write interesting and exciting stories. I remember

Bates particularly for *A Matter of Size*, Cloukey for *Swordsman of Sarvon*, Cloud for *The Superman of Dr. Jukes*, Spohr for *The Final War*, and Starzl for many fine shorts, the names of which I have forgotten. Let's hear from them again soon.

As you seem to have a real interest for finding out what your readers like, I'll give what, to me, are the essentials of a good story. It makes no difference what type it is, from the immensities of intergalactic space wandering to the inevitable mad scientist in his equally inevitable laboratory. I enjoy them all if they have the essentials I shall list here:

(1) Living, understanding characters motivated by the same desires, curiosities and fears, that have governed man since he has been man.

(2) Plots with at least a smattering of logical motives and developments, and science with a thread of logic running through its theories, be they never so weird nor contrary to accepted beliefs.

(3) The science should be an integral part of the plot, not a cloak thrown hastily over an adventure or mystery yarn to get it within secret precincts of our magazine.

I should like to see this in Brass Tacks. Perhaps it would stimulate others to give their ideas of a perfect story formula.—Jay Jerome, 921 West 5th St., Los Angeles, California.

Welcome to Our Circle.

Dear Editor:

I have just finished reading my first Astounding Stories magazine. It's colossal and I shall continue to read it. Variety is what I like and what the January issue has. I have read other science-fiction magazines but Astounding is the best in its field.

I would like to make a few requests: make Astounding Stories a twice-a-month magazine, add a page of true scientific facts, have one long novel of at least fifty pages.—Roger Sullivan, 3119 Highland Ave., Birmingham, Alabama.

The Best to Date!

Dear Editor:

Probably any praise I would have for Astounding would be old stuff to you, and I certainly don't intend writing sheets and sheets on my personal, conceited opinions on each story you've printed recently. Suffice it to say that I started to read Astounding a few years ago, that within a few months of that time I had stopped buying the rest of the science-fiction magazines, and that I think that the February issue is the best science-fiction magazine ever published, at least any that I've seen.

As to your illustrations: Probably this issue has a larger variety of illustrations and a better batch of illustrations than any ever brought out. Thompson and Schneeman are equally good, Dold and Marchioni, pretty poor when you compare them to either of the other two, and flea-bitten when you match them against that master of masters—Wesso. Brown, of course, does himself noble in those covers, even though he can never attain to the heights of perfection as brought forth by the fellow, whoever he is, who did the covers for the few published copies of another magazine.

A few opinions—which I previously said I was not going to express, but will, in view of the fuss made over constructive criticism: The most outstanding thing, of course, about the February issue is the trimmed edges! I don't imagine I would have ordinarily said much about them, but I get a deep sense of satisfaction every time I look at them.

Then, I'd like to say that I enjoy stories by the same author, arranged as a series or as sequels, much more than ordinary yarns. Notable among these are F. B. Long's little sagas of servile men of the future, Don A. Stuart's *Twilight* and *Night*, *The Machine*, and its two sequels *The Invaders* and *Rebellion* and Weinbaum's "Ham and Pat" stories.

I would like to see Hawk Carse back. I like your "pep talk" editorials; they keep me trying to get new converts, but I should also like new little footnotes like the ones in the old Clayton Astounding—not stuff that any one who wanted to could look up, but little paragraphs about new inventions and new discoveries that most of us would never hear about, although they have some connection to science-fiction.

Another thing: why not try to say more about the letters in Brass Tacks, although it does take up a little space. If necessary, make the print smaller. We don't care in the least whether we use a magnifying glass or a microscope. Don't change to a quarterly and don't worry too much about the science-adventure balance.

Which brings me to Wollheim's suggestion about a sister magazine or a Planeteer. I think it's a fine idea, and by the way, there's a little publication recently put out called by the same name, which isn't half bad.—Bill Miller, Jr., 69 Halstead St., East Orange, New Jersey.

Page Mr. Lovecraft!

Dear Editor:

Congratulations! Your magazine is once again astounding! In addition to the fine stories I wish to congratulate you on the improved appearance of the magazine—the trimmed edges, and the seemingly better grade of paper.

The cover, as usual, is good. The interior illustrations are all right, but the artist who illustrated *At the Mountains of Madness* lacks the imagination of the others. Schneeman should have illustrated this. Marchioni is unbelievingly improved, and Schneeman is fine. Wesso is far below his old standard.

