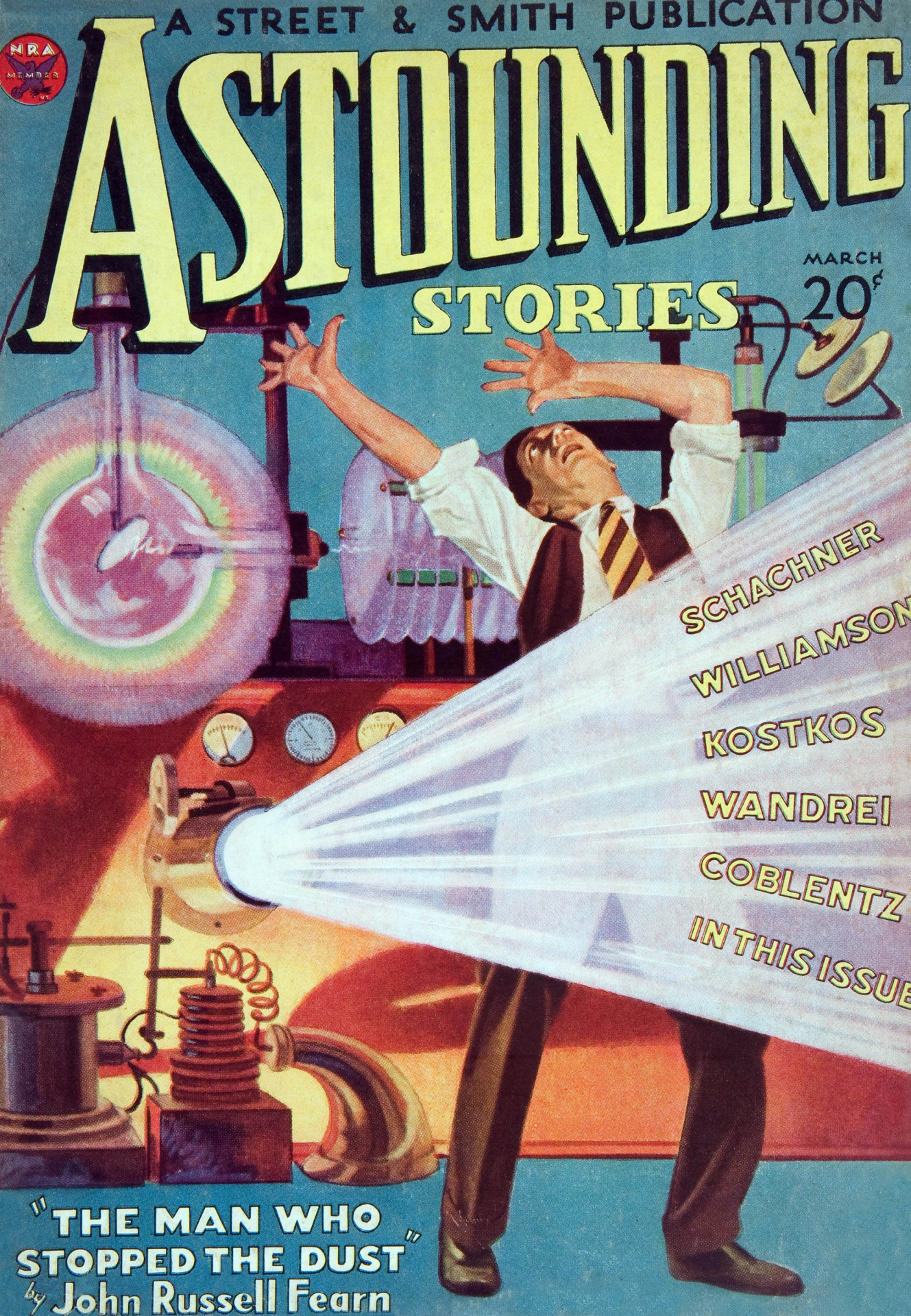
A STREET & SMITH PUBLICATION

ASTOUNDING STORIES

MARCH 20¢



SCHACHNER
WILLIAMSON
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IN THIS ISSUE

"THE MAN WHO STOPPED THE DUST"
by John Russell Fearn

JAPANESE ROSE BUSHES

10 Cts.

The Wonder of the World

Japanese Rose Bushes **bloom all the year round.** Just think of it. Six weeks after planting the seed, the plants will be in **full bloom.** It may not seem possible, but we positively **guarantee it to be so.** They will **bloom every ten weeks,** Summer or Winter, and when three years old the bush will be a **mass of roses,** bearing from five hundred to a thousand roses on each bush. The flowers are in three shades—white, pink, and crimson. The plants will do well both in and out doors. We guarantee at least three bushes to grow from each packet of seed. **Price, 10c** packet, 3 pkts. for **25c** postpaid.

Chinese Fragrant Tree Fern

Just introduced; noted for its rapid growth. An exceptionally pretty ornamental plant. Foliage is rich dark green. Forms grand pyramidal bushes about 5 feet high. Branches very desirable for decorative purposes, wreaths, etc. **Seeds 15c pkt., 3 for 40c.**

Weather Plant

NATURE'S WEATHER PROPHET

By mysterious changes that take place, this remarkable plant accurately forecasts the weather many hours in advance. Will grow anywhere all the year around. An interesting house plant. Bears large, fragrant, pink, butterfly shape flowers. **Seeds, 15c packet, 3 for 40c, postpaid**

GROUND ALMONDS

Amazingly Prolific—Easily Grown From Seed

The Ground Almond has a flavor that is MOST EXCELLENT, resembling the cocoanut. The meat is snow white, covered with a shell or skin of brown color. It grows close to the surface and anything from 200 to 300 Almonds may be expected from a single nut. There is no trouble whatever growing anywhere and in any kind of soil. May be planted any time, and in eight or ten weeks from time of planting you will have an ENORMOUS CROP of the MOST DELICIOUS ALMONDS YOU EVER TASTED. **Seeds 15c Pkt.**

Chinese Cabbage

Novelty from China and should be grown in every garden. Seems to be a cross between Celery and Cos Lettuce. Flavor is more mild than any other cabbage. **Can be served on the table** and eaten raw or cooked like cabbage, spinach or lettuce or made into salad. Grows very rapidly, easy to cultivate. You can create quite a sensation by cultivating this remarkable novelty. **Seeds, 15c packet, 3 pkts. for 40c.**