May I, Mr. Lovecraft, criticize the first installment of your serial? It is only because it is a fine story that I consider it worthy of the time to criticize. Invariably, in reading a story of this type I compare it with Merritt's *Moon Pool*, which is, of course, the perfect story in so far as perfection can be attained by mortals.

In your story compared, not to the usual standard, but to perfection, I find a few faults: a lack of attention to detail and too much repetition; too many specific references to Necronomicon. Could you not have suggested the occult and the mystic in other ways? This is fault of all your stories. But *At the Mountains of Madness* was really good because you are an exceptional master of words, and of the mystic mood.

Mathematica is an intensely interesting conception. The author has a slight glimpse of the truth, although he has carried his deductions in the wrong direction. It was very good reading.

The other stories were up to standard. Deserving mention are: *Cones*, *Psycho-Power Conquest*, and the conclusion of *Blue Magic*.

As long as the serial and one novelette are either fantasy or superscience, the rest of the magazine can be overrun by Hawk Carse and blood-and-thunder for all I care. You have given us the best—all the masters, except Merritt. If I were to see a story by him in your pages I fear I would drop in my tracks, from sheer surprise and joy. Thank you.—L. M. Jensen, Box 35, Cowley, Wyoming.

Are You Sure About the Covers?

Dear Editor:

You certainly have made a big improvement in your magazine by cutting the edges and improving the grade of paper.

You can improve it even more by getting Wesso to illustrate your covers. Brown has been getting worse and worse. His color values are lousy.—E. M. Stubbs, 5308 Wayburn Ave., Detroit, Michigan.

Did Some One Mention Edges?

Dear Editor:

I just got the surprise of my life when I saw the February Astounding. Just think—straight edges! First you give us Wesso and now—straight edges! Next you'll give us a quarterly? How about telling Wesso to try a cover?—James Taurasi, 137-07 32nd Ave., Flushing, Long Island, N. Y.

Satisfied.

Dear Editor:

HOORAY! ASTOUNDING STORIES INTRODUCES SMOOTH EDGES! So what?

The only thing I have to say is that it doesn't make a bit of difference if you print the magazine on saw blades. I buy the magazine for the reading matter and not the edges. What good would the smooth edges do if they weren't around something? Maybe it is a little more convenient, so it is a good thing, I guess.

Since smooth edges, I don't know what to expect next. But if I ever go to the news stand and find there an Astounding Stories with glossy paper, I swear that I'll rush to the nearest telegraph office and wire you a kick. No kidding, I can't think of anything more unpleasant than trying to read with a constant glare in the eyes from a sheet of slick paper. It's hard on the eyes, too.

It seems that there is something a little different in this month's Brass Tacks. After meditating severely on the matter I have come to the conclusion that you have really carried out your readers' ideas about the elimination of goofy societies. Nice bit of work!

Well, the newest controversy, it seems, is anent the science and adventure in science-fiction stories. I'm not perturbed in the slightest about that argument. The editor is doing quite well with himself in maintaining the present Astounding Stories. I don't see any pressing need for rebalance of science and adventure in our stories. I suppose, however, that these chronic critics will never be satisfied. There will always be something to argue about.

Side glances to the fellows who rave about repetition of plots in the newer stories: some day, you must realize, the human imagination will run out of ideas. Eventually, all plots you could think of will have been used by somebody before. Look at music—experts tell us that it's impossible to write a single measure of music which hasn't previously been written by some one. So, on that day when plots shall run out, what do you plan to do? Mix up a lot of the old plots and rewrite them in the form of a chaotic yarn with fifty or so interlocking plots? That's why I hate Shakespeare!

I think I must have missed an issue because so many readers this month write about *Forbidden Light*, *Davey Jones' Ambassador*, *The Fourth-Dimensional Demonstrator*. I never heard of them! Maybe some kind reader will donate a copy of the December issue to me.—Joseph E. Watson, 613 Randolph St., Charleston, West Virginia.

We'll Try to Get Them!

Dear Editor:

I have never before written to a magazine voicing my opinion. I will do so now, however, because I am very much interested in seeing Astounding Stories lead all magazines, regardless of type.

I have no kick to make about your stories, except to request more interplanetary ones. They seem to me to be the nearest to real fact and science. I have often attempted to write interplanetary stories and have enjoyed doing so. My science and sequence may be poor but I like them. I am now playing with chemicals, tubes and fire, attempting to make some real flying models of rockets. I use a mixture like gunpowder, and small tube chambers a few inches long.

I am interested in seeing plans for rockets in your magazine. I would like to correspond with any one who is interested in rockets. I'm eighteen years old and a senior in high school.—George Elaton, R. D. No. 1, Elmira, New York.

I'm Always Ready to Consider Sequels.

Dear Editor:

Although I have been reading science-fiction for about six years and have every issue of Astounding Stories, this is the first letter I've written to you. I buy the magazine for what is in it, so you can put any type of fastener on the magazine, just so it stays together and remains such excellent reading.

In your editorial in the January issue you said that if one story appealed unanimously to a reading audience as great, you think that you should avoid another story of similar style and background. I fully agree with you on this point and will back you to the limit.

In regard to a semimonthly, I think the extra magazine would be too much of a strain on the pocketbooks. Also, some readers would not get every issue and therefore sales would fall off from the readers' inability to keep up.

In regard to your artists: Keep Marchioni and Brown. Bring back Paul and give Wesso more to do. Dold is all right in his way but some of his works are too complex and unnatural. His chief difficulty is drawing humans.

Now for the stories: Give us more stories with space adventure in them. *The Red Peri* was one of the best stories that I have read and it needs a sequel, or a series of stories. How about some more stories like *Davey Jones' Ambassador*. *Strange City* was the best story of the January issue and dearly needs a sequel.

Smothered Seas was also well-written. *Blue Magic* is one of your best novels of late. Get some more like it and *The Mightiest Machine*. Remember *Prowler of the Wastelands?* I want more like it, even if you have to print *it* again. Also, make comments on each letter in Brass Tacks so as to avoid questions on this and that.—Calvin Fine, Box 441, Kilgore, Texas.

Living Up to the Title!

Dear Editor:

Crank or no crank, I've got something to say and also something to ask!

How do you expect your magazine to sell when it is effaced with such drivel as adorned the January, 1936, copy? In all my years of science-fiction reading, I've never come across such hodge-podge. When I first saw it, I shrank back, astounded! Yes, that cover certainly lived up to the magazine's title. Just what was the calamity supposed to represent?

That cover, with its gaudy-yellow and innumerable gadgets, cheapened the appearance of the magazine immeasurably. Give us more beautifully harmonious illustrations like the ones we used to have. And in heaven's name don't let any more of those nightmarish monstrosities that pass for space ships ,rocket across the cover.—Jerry Gurner, Kohut, Harrison, New York.

Yes, Wesso Has Faults, Too.

Dear Editor:

Ever since I have been reading Astounding Stories, I have seen in Brass Tacks a great many requests for Wesso to be added to your staff of artists. Yesterday, I witnessed some of his drawings for the first time. Truly, they were good in every sense of the word, but it seems rather funny to me that every man—in the drawing, facing page forty in the January issue—has wavy hair that is combed straight back. That reminds me of many of Dold's sketches. Dold is an excellent artist, but in

checking over his work from September, 1934, to January, 1936, I found that twenty-one of the men in his drawings were slightly bald on one side of the head and that spot led into a nice parting of the hair. In addition to that, about fifteen faces were absolutely the same. Despite that bad record, Dold should be kept. His drawings of machinery and scientific implements are swell. As for Brown on the January cover, that *was* a masterpiece. Keep him, whatever you do.

What happened to J. George Frederick? Might we have some more of his stories? Or does he write one about as often as E. E. Smith?

Diffin's *Blue Magic* is coming along fine. Some of the terrific suspense ought to be broken soon. —John Chapman, 500 15th Ave., S. E., Minneapolis, Minnesota.

On Esperanto.

Dear Editor:

I received many letters in answer to my letter in the January issue. Some of them are very learned answers to my queries concerning the intelligence of micro organisms. I intend to sum up the opinions and send them to this department for publication soon.

I also received many requests for information about Esperanto and I will say that I have a quantity of books containing the complete grammar and a good-sized vocabulary of about seven hundred and fifty root words. I will send a booklet to any one who requests it and sends five cents in stamps to cover postage.—Robert H. Anglin, 252 Jefferson Avenue, Danville, Virginia.

"Strange City" Again!

Dear Editor:

Congratulations are certainly in order—for two reasons. The first is the securing of H. W. Wesso for your staff of illustrators. There is only one Wesso and he proves this by his drawings in the January issue. Now that you have Wesso, please let him do a cover. The rest of the pictures of the issue are good, with the exception of Thompson's, for *Smothered Seas.*

The second reason for congratulations is the coming of H. P. Lovecraft. *The Colour Out of Space* holds a treasured place in my memory. Now the author is again turning to science-fiction and the result should be as great as occurred in the case of C. L. Moore.