TREE OF HEAVEN

This splendid ornamental tree is a native of China, and is called the Tree of Heaven, on account of its great beauty. Very hardy, thrives in any soil, no matter how poor, and grows from 6 to 10 feet high from seed the first summer. The leaves are from 5 to 6 feet in any length, giving it a grand appearance. Nothing outside the tropics can rival it for lawn decoration. Large panicles of bloom, followed in season by great clusters of colored seed pods, make the tree a continual thing of beauty. **Packet, 15c; 3 packets 40c**

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One of the most rapid growing vines known. Under favorable conditions this vine has been known to grow OVER 25 FEET IN A SINGLE WEEK. In a very short space of time indeed the Vine has climbed to a great height, and is covered with IMMENSE FLOWERS, from 5 to 7 inches in diameter. It is, indeed, a great novelty, for, unlike other plants, the flowers OPEN IN THE EVENING, and remain open until about noon the following day. In dull weather they will remain open all day. It is a most INTERESTING SIGHT to watch the opening and closing of the flowers as the clouds appear and disperse. As the flowers open they give forth the most DELIGHTFUL AROMA and the whole atmosphere around is full of scented fragrance. It is always the object of favorable comment, and much curiosity is aroused by people passing at night time as to the cause of the charming aroma, frequently stopping in an endeavor to satisfy their curiosity. **PRICE, 25 CENTS packet, two packets for 35 CENTS, POSTPAID.** JOHNSON SMITH & CO.

The Great Wonderberry

A luscious berry that may be grown and ripened from seed in any soil or climate in 3 months. The flavor is fine and unsurpassed for eating raw, cooked, canned or preserved in any form. The fruit is blue-black in color, and tastes like a luscious, rich blueberry. One bush will produce an enormous amount of fruit, yielding great masses of rich fruit all Summer and Fall. **Packet, 10c, 3 pkts. for 25c, postpaid.**

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Banana Musk Melon

Quite a curiosity. Looks and smells like a banana. Peculiar shape and its delicious flavor make it well worth your while cultivating. Flesh is deep and of exquisite flavor. Very high prices are obtained in choice city markets, as high as a dollar sometimes being demanced for one single specimen. **Seeds 10c, 3 pkts. for 25c.**

Great Japanese Umbrella Palm A Graceful House or Conservatory Plant

Easily Grown From Seed Winter or Summer

The Japanese Umbrella Palm is a semi-aquatic plant. It is easily grown from seed either in a bowl of water or in very damp soil. Probably the most usual, as well as the most interesting method, is to cultivate the plant in a bowl or jardiniere filled with water, with two or three inches of good garden soil at the bottom. The seeds soon commence to germinate, and the plant shoots up to two to three feet high and rapidly assumes a most pretty palm-like appearance, as shown in the engraving. The tops of the stems are surmounted by a whorl of umbrella-shaped leaves, of a waxy appearance. We will send a package of this seed, with full instructions for culture, for only **15c or three packets for 40c postpaid.**

Perfume Plant

Blooms only at night, giving forth the most delightful scented fragrance for quite a distance. Causes general comment. For house or garden. Also valuable because of rare perfume made from it. **SEEDS. 10c pkt., 3 for 25c.**

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Very curious, odd looking, strange species of plants; will thrive anywhere with little or no care. Flowers are of exquisite beauty and delightfully fragrant. You will be astonished at the odd looks of the Cacti just sprouting. **Packet, 10 cents, three packets for 25 cents, postpaid.**

GIGANTIC NEW GUINEA BUTTER BEANS

THE NEW EDIBLE VEGETABLE WONDER

Grows to an astonishing size, the Beans measuring from 3 to 6 feet long, and weighing anything from 10 to 16 lbs. and even more. One Bean is sufficient for a family for several meals. Very palatable and rich in nutritious materials. The delicate Buttery Flavor is much appreciated. The Vines are easily grown, very prolific, and a most welcome and valuable adjunct to your garden. Try them; you will find them the **most delicious vegetable you have ever tasted.** Imported direct. Unobtainable elsewhere. Sample package of Seeds with full directions for cultivating and cooking. **25c, postpaid.**

Kudzu Vine

Most rapid growing vine known. Will grow 20 feet in one week. Luxuriant foliage, lovely purple flowers, very fragrant. Nothing to equal it for shade purposes and quick growth. **Seeds 15c packet. 3 for 40c.**

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Produces enormous crop of long, slender, round pods, of excellent quality for snap beans. Pods grow from 2 to 5 feet in length. Very tender and fine flavor. The vines are rampant growers; an interesting curiosity. **Seeds 15c pkt., 3 for 40c**

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Blank Cartridge Pistol

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.22 CAL.

MADE IN 3 SIZES

25c 50c $1.00

Three new models now out **25c, 50c and $1.00.** Well made and effective. Modelled on pattern of latest type of Revolver. Appearance alone enough to scare a burglar. Takes 22 Cal. Blank Cartridges obtainable everywhere. Great protection against burglars, tramps, dogs. Have it lying around without the danger attached to other revolvers. Fine for 4th July, New Years, for stage work, starting pistol, etc. **SMALL SIZE 4 in. long 25c. MEDIUM SIZE 5 in. long 50c. LARGE SIZE 6in. long $1.00. BLANK CARTRIDGES 50c per 100. HOLSTER (Cowboy type) 50c. Shipped by Express only, not prepaid.** *710 page catalog of other pistols, sporting goods, etc. 10c*

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a little instrument, fits in the mouth out of sight, used with above for Bird Calls, etc. Anyone can use it. **Never fails. A 16-page course on Ventriloquism together with the Ventrilo. All for 10c postpaid.**

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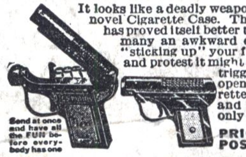

Send at once and have all the FUN before everybody has one

It looks like a deadly weapon, but it is merely a novel Cigarette Case. This clever contrivance has proved itself better than the real thing in many an awkward encounter. Great fun "sticking up" your friends. They squirm and protest it might be loaded. Pull the trigger and the slide flies open disclosing the cigarettes. Well made, light and compact. Weight only 2 ounces.

PRICE POSTPAID 25c

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Place a very small amount of this powder on the back of your hand and blow it into the air, and watch them sneeze without knowing the reason why. It is most amazing to hear their remarks, as they never suspect the real source, but think they have caught it one from another. Between the laughing and sneezing you yourself will be having the time of your life. For *parties, political meetings, car rides,* or any place at all where there is a gathering of people, it is the *greatest joke out.* **PRICE 10c, 3 for 25c, 75c per dozen. Shipped by Express.** Not Prepaid.