I was certainly disappointed in *Smothered Seas.* It was far too hackneyed in style, though the "plague," as far as I know, was original. The development of the story was so trite as to render the story mediocre. I am an advocate of adventurous science-fiction, but I insist on originality. I was sorry to see the names of two such fine authors attached to such a poor story.

Strange City was also adventurous, but, oh, how different! Here were new ideas and plenty of thought-provoking science. I give it second place in the issue and call for a sequel.

The Isotope Men was excellent. Schachner was in very good form. Though many things about the story were not new, an original slant was given. There seemed to me to be a good many flaws in the author's conception, but I'll leave them for more scientific thinkers to call to your attention.

Blue Magic again takes first place. Here is a master of science-fiction at his best. Please keep Diffin busy. I'm eager to see how he brings this great story to a conclusion. Three good stories round out a fine issue for January.

In recent issues you have printed some very excellent stories. November was one of the best. *I Am Not God* ended magnificently, while *Blue Magic* started the same way. Binder is excellent and very convincing. There was one big surprise; I refer to *The Adaptive Ultimate.* There was a real story and certainly thought-variant. It was so convincing and logical and so breath-taking in its possibilities that I unhesitatingly deem it one of the best that you have ever printed. It left me dreaming for some time after I had finished it.

The Red Peri was very good. Weinbaum is always at his best at such fantasies as *The Lotus Eater,* but he shows that he has talents in other lines as well.

It seems that about half the letters in Brass Tacks ask for science-adventure, the Planeteer, a series to follow up *The Red Peri* and *Derelict;* they praise your few science-fiction stories. They call for the return of Hawk Carse and John Hanson. Is there any good reason why we can't have these two mentioned back with us?

Twelve Eighty-seven was really a good science-fiction story, yet many knock it. Oh, well, you can't expect every one to understand such a story, but when they throw brickbats at it and praise such a story as *The Blue Infinity!*—Donald Allgeier, 724 East Grand St., Springfield, Missouri.

Van Loren is Promising. We'll Watch Him.

Dear Editor:

This is my first and last letter and it doesn't matter whether or not you publish it—just so you read it. I don't believe in trying to tell any one how to run their own business, but I imagine that there are quite a few people who feel the same as I do.

I am seventeen years of age and have been reading Astounding Stories for some time. In my opinion *The Strange City* is the best story that Astounding has ever had between its covers. *The Red Peri* comes next. And say, tell Van Lorne to give us another story like *The Strange City,* or to start another story where he left off. We would like to know more about that strange planet.

But that story of Wycoff's was a flop. No one could be so dumb as the scientist in *The Seeing Blindness.*

At the Mountains of Madness would be good if you leave about half the description out of it.

Stories like *Don Kelz of the I. S. P.* should be left out because we can read that kind of story in any old ten-cent magazine.

Here's hoping for a bigger and better Astounding Stories!—Carl Bennett, Jodie, West Virginia.

Thank You!

Dear Editor:

What a grand job you are doing! Now we have trimmed edges on good old Astounding!

Impressions: Cover—superexcellent; Stories—all very good, not even one complaint; Illustrations—all good, Marchioni's especially; Brass Tacks—good; Editorial—good logic; Kessler—thanks; Milton Rothman—bah, I think you are just a chronic kicker; Willis Conover, Jr.—a fine answer to Welch's chronic kicking.

I read *Blue Magic* all in one part and it exceeded my expectations for it. The cover is very good; one can easily distinguish the looks of terror on the men's faces. I do not like C. B. Kruse's new character as well as I did his Mardico and shipmates, but Max Durr is a realistic fellow.

The Shapes was a fine little story, made so by its sudden ending. I am still waiting for our quarterly.—Lyman Martin, 65 Howe St., Marlboro, Massachusetts.

We Appreciate Appreciation!

Dear Editor:

I have just purchased the February Astounding Stories and have looked it over. I was so enthusiastic that I just had to put off going out and getting some decent stationery. The smooth edges and stiff cover so overwhelmed me

when I saw them that I just flopped in a chair and gazed at the magazine speechless, with mouth agape.

But not for long, since I came to my senses and realized the precious time I was wasting and started pawing through the pages, and lo! and behold! When I turned one page—I turned one page, and half the pages of the book did not slip through my fingers at one flip.

Another surprise like that and I'll be carrying Astounding Stories with me wherever I go, fondling it over and over again, delirious with joy because of its sudden transformation. The cover was swell—one of Brown's best. The colors were perfectly used, and the figures actually looked human, and were very interestingly done.

Wesso's illustrations were fine—the Editor's Page, real, fine and human, with all you, the editor, have done for us. I feel that we, the readers, would be a pretty small and ungrateful bunch if we didn't try to do something to help Astounding Stories and the editor. The readers' department was as usual, interesting and lively, although Rothman's letter seemed to me to be very critical and egotistical. Mr. Thompson's criticism of *The Fourth-Dimensional Demonstrator* was very amusing and typical of a fellow of his age.

All in all, the February issue is a star. I have serious thoughts of binding it with leather and preserving it for posterity.—James N. Mooney, 617 West 113th St., New York City.

On Review.

Dear Editor:

To review some of the stories in recent issues: *Blue Magic* is coming along grand. Science and adventure blended perfectly to form smooth and interesting reading. Others to be classed in the same line are: *Islands of the Sun*, *Planet of Doubt*, *Davey Jones' Ambassador*, and——Gee Whiz! it's a tough job to pick out any special stories as extraordinary in the last few months, as they all seem to be equally high in quality, each in its own way.

I notice that we are getting quite a few space stories and those dealing with strange planets. Those about space ships should satisfy, to some extent, the cravings of the Hawk Carse fans.

I Am Not God was wonderful and leaves a lasting impression. *When the Cycle Met* was short, but the thought made up for the length. *Forbidden Light* was creepy but fascinating.

Moon Crystals, *Laboratory Co-operator-3*, and *Stranger From Fomalhaut*, rate equally in my estimation in thrills and in science interest. It was grand to meet our space friends—Wiljon Kar, Prock, and the rest—again. The authors of *Smothered Seas* did some fine collaborating, as shown by the product they turned out, even if it was green and messy.

And to wind up to date, *The Isotope Men* and *Strange City*—need I use up a lot of space to express my opinions? I'll melt them all up into one word—magnificent!

And so I bid all you members of the Mud Masons, Blossom Tossers, Rock Heavers, and Overripe Fruit Slingers Association, adios. And to the editor, lots of luck in your work and no headache pills included. I hope Mr. Dold is feeling better and enjoying his rest from his fine work, even though we will miss him from the pages of Astounding Stories.—Ethel C. Poppe, Box 727, West Brownville, Pennsylvania.

Thought-Variants Again.

Dear Editor:

Congratulations and thanks! Congratulations for the smooth edges which I felt the moment I touched the magazine; and thanks for consideration for the wishes of your clientele.

The quality has been very generally satisfactory under the present management. However, I have noticed a tendency to fall back on romance for plot interest, instead of science-fiction.

This last cover is excellent—not all cluttered up with words.

I don't read to criticize—simply to relax and enjoy. So I am not up on authors, titles, etc. But I come back regularly for more, and that means the cook's efforts are appreciated.

As linguistics is one of my chief interests, may I suggest for the benefit of all concerned, that Esperanto is far from the ideal interlanguage. Worthier attempts have appeared as far back as 1907. Scientifically minded persons cannot afford to advocate anything less excellent than Novial.—W. L. Bradley, 235 East 49th St., New York City.

In One Word!

Dear Editor:

CONGRATULATIONS!—Jack Darrow. 5229 North Sawyer Ave,. Chicago, Illinois.

We Can't Stand Still.

Dear Editor:

For some rather obscure reason, since it has never happened before, I have taken out and dusted off the old typewriter, and am herewith setting down my own insignificant opinions and desires regarding science-fiction.

I have been a fan for rather longer than most of your readers, I think, and I still cherish the memory of tales and future glories to be read in the dim long ago of perhaps eighteen years.

In your Brass Tacks pages I have noticed any number of readers' comments, which, by their very assumed infallibility, demonstrate the reason for the title of the section. Brazen nerve and heads like tacks would seem to describe a majority of those who would apparently only like to see their names in print, since they really have nothing to say.

Personally, and it may be that this expresses the beliefs of a great majority of your readers, heretofore, like myself, silent, I think that not only have you, as the guiding genius of Astounding, given us readers better service than we deserved, but I likewise believe that under your guidance we are progressing to the point where fiction of a scientific bend and balance will make its place with the other more erudite types of stories. It is certain that this variety of literature has, and will have, a very profound effect upon this and future generations; and you, friend editor, have a great power for good placed in your hands.

My own tastes being almost completely omnivorous in the matter of material—I enjoy equally Edgar Rice Burroughs and Victor Hugo—makes it difficult for me not to enjoy most of the stories you publish.