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Good Luck RING

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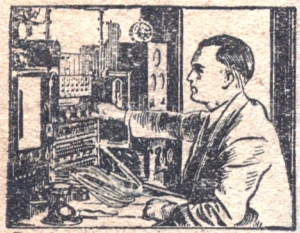

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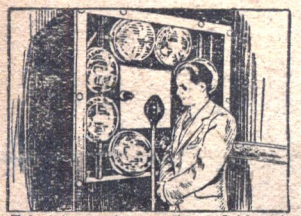
Set servicing has paid many N. R. I. men $200 to $1,000 a year for their spare time. Full-time men make as much as $40, $60, $75 a week.

Many Radio Experts Make $40, $60, $75 a Week

Spare-time and full-time Radio Servicing, Operating Broadcast, Aircraft Radio, Commercial Land, Ship and Television stations, a Radio service business of your own. I'll train you for these and other good jobs in the manufacture, sale and service of Radio and Television apparatus. My FREE book tells you about the many money-making opportunities in Radio.



Television, the coming field of great opportunities, is covered in my Course.

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You don't have to leave home and spend $500 to $1,000 to study Radio. I'll train you quickly and inexpensively right in your own home and in your spare time for a good Radio job. You don't need a high school or college education. Many of my successful graduates didn't even finish grade school. My amazingly practical 50-50 method of training—half with lessons, half with Radio equipment—gives you broad practical experience—makes learning at home easy, fascinating, practical and rapid.

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Broadcast Engineer.
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Government Radio Operator.
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"Soon after the depression started, I found myself without a job, but I was well protected with N. R. I. training. I swung right to full-time Radio servicing and I have made over $6,000 in a little over two years." —WM. SPARTIVENT, Sparty Radio Service, 93 Broadway, Newark, N. J.

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"Although doing spare-time Radio work only, I have averaged about $500 a year extra in addition to my regular income. Full-time Radio work would net me many times that amount." — EDW. H. FAWCETT, Slough Road, Ladner, B. C., Canada.

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National Radio Institute,
Washington, D. C.

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VOLUME XIII
NUMBER 1

ASTOUNDING STORIES

MARCH
1934

A STREET & SMITH PUBLICATION

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For here is a remarkable method to learn to play your favorite instrument that is actually fun, that teaches you in a fraction of the usual time—right in the privacy of your own home—and without a private teacher! Moreover, you save more than half the usual cost.

This amazing way is based on an entirely new principle. You learn by playing real pieces instead of scales. It's actually as easy as A-B-C, and exciting as a novel. You learn by playing real pieces from the very beginning—right from real notes.

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Then get in on these good times you are missing! Learn to play your favorite instrument quickly and easily this modern way.

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Win Back Your Pep

Good Kidney Action Purifies Your Blood—Often Removes the Real Cause of Getting Up Nights, Neuralgia and Rheumatic Pains—Quiets Jumpy Nerves and Makes You Feel 10 Years Younger.

A famous scientist and Kidney Specialist recently said: "60 per cent of men and women past 35, and many far younger, suffer from poorly functioning Kidneys, and this is often the real cause of feeling tired, run-down, nervous, Getting Up Nights, Rheumatic pains and other troubles."

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Cystex is probably the most reliable and unfailingly successful prescription for poor Kidney and Bladder functions. It starts work in 15 minutes, but does not contain any dopes, narcotics or habit-forming drugs. It is a gentle aid to the Kidneys in their work of cleaning out Acids and poisonous waste matter, and soothes and tones raw, sore, irritated bladder and urinary membranes.

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New York Doctor Praises Cystex

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Dr. N. T. Abdou

"It has been my pleasure to make a study of the Cystex formula. This prescription impresses me as a sound combination of ingredients which should be of benefit to men and women troubled with night rising, putrefaction of the urine, aching back in the kidney region, painful joints or stiffness—due to insufficient activity of the kidneys or bladder. Such functional conditions often lead to indigestion, headaches, high blood pressure, rheumatic pains, lumbago and general exhaustion—and the use of Cystex in such cases should exert a very favorable influence. Within 15 minutes after taking Cystex the color of the urine is changed and the irritating excretions expelled."—Signed, N. T. Abdou, M. D.

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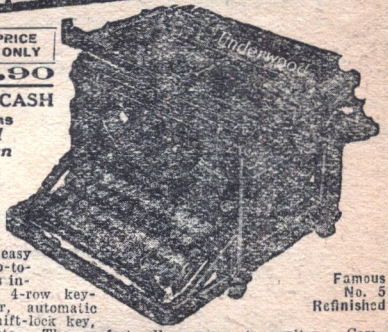

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—The Editor.

Illustrated by Howard V. Brown

BORN of the SUN

A vivid, comfort-destroying story— a thought-variant that will thrill you and make you wonder!

by JACK WILLIAMSON

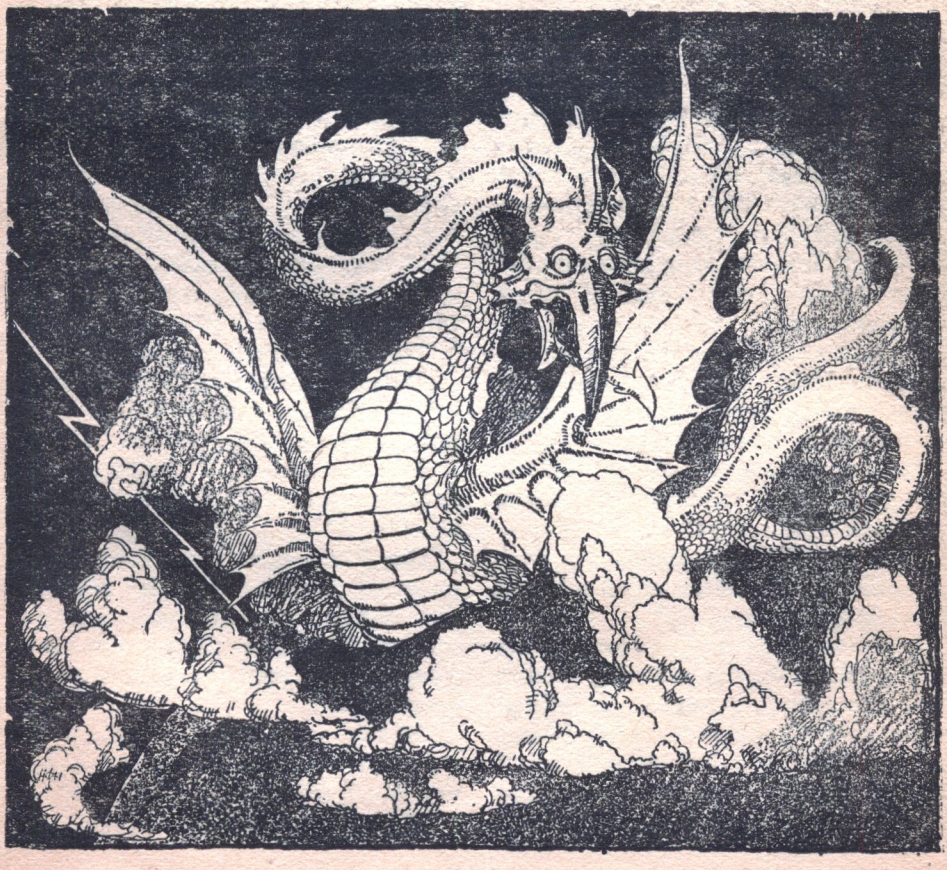
THE DEEP song of a wide-open motor throbbed into the huge mahogany library—the first faint note of rising menace. Foster Ross, busy over a great table in the end of the room, glanced up abstractedly at a frost-rimed window. Gaunt trees, outside, flung bare, skeletal branches against the gray gloom of an early December dusk; the moaning wind carried a few flakes of snow.