From *Lo!* to the fareical *Fourth-Dimensional Demonstrator*, I have thoroughly enjoyed every issue, with but few stories excepted, among them *Twelve Eighty-Seven*. And, since congratulations to the striving, hard-working authors seems to be indicated, allow me to extend them for myself and all the science-fiction fans I know, including all my close friends and many acquaintances, who seem to have caught the craze from me.—G. B., 502 West Washington St., Monticello, Indiana.

Two Copies? One to File?

Dear Editor:

The February issue certainly gives one plenty to write about.

A few comments on your artists and their drawings: Either tell Brown to change his style or don't let him do any more inside illustrations. That's a definite request. His style of shading ruins all his drawings—makes them look smudgy and dirty. For good examples of these results see any of his scratchings in the last three issues.

I would suggest that you let either Wesso or Marchioni handle the feature stories. They're your best bets now that Dold is gone. Schneeman is undoubtedly an artist, but is no good at illustrating science-fiction. His only good drawing was for Kruse's story in the July, 1935, issue. Saaty looked very good in his drawing for the *The Fourth-Dimensional Demonstrator*. He handles machines nicely.

The best pictures this month are for *Mathematica* and *Psycho Power Conquest*, although those for the former story were a bit too dark. Of course, Dold is in a class by himself with his two drawings for *Blue Magic*. By the way, I am still of the opinion that his best piece of work was for the first illustration for Part IV of *The Mightiest Machine*. It is my conception of the ideal illustration for the scientific story, and it is only fitting that it should illustrate such a marvelous story as Mr. Campbell's novel of titanic achievement.

Diffin is a man "What am!" The reason is *Blue Magic*. The story may be quite aptly termed "literature"—of which you need a lot more. It reads like Williamson at his best. Reading your story, I forgot that the plot was in no way new, that it contained no really breath-taking, thought-variant conceptions. It swept me right off my feet, and I really lived the story, together with Rance Driggs and Kitten.

You made me feel all the emotions of your characters, and when an author can do that, he's tops with me. There is yet another thing for which you deserve praise. Mr. Diffin. That's the selection of such euphonic names for your characters; Rance Driggs is about the best I've come across. Wandrei, in his *Colossus* gave us a good one in Duane, too.

The editor deserves something more than praise for bringing Lovecraft back to science-fiction. In appreciation, I'm buying two copies of the February issue. The smooth edges ought to more than pay for their expense by a substantial increase in circulation. That's logical.

Forbidden Light did not receive the panning it deserved. I consider it one of the most amateurishly written stories you have ever published. On top of that, the science was weak—more than that—rotten!

Jim Blish was the author of the most helpful and concise letter of the month. He knew what he wanted to say—and said it, intelligently, too—and then said good-by. It's the kind of a letter both you and I like to read.

I don't like most of your short stories. A close check on Brass Tacks will reveal that novels and novelettes are the best liked. Why not take the hint and eliminate a few, giving us instead, another novelette? Then again, you might substitute a science editorial and a science forum for a story. Readers, give your opinion on this idea, will you? My vote is in the affirmative.

Weinbaum, Schachner, and Wellman for next month, eh? I can't wait.—Corwin Stickney, 28 Dawson St., Belleville, New Jersey.

I'm Glad to Print Such Suggestions.

Dear Editor:

I have great affection for you. Times have been when I've felt more like slinking home with my copy of Astounding than I did to take it proudly. Now, thanks to your work, I feel quite differently about it. In fact, I could have poked the February number beneath the president's nose without any qualms as far as the appearance of the magazine was concerned, and could have exclaimed, "Isn't it grand, though?"

The backward boys that haven't subscribed yet may be in for a surprise some not-far-distant day when they paw through the pulps at their favorite news stand and do not find Astounding there, and when they have almost given up hope of finding it, see it with the "slicks." I'm hopin' that they have some slight trouble soon, every bloomin' one of them.

And allow me these words: Why don't all who really wish to give support, subscribe? A twenty-five thousand showing of paid subscribers would have a great influence with advertisers where there is also a great news-stand circulation. Actually, dreams of five hundred thousand subscribers or more would not be without realization, when we make it possible for greater improvement to be made through the additional investments of the more conservative advertisers who seldom use pulps and that want larger and better chances of results. I'd like you to print this in Brass Tacks. It might bring results for you.—Lawrence E. Larkey, Maces Spring, Virginia.