Listening, Foster Ross wondered briefly the reason for such suicidal haste over the icy highways, before his attention went back to the experiment that had engrossed him for two hard years.

He was alone in the great, rambling stone mansion his father had left him, secluded upon a lonely, wooded Pennsylvania hilltop. No visitors were expected—the house was being closed for the winter. The few servants had departed that afternoon. Foster, himself, planned to leave at midnight for sunny Palm Beach to meet June Trevor.

A lean, muscular giant, he was whistling absently as he bent over the immense mahogany table. It was littered with electrical apparatus. In the center of it, shimmering under brilliant light, was a little aluminum sphere, trailing two fine platinum wires.

Foster tightened a last connection. He stepped back a little, eagerly brushing a wisp of copper-colored hair out of his eyes.



"Now!" he whispered. "It should go up. As the first space ship will go up toward the Moon! It should be——"

Nervously watching the toylike sphere, he snapped down a key. Anxiously, he waited, as coils whined angrily, and violet discharges flickered about bright contacts.

The tiny globe did not move. A moment he stared at it, sighing wearily. Then he shrugged, grinned at himself.

"Fifty thousand, that makes," he muttered to himself. "Fifty thousand dollars, for a pipe dream! I could have sowed a lot of wild oats for that. What a fool I am, to be fussing with this infernal thing like an old crank, when I might be lounging on the beach with June!"

But something flashed, then, in his level blue eyes; his wide shoulders squared.

"It can be done!" he insisted under his breath. "I might try a cone-grid. Or alloy the cathode element with titanium. The motor-tube——"

He heard, then, the insistent doorbell and frantic knocking at the front door. Foster hurried down the gloomy hall.

Still he could hear the racing car, a deep-toned, ominous roll, that grew swiftly louder. It slackened momentarily, was renewed.

"It has turned in the drive," he thought. "Two unexpected guests, and both in a hurry!"

He flung the door open upon wintry gloom; the bitter wind whirled snow into his face.

A cab was standing in front of the door, yellow lights stabbing feebly into the swirling snow. It glided away as he appeared. And Foster saw the man who had rung, a small figure, muffled in an enormous gray coat, crouching against the wall.

He sprang toward the opening door, gasping: "Quick! Inside! The other car——"

Powerful lights probed through the snow; the second machine came roaring up the drive, behind the departing cab. Skidding recklessly, it swerved toward the door.

Terrific reports crashed in Foster's ears; yellow flame jetted from a black automatic in the little man's hand. He was shooting into the skidding sedan.

A thin sword of blinding orange light stabbed back from the machine, as it thundered past. The ray seemed to touch the little man. He whirled, as his gun exploded a last time, fell inside the door.

The black car paused, plunged forward again. Its headlights rested a moment on the cab, swept past it. It vanished down the drive.

BEWILDERED, Foster slammed the door, locked it. He bent over the little man on the floor. A gasping breath greeted him, then a faint chuckle.

A low voice spoke, oddly calm: "We score one, Foster!"

"You aren't hurt, sir? You fell, when the orange light——"

"No. I dropped in time."

Foster was helping him to rise.

"But it's a deadly thing. The poison flame, they call it. It's an actinic radiation, I believe, that splits proteins. It forms poison in the blood."

The little man bent for his automatic. Deliberately, he removed the empty cartridge clip, snapped another into place, slipped the heavy weapon back into the pocket of his gray coat.

"Won't you come in where it's warmer?" Foster invited. "And if you don't mind explaining——"

"Of course, Foster."

His strange guest followed him through the shadowy hall, into the brightly lighted library. Foster turned, when they came into the light, to survey the other.

"You seem to know my name," he remarked. Recognition flashed, then, in his level blue eyes. "Uncle Barron!" he exclaimed. "I hadn't recognized you!" He offered his hand cordially.

Barron Kane was a small man. His chest was flat; his drooping shoulders were thin as a boy's; his arms were lean and stringy. Yet the serene patience of the scientist lighted his weary face with a radiance of power. In his calm gray eyes was confidence, and beside it, strangely, the shadow of a devouring dread.

"You surprised me," said Foster. "I thought, you know, that you must be—dead. It's years since any one has heard from you. My father tried to locate you."

"I've been in Asia," said the little, sun-browned man, "at an oasis in the Gobi, that you won't find on the maps. I was completely cut off from civilization. And there's a power, you see, that would cut me off forever."

He nodded in the direction the racing car had gone.

"I remember when you were fitting out your last expedition," recalled Foster. "Twelve years ago—I was in high school. You were so mysterious about where you were headed. And I was wild to go along, for the adventure of it, trying to talk dad out of the idea that I was destined to run the steel business.

"But sit down. Do you care for a drink?"

Barron Kane shook a brown, bald head—he had arrived without a hat. "But I must talk to you, Foster."

"I'm keen to know all about it," Foster assured him. "All this is—well, interesting."

"We might be interrupted," said Barron Kane. "Do you mind fastening the doors and windows and drawing the blinds?"

"Of course not. Do you think—they will come back?"

"There is a power," said Barron Kane, his low voice still oddly calm, "that will not rest without positive proof that I am dead."

Foster locked the door, went to secure the windows. He came back to find his uncle curiously examining the little silver model on the table.

"I read your monograph last month in the *Science Review*," he said. "About the omicron-effect and your motor-tube. That's why I've come to you, Foster. You've hit on a tremendous thing——"

"Not yet," denied Foster, with a weary little smile. "I've spent two years of time and a good deal of money on the motor-tube. And still it won't lift its own weight."

"But you're still trying?" The low voice was edged with a strange anxiety.

"I was working to-day." Foster touched the little aluminum globe. "This is a model of the space machine. The motor-tube is inside, connected with these platinum wires. The real ship, of course, would have all this other apparatus aboard. The living accommodations and she——"

He stopped himself, shook his head bitterly.

"But it's just a dream!" he muttered. "A crazy dream—I'm not going to waste my life on it." His blue eyes flashed at Barron Kane defiantly. "I'm leaving for Palm Beach, to-night, to meet June Trevor." He explained: "We're engaged. We'll be married New

Year's. Barron, June's simply—wonderful!"

"You can't do that!" protested Barron Kane. Gripping Foster's arm, he spoke with a puzzling urgency. "You must stick to the space machine. You must finish it, Foster, to save the human race."

"Eh!" Grunting with astonishment, Foster stepped back from him. "What do you mean?"

"Just that," Barron Kane told him, in the same quiet voice that was emphatic for its very lack of emphasis. "I've come to tell you a dreadful thing, Foster. A thing I learned in Asia. A thing that a terrible power is bent upon keeping me from telling."

Foster stared at him, demanded: "What's that?"

"The planet is doomed to destruction," said Barron Kane, still grimly calm. "And the human race with it—unless you can save a handful of humanity. You are the one man who has even the ghost of a chance, Foster, with your steel mills and your invention of the motor-tube."

AMAZED, a little shaken, despite himself, at the chill touch of alien fear, Foster watched his uncle.

Had the man gone mad in the twelve years since he vanished? He always had been famous for an eccentricity of character no less than his ability as geologist and astrophysicist. No, Foster decided, his manner was sane enough. And the car from which the orange ray had flamed had been no mad delusion. It had been very real.

Foster took Barron Kane by the shoulder, marched him to a great leather chair and seated him in it. Standing over him, he demanded:

"Now tell me exactly what this is all about?"

Grave humor momentarily banished the haunting shadow of dread from those calm gray eyes.

"No, Foster," the quiet voice said; "I'm afraid that I'm perfectly sane."

Barron Kane laced his thin brown fingers together, stared at them meditatively.

"You cannot have heard of the Cult of the Great Egg," he began. "You can't, because even the name of it is almost completely unknown outside. But it is a fanatical religious sect, whose temple is hidden in an unknown oasis in the Gobi.

"Nearly ten years ago, Foster, I became a member of that sect. It was not easily done. And afterward I had to endure ordeals that were—well, trying. After seven years I was fully initiated. From the lips of the head of the order—a human demon named L'ao Ku—I heard the dreadful secret that I had gone to Asia to learn.

"That was three years ago. L'ao Ku must have suspected me. I was very closely watched. Two years I had to wait, even for the chance to escape. Since, I've been hunted across the world by the agents of L'ao Ku. It's almost another year.

"I thought I'd given them the slip in Panama. I saw your article about the motor-tube and came to you, Foster. You, as I say, are the only man—— But they've somehow picked up the trail again. I'm afraid I've sentenced you to death."

"Sentenced me?" asked Foster. "How?"

"L'ao Ku wants his secret kept. Three men have died very soon after talking with me, mysteriously."

Foster was still planted in front of Barron Kane, wonder and incredulity struggling in his mind. His chin tightened with determination to find some rational order in these bewildering incidents.

"This secret?" he demanded. "What is it? What's this about the end of the world?"

Again Barron Kane thoughtfully studied the tips of his laced fingers. "I'll begin, I think," he said, "by asking you a question—by asking you, Foster, the greatest riddle in the world. What is the Earth?"

Startled, Foster searched the weary, patient face. He studied the gray eyes, calm, yet shadowed with brooding horror. He shook his head. Barron Kane was an enigma.

"All right, what *is* the Earth?"

"I've a very astounding thing to tell you," went on Barron Kane, "a very terrible thing. It will be hard for you to accept, for it is contrary to a lot of our unthinking dogma that is older than science.

"The idea is so strange, so terrible, Foster, that no western mind could have conceived it. We owe a debt, after all, to the Cult of the Great Egg. The oriental mentality, working with the secret science of the order, saw a thing that we should never have been able to see, in spite of all the evidence in front of our eyes.

"But I can make it easier for you to accept the thing, Foster, by recalling a few notorious gaps in scientific knowledge. And you *must* accept it, Foster. The very life of humanity depends upon you."

Foster dropped into a chair directly before Barron Kane. Sitting bolt upright, he waited silently.

"We live in appalling ignorance of the planet beneath us," the same calm voice spoke on, edged still with a terrible intensity. "Out of four thousand miles to the center of the Earth, how far have we penetrated? Not four miles!

"What lies beyond? What, really, is the thing whose tremors we call earthquakes? What lies beneath the thin shell of solid rock we live upon? What is it whose heat causes our volcanoes? I could cite you a thousand vague, conflicting theories, guesses, about the nature of the Earth's interior—but hardly one proved fact. We know actually as little of the Earth, Foster, as a fly, crawling on an egg, knows of the mystery of embryonic life within.

"And how much less we know of the other planets! What scientist can tell you even how they came to be? Oh, there've been fine theories enough, since Laplace. We have the planetesimal hypothesis, the nebular hypothesis, the gaseous hypothesis, the meteoritic hypothesis—this hypothesis and that. The most remarkable thing about each one is that it successfully contradicts all the others.

"Think of the puzzle of the lost planet! According to Bode's Law, you know, there should be another planet in the gap between Mars and Jupiter, where the asteroids are. The asteroids and the comets and the meteor swarms apparently are fragments of it—but, altogether, they account for no more than a tenth of the bulk it should have had. What unthinkable cataclysm shattered the lost planet, Foster? And, tell me, what became of the nine-tenths of it that is gone?

"Take another cosmic enigma! What is the Sun itself, upon which our very lives depend? What is the life story of a sun, any sun? How does it acquire its matter and its motion and its heat? What is the purpose in existence of a sun? When you look at the stars on a winter night, Foster, can you conceive them without any end in being?

"Consider the riddle of entropy! There is a force of death that pervades the universe. Stars grow cold

and die; star dust is scattered; radiation is diffused and lost. Our cosmogonists say the universe is running down. But must there not also be a force of life, of growth, of creation?

"How can death be, Foster, without life before it?

"Did you never wonder, Foster, why the Sun, like other variable stars, expands and contracts in the rhythm of the sun-spot cycle, with a beat like the pulse of a living thing?"