Progress and Reader Support Go Hand-in-Hand.

Dear Editor:

Whoops! We readers get trimmed edges. You ought to get a medal, Mr. Editor, because you really try to give the readers what they want. And at the same time you give us a magazine which has the story content that is at least twice as good as the other magazines combined.

Mathematica was the best story by Fearn that I have read. It is one that I will reread, and I very rarely reread a story. The story contains some very thought-provoking statements.

I hope you won't stretch Lovecraft's serial into too many parts, as I never read serials until I have them complete.

H. W. Wesso's work is excellent. I think he is the best science-fiction illustrator. I like the full-page illustrations and I like to see that some stories are getting more than one illustration. Couldn't you give us a cover by Wesso once in a while? Brown is good, but so is Wesso and I like variety.

I am trying, in my small way, to help you. I have secured one new reader for Astounding Stories and I'll try to get more.

Here's how to more progress!—C. Hamilton Bloomer, Jr., 434 Guerrero St., San Francisco, California.

Astounding Thrives in a Crucible of Reader Opinion.

Dear Editor:

Ordinarily I do not write letters of praise, condemnation, or suggestion to magazine editors. I figure they wouldn't be holding their jobs if they didn't know how to handle them. And then again—in reference to Astounding—I always get more than my twenty cents' worth, so why kick? But a few rattle-brained suggestions on the part of a few fans have finally awakened me from my lethargy.

Rocket ships model! Holy cats! Perhaps you might be able to stretch a point and include a pair of scissors with every copy of the magazine in order that the children might enjoy themselves cutting out the pretty pictures! Remember, Mr. Tremaine, you still have a *few* adult readers!

Another reader requests that you discontinue announcing forthcoming stories. I suggest that you do as you did in the current February issue—announce the feature yarns and surprise us with the rest. As for the cover artist—keep Brown busy. Wesso is good, but Brown's work is artistically better! Glad to note Wesso's return to your pages, and sorry to learn of Dold's departure.

A word about the stories. The best recent serial is, of course, *Twelve Eighty-Seven*, by John Taine. A superb bit of writing in a class with *Rebirth*, by Thomas Calvert McClary, though a story of an entirely different type. More of Taine—much more! A sequel to *Twelve Eighty-Seven* would be welcome, though, as a rule, I do not advocate the publication of serials. And when are we to hear from McClary? Surely he isn't a one-story writer!

Here's a hand for H. P. Lovecraft! *At the Mountains of Madness* is bound to be up to

Lovecraft's usually high literary level, and it looks like a good story as well. Welcome, Mr. Lovecraft!

Terribly sorry to hear of the death of Stanley G. Weinbaum. A blow to science-fiction. All of his work was far above average, *The Adaptive Ultimate*, published under his pseudonym, being classic.

Trimmed edges? O. K., I don't object. But the stories won't be any better because of them. You certainly are an accommodating editor.—L. A. Eshbach, 209 West Greenwich St., Reading, Pennsylvania.

We Waited Seven Years for This!

Dear Editor:

Although I am a science-fiction fan of seven years standing, this is my first letter to you—so I'll try to make it good.

I have before me the February issue of Astounding. I haven't read a single story in it, but I have so much to say that I don't know what to say. Perhaps I could better start with you, Mr. Editor. You have done what I would have said was impossible three years ago. Science-fiction was rapidly becoming the lowest type of literature in all pulpdom and you are the one who has raised it to the top. If I am not much mistaken, the next two years will see you bring it out of the pulp class altogether. However, I'm not worried about that. The issue is as much as any fan could desire, and certainly more than could be expected.

The cover was fine, as usual. I like Brown because he's an artist—not a pen-and-ink photographer. If the other readers are anything like me they will also appreciate the reduced size of the issue date and the price sign.

I recognized Wesso's drawings instantly, although I hadn't seen one of them in three or four years. He is an artist, also! And Schneeman! What a change from his former scratchy style! His first illustration for *Cones*, by Long, was the first I have ever seen in a science-fiction magazine that showed human beings with character and individuality. Generally the figures are just stuffed shirts. Marchioni's human beings are well-drawn, too, but his liking for hard, angular objects, and sharply contrasted black and white is a little monstrous. It seems to me that his drawings lack perspective, due to the fact that even objects supposedly at a distance from the foreground appear in sharp outline.

Although I haven't read the stories, I know they will be good. You have attained a nice balance between the adventure type and the laboratory or more theoretical type. Some fans like their stories with more technical science and some prefer the so-called blood-and-thunder. I think your present policy pleases the majority. Certainly it pleases me.