Barron Kane leaned forward. His gray eyes—the shadow of haunting horror was deeper in them, now—fixed upon Foster's face with a desperate, appealing earnestness.

"Foster," he went on, "I know what the Earth is!

"Years ago, struggling with the failures and the contradictions of our Western science, I vaguely guessed the thing. Twelve years ago, from a chance faint rumor, I inferred that oriental insight had seen the truth hidden from our dogmatic western minds.

"I went, as I say, into the Gobi. I found the secret sect. After seven years of effort and endurance, I reached the inner mystery. L'ao Ku confirmed my terrible inference.

"I learned from him things I had not dared even to guess. I learned that the Earth—the entire solar system—is destined to break up within a very short time. We shall see the end, Foster—unless the secret agents of L'ao Ku make away with us first.

"We must not forget him, Foster, in the greater danger. The man is inhuman, fanatic, diabolical; but he is a genius. And all his power, all the secret science that produced the poison ray, is bent upon our destruction."

The calm voice paused. Quiet hung in the wide library, strained, electric. And Foster whispered, incredulous:

"The end of the world!"

"The end," repeated Barron Kane, with the same compelling calm. "I had hoped we might have—years. But I know to-night, from an item in the evening paper, that the change has already begun."

Foster Ross surged back to his feet, towered over the little brown man. "Tell me," he implored, "just what are you getting at?"

Barron Kane told him, leaning forward, his low voice sunk almost to a whisper. Foster listened silently, still standing. Unbelieving wonder was first in his blue eyes. It gave way slowly to the dawn of a terrible fear.

II.

AN HOUR later, it was, when the grave little scientist finished and leaned back in the huge leather chair, lacing his thin brown fingers together again.

Without speaking, Foster strode to a tall window. He put up the blind and stared out into the early-winter night. The bare trees were a ghostly rank of skeletons on fields of snow that shimmered faintly under the dark sky. Flakes of snow gleamed white in the flood of light from the window. The bitter wind moaned bleakly against the ancient stone walls.

"Please draw the blind," requested Barron Kane, with that same calm that nothing disturbed. "The agents of L'ao Ku might be watching. The poison ray——"

Foster snatched down the blind. He strode back to his uncle, tense, trembling a little. "Sorry!" he muttered. "I forgot."

"The idea is a peculiarly difficult one for the western mind to re-

ceive," said Barron Kane sympathetically. "It would drive most westerners mad, I suspect, to be forced to believe it. But, if you will try to grasp it with something of the oriental fatalism——"

Foster seemed unconscious of him. He strode up and down the vast, dark-paneled room. He paused, once, to touch the little aluminum model of the space ship on the table. He took a photograph of dark-eyed June Trevor from the mantel, and studied her demure, classic loveliness for a moment and replaced it very carefully. He strode back to his uncle.

"The Earth—that!" he rasped. "I can't believe it! It's too—monstrous!"

Barron Kane rose and came to him eagerly. "You must believe me, Foster," his low voice pleaded. "Because only you have the means to save the seed of humanity. And you must begin the work at once—to-night!"

"To-night?" echoed Foster, in dull surprise.

"You must realize, Foster, that we've only months. Half a year, at most. And the undertaking is—terrific. We must set up a laboratory to rush the development of your motor-tube. Your steel mills must begin fabricating parts for the—the ark of space.

"We've a thousand problems to solve in every branch of engineering. And the thing must be finished in less time than was ever taken for a similar construction. Much less time!"

"There has been no similar construction," Foster said. "Even a battleship is a simple toy compared to the space machine. It would take a lifetime to launch the thing.

"Besides," he protested vaguely, still lost in wonderment, "I'm going to Palm Beach. I promised June that I——"

"Then you must break your promise," cut in Barron Kane imperatively. "Both of us must give every second to the job. Even then, the time is fearfully short. And we must look out for L'ao Ku with his poison ray."

"Really, you see, I can't—can't quite believe." Foster's blue eyes looked soberly at Barron Kane. "The thing's too damnably fantastic!"

"You must try to grasp it with the oriental viewpoint," urged his uncle. "The eastern fatalism——"

"I'm no Chinaman," said Foster. "But I do love June Trevor—more than anything. Even if you're right—if the next six months will be the last—I'd rather spend them with her."

"Don't you see?" whispered Barron Kane. He gripped Foster's arm with thin fingers. "If you love June Trevor, you must build the space machine to save her. Would you want to see her die, Foster, with the rest of the human race, like—like vermin in a burning house? Wiped out—annihilated?"

"No!" exclaimed Foster. "No! But I can't believe——"

"You must!" insisted Barron Kane. "There's proof, I tell you. To-night, in the evening paper, is an item that heralds the disruption of the solar system."

"Proof?" cried Foster incredulously. "Proof of—that?"

"Have you an evening paper?"

"It's here somewhere. I had no time to look at it. The experiment, you know."

He found the paper, unfolded it curiously. His eye sought the chief headline, saw that it concerned merely a new disclosure of political corruption.

Barron Kane's thin, eager hands took the paper from him, pointed out an obscurely headed item at the bottom of the page.

SAVANTS PUZZLED

Doctor Lynn Poynter, of the Mount Wilson Observatory, reported this morning that the planet Pluto has left its orbit and is wandering away from the Sun on an erratic and inexplicable path. The planet's color, Doctor Poynter also stated, has changed from yellowish to vivid green.

He is unable, Doctor Poynter says, to give any explanation of the phenomenon. He refuses to make any further comments upon it, except to say that other astronomers, in all parts of the world, are being requested to check his observations.

Foster's face set grimly as he read the brief paragraphs. His fingers, trembling, closed unconsciously upon the newspaper, tore it slowly in two. Into his blue eyes, when he looked back at Barron Kane, had come a new, consuming horror. Huskily, he spoke:

"So Pluto is already—gone? Already, the solar system is breaking up!"

He gazed down at the torn paper in his hands.

"We'll go down to the mill in the morning, Barron," he said, "to begin."

Silently, the little brown man gripped his hand, mutely thankful.

"Now," said Foster, "I must telephone June."

"IT'S YOU, Foster!" came the girl's clear voice over the wire, eager with anticipation. "You're coming down to-morrow? I'll drive to meet you——"

Foster was picturing her staid, brown-eyed charm; he saw her as she would sit at the wheel, tall, slender: a gay, childish eagerness beneath her sedate reserve. And he was faint, suddenly, with a sick regret that he could not go to her.

"No," he was saying, trying to keep the pain from his voice; "I'm afraid I can't come down."

He sensed the quick anxiety in her reply:

"Is something—wrong?"

"A thing has come up," he stumbled, searching for words not too alarming. "A job that I must do. It's tremendously important. I must stay——"

"Oh!" In her voice was a little catch of agony. "Will it keep you—past the New Year?"

"Yes," he said. "We'll have to name a new wedding day."

"Oh!" It was a gasp of pain; Foster was sick with pity for her. "Can't you tell me what it is?"

"No; not over the phone. But I want you to come to me, June, as soon as you can. I'll explain."

"I've a lot of engagements," she protested. "And you seem so—strange!"

"It's really important," he urged. "Please come! I need you, really. Oh, June—please——"

A moment of silence; then she spoke decisively:

"All right, Foster, I'll be there—let's see—Monday."

"Thanks, dear!" he said gratefully. "When you understand——"

"Atta boy!" she cried, almost gayly. "Get some sunshine in your voice! You were talking as if the world were going to end! I'll be there Monday."

Dear June, the same good sport, he was thinking, as she hung up. Gay and unselfish as ever She always understood. And he would, he must, finish the space machine in time to carry her away from this unbelievable terror that Barron Kane promised.

THAT NIGHT Barron Kane and Foster Ross did not go to bed. They stayed in the long library, beside the little aluminum model of the space machine, planning how to transform the dream of it into reality. Foster ventured to the kitchen at midnight and brought bread and cold ham and a bottle of milk and set them beside the toy ship.

At dawn he began packing into a brief case the model and the sheets they had covered with plans, to carry down to the mill.

"There's a danger, remember," warned Barron Kane. "The men who followed me won't be far away. They won't go back without proof that I am dead."

"I'll call the mill," said Foster, "have a few men sent out."

But the line, he discovered, was dead.

"The wires are down," he said. "The storm——"

"L'ao Ku's men have cut them," whispered Barron Kane. "They are waiting for us."

"We'd better make a dash for it, then," Foster suggested, "while we can."

Barron Kane nodded. "We'll have to fence ourselves in if we do get to the mill," he said. "For we'll be fighting L'ao Ku, to the end, as well as fighting against time. It is the basis of the secret sect that all life must perish when the Earth breaks up. Any attempt to save even a single human life breaks the first tenet of their fantastic dogma."

Leaving the lights burning in the library, the two slipped out through the rear of the old mansion. The grounds were ghostly white with snow. Dense clouds hid the sky, ice-gray with the first glow of dawn. Mysterious shadows were clotted against trees and buildings.

Foster carried his priceless model, Barron Kane had drawn his heavy automatic, snapped off the safety. At a half run, they crunched through thick snow to the garage. Foster unlocked the doors, flung them back.

A thin orange ray, bright as a blade of incandescent metal, flamed silently out of the gloomy doorway. It struck Barron Kane's arm. His automatic spoke once in reply. Then, gasping with agony, he crumpled down on the snow.

Foster caught his breath. His lean body catapulted instantly into the black corner from which the silent ray had come.

His groping hand closed over a talonlike hand that held a light metal tube. His shoulder struck a lithe, powerful body, flung it heavily against the wall. Another lean hand closed on his throat. He caught a sinewy wrist, forced it back.

The two recoiled from the wall, thudded on the concrete floor. Foster had heard a guttural grunt of surprise. That was the only sound from his unseen opponent. The battle was finished in silence and darkness.

A doubled knee drove into Foster's groin. As he writhed in agony, hard fingers twitched under his. A blinding finger of yellow light stabbed from the little tube. It wavered across the wall of the garage. Slowly it came down.

The poison ray! If it touched him, to make a deadly venom of his own blood——

Intolerable agony burst suddenly from the tortured wrist of his resisting arm. He trembled with the pain of effort. Hot sweat burst out on his face.

The orange ray touched the floor, trembled toward his shoulder. The talons that moved it were hard as steel.

Foster was giddy with the unbearable pain from his twisted arm. The world spun; a wave of blackness rose. Then, in the moment of defeat, a queer something happened to him, a blinding revelation. In a moment of crystal vision, he saw himself not as one man fighting for his own life, but the champion of humanity, battling for ultimate survival.

A NEW strength came oddly with the vision; deathless purpose flowed into him like a strange tide.

He straightened his tortured arm. Red agony flamed in it. But the orange needle flickered away. The hard body against him knotted with exertion; the ray flashed back. Faint and dizzy, Foster drew on his new strength to the utmost.

He heard the dull snap of a breaking bone. The steel talons in his grasp turned to limp flesh. The orange blade described a sudden arc, that touched the head of the other man. Then the little tube crashed against the wall, the ray went out.

The other was already dead from his own weapon when Foster staggered to his feet.

Barron Kane lay still on the snow outside, a small gray huddle in the pale dawn light. Foster ran to him, heard his faint whisper:

"The poison ray—my wrist—a tourniquet at the elbow—bleed it."

Foster pushed up the sleeve on the thin brown arm. He whipped his handkerchief around the right elbow, twisted it tight with a spanner he snatched from the wall. On the lean, stringy wrist he saw a swelling, lividly purple, swiftly increasing in size. He dug a keen penknife out of his vest pocket, slashed deep into it, put his own lips to the wound to draw out the poison.

"That will do," whispered Barron Kane at last, his voice a little stronger. "Guess I'm done for, anyhow. Just hope I live to see you win, Foster. No matter. I've done my part. It's up to you, now, to save the seed of mankind."

"I—I'll do my best," Foster promised him, choking. He was still strong with the strange self-forgetful resolution that had come to him in the fight.

"Drive on," whispered Barron Kane, "to the mill!"

Foster lifted him into the roadster. When he switched on the lights he paused a moment to look down at the dead man on the floor. His face was yellow, Mongoloid, with a hawklike thinness. It was set, now, in the fearful, derisive grin of death.

"Open his clothing, Foster," commanded Barron Kane. "Look on his body, under the left arm."

Foster obeyed. Under the man's arm, on the yellow skin stretched like parchment over the ribs, was a scarlet mark, like a large O.

"He's branded!" he cried. "With a red circle!"

"That is the emblem of the secret cult," whispered Barron Kane. "He came from L'ao Ku."

Foster leaped in beside Barron Kane. The stiff motor came to bellowing life. The roadster lunged forward, swerved past the dead man, skidded out upon the icy drive.

The leaden, frigid day had come when they drove into the grimy mill town. Gaunt, ugly, the little buildings of the workers huddled over hillsides gray with snow and soot. The mill stood in the level valley; gigantic blast furnaces marched, like a grim army of black steel monsters, against the gloomy clouds.