I prefer the "pep" editorial to the scientific, but an occasional article is not out of place. Rather than see you add a lot of departments, I would rather see an even larger Brass Tacks, although you are quite generous as it is.

This letter contains bouquets mostly, but I have some brickbats stored away. You may hear from me in a more critical vein next time. —Bob Magovern, 240 West 62nd St., Kansas City, Missouri.

Want Fewer Shorts?

Dear Editor:

My latest observations of Astounding Stories. What do you think of them?

Smothered Seas was the best in the January issue, a good adventure yarn. I think Schachner slipped up in *The Isotope Men*. Horty, a vicious criminal, was "isotoped" and at once reformed—in other words his recessive personality, which was good, came to the fore. Yet all these scientists, after being "isotoped" still retain their same personalities, merely becoming more intelligent. According to the reaction on Horty, their recessive personalities should have come to the fore, making them vicious.

Wesso's illustrations for this story were excellent. In Dold's absence I should like to see Wesso do the bulk of the illustrating, especially the serials and the novelettes. The rest of the work could be left to Schneeman and Thompson, thus eliminating Marchioni entirely. Marchioni's work grows worse with each issue. Never excellent, it is now becoming very sloppy. Practically all of his illustrations contain either a little bearded man, who looks like a cross between a Frenchman and a Chinaman, or a football type whose clothes are more wrinkled than a prune's skin. His buildings resemble Chinese pagodas, and his work in general is very carelessly drawn.

With Marchioni gone and Dold back we could have the best-illustrated magazine on the market; Brown on the covers, Dold and Wesso for the main interior illustrations, and Thompson and Schneeman for the short stories.

Keep naming your forthcoming stories; it gives us something to look forward to each month. By the way, what has become of these authors: McClary—*Rebirth* is still Astounding's greatest story; Zagat—*Spoor of the Bat* was one of the best action stories that I have ever read; Kelly—hasn't appeared since January, 1935—writes excellent character stories; Gilmore—whose *Coffin Ship* way back in 1935 was good?

Why not lengthen your novel and drop a couple of shorts? Two or three shorts per month are merely fair stories. These pages used to make a long complete novel would make plenty of percentage points to Astounding's average. And, speaking of percentage—trimmed edges improved the magazine's looks one hundred per cent.—Richard H. Jamison, 5141 Dresden Ave., St. Louis, Missouri.

This Revelation Will Startle

Men Past 40!

But it May Bring Years of Comfort To Their Lives

HAVE you lost much of your strength? Do you suffer from pains in back, and elsewhere? Are you forced to get up 2 to 10 times at night? Are you a victim of nervousness, fatigue, dizziness, mental depression, chronic constipation, sciatica, so-called bladder weakness? Many men past 40 often mistake these ailments for symptoms of approaching old age. They undergo prolonged treatments that frequently bring no relief and a life of miserable old age ensues, because they have failed to strike at the real trouble.

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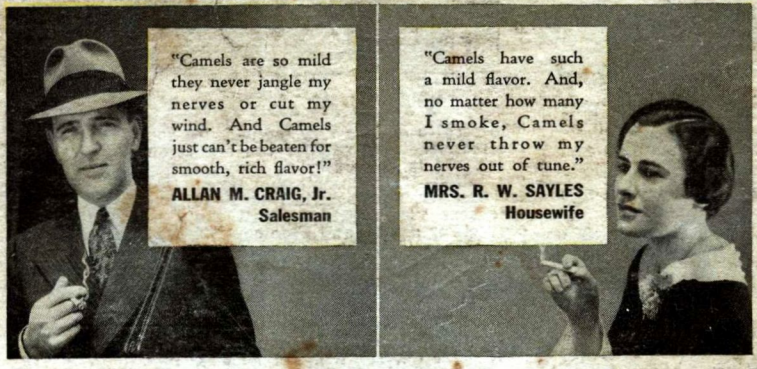

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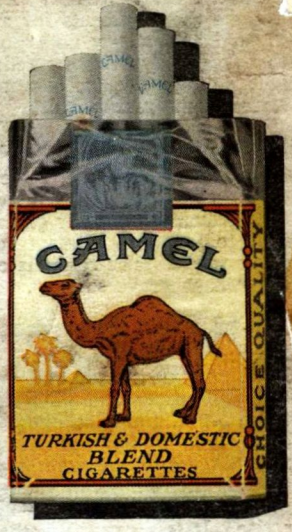

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