Foster drove straight through the gates to the emergency hospital. He carried Barron Kane to a cot inside.

"The doctors will soon be here," he promised.

"Don't worry about me," the little man whispered. "You have work to do. I'm going to try to live to see you finish it."

III.

THREE months later, a new fence surrounded the steel mill. It was twenty feet high, and the first ten were bullet-proof concrete and steel. The top of it was wired to powerful generators. At hundred-foot intervals it was studded with rotating turrets of steel and bullet-proof glass, in which sentries watched always, behind frowning machine guns.

Inside the fence, on a huge pier of reënforced concrete, the space machine was building.

Its hull was already completed—a feat unprecedented in engineering. A colossal sphere, nearly five hundred feet in diameter, it dwarfed to insignificance the flanking armies of blast furnaces. The top of its gray bulk was visible for many miles across the low Pennsylvania hills, that now, in March, were green with the last spring of Earth.

Much, however, remained to be done in perfecting the interior arrangements, by which human life was to be sustained indefinitely in the sunless void. Greatest lack of all, the motor-tube, which was to utilize Foster Ross' omicron-effect to propel the machine, was still unperfected.

"The rest will be finished in a month," Foster promised Barron Kane, one windy spring day. "But a lot of good that will be if the motor-tube won't work. A million tons of steel and glass! We have no way to move it an inch, unless——"

They were in a room in the emergency hospital, from the windows of which the sick man could watch the tremendous gray-painted sphere of steel, looming against pale-green hills and wind-torn sky.

Barron Kane was still on his back. The venom formed by the orange ray had affected spinal nerve centers; he was unable to walk, even his hands were partially paralyzed. But his brain remained keen as ever; despite his helplessness and pain, he had helped the solution of many a problem in the building of the space machine.

"Unless?" he whispered. "You're trying something else?"

"We began this morning to work out a new design. We started from a new beginning, suggested by the equations of the omicron-effect. We don't know that it will be any better. Even if it works, the installation will take six weeks."

"Six weeks?" breathed Barron Kane, in weary alarm. "We may not have that long before the Earth breaks up!"

His gray eyes stared at Foster from the pillow, calm, yet dark with dread.

"The moon of Neptune, you know," he whispered, "left its orbit last week. It turned greenish and followed Pluto off into space. And there's another thing——"

His shrunken, half-useless hands fumbled for the newspaper on the blanket beside him.

"What is it?" asked Foster.

"In the morning paper. Still no one sees what's coming. They have the story hidden on an inside page—nobody saw what it meant. But it's about the most important thing they ever printed. Here it is!"

Foster read the item:

QUAKES SHOW RHYTHM

A new series of tremors is shaking the earth, announced Doctor Madison Kline, noted English seis-

mologist, speaking to-day before an international convention of geologists.

These recently observed earth tremors occur at regular intervals of about thirty-one minutes, said Doctor Kline. He believes they reflect some rhythmic disturbance deep within the planet.

Doctor Kline and his associates, he stated, have had the phenomenon under observation for several weeks, during which time it has steadily and markedly increased.

No conclusively definite explanation can yet be offered, Doctor Kline said, though he believes that the period of the vibration corresponds to the natural fundamental frequency of the planet.

FOSTER'S hands closed until the knuckles went white. "That means," he muttered huskily, "that we're near—the finish."

"You see," whispered Barron Kane, "you must rush the installation of the new motor-tube."

"We will!" Foster promised. "Though the thing may not work, when it's done. We're trying, you see, to compress a generation of scientific progress into four months."

"There are other things," Barron Kane reminded him. "We must be ready to cut all connection with civilization."

"Our supplies are mostly on board, already," Foster informed him. "And our people are moving into the machine as fast as the quarters are ready. Six hundred picked men, representing every race and every craft and every creed, with their wives and children. Two thousand, all told—and the very cream of humanity."

"The laboratories?" queried Barron Kane.

"Oh, they'll be finished in time," Foster assured him. "In a month, Barron, we'll have our own artificial air and our own synthetic food, made on board from the refined elements of the waste.

"Once out in space," he went on, a ring of enthusiasm in his voice, "we'll be independent. Our generators will tap the limitless energy of the cosmic ray. They will supply warmth and light and power, the means for the manufacture of oxygen and food, and current for the motor-tube.

"The machine can sail on forever, Barron. It's a little world, itself, independent of the Sun——"

Foster stopped himself, bit his lips. "Here I am," he muttered sheepishly, "ranting about the thing! When I couldn't move it an inch, to save my soul! So long, Barron. I must get back to the shops."

"Wait!" whispered the sick man. "There's another thing. Where is your fiancée?"

"Why," Foster told him, "June has gone back to Florida for a short visit with some friends. I want her to forget, as much as she can, what's coming. It's so terrible, for a girl like her——"

"Have her come back," advised Barron Kane. "Have her move on board, with us."

"There's danger?" demanded Foster. "Already?"

"The first quiver of the Earth's crust will be enough to shatter the thing we call civilization," whispered the little man. "She must be here before that happens. And there's another danger."

"What's that?"

"L'ao Ku hasn't shown his power, Foster. But don't forget that he has a power. He's just waiting, getting ready. Don't be deceived; don't let down your guard."

"Oh!" breathed Foster, relieved. "I thought you meant some danger to June."

"I do," whispered Barron Kane.

Foster leaned over him, tense with alarm.

"In that temple in the Gobi is an altar erected to the Great Egg. Above it is an image, cut from black stone. The image is a globe, with the outlines of the continents engraved on it, so you can see that it represents the Earth. It is split, and a thing is emerging. A thing obscenely monstrous!

"Regular ceremonies are held in the temple, Foster. On that altar, under the image of that unthinkable obscenity breaking from the earth, L'ao Ku offers sacrifices. The victims are always women. When possible, they are heretics or members of their families.

"It is possible, Foster, that June Trevor might—suffer, just because you plan to save her."

Foster's face was gray, drawn. Hoarsely, he rasped: "I'll send for her to come on board. Right away!"

THE SCIENTIFIC world was stunned from the first. The aberration of Pluto shattered the whole painfully built structure of western science. The pulselike tremors of the earth, which soon became violent enough to be felt as one walked in the street, received no adequate explanation.

Scientists, for a time, took refuge in pitiful charges of inaccurate observation. But they could not long deny that the solar system was breaking up. The planet Neptune shifted unaccountably from its calculated position. One by one, the greater moons of Saturn and Uranus assumed a greenish color and departed from their orbits. The change, spreading inward through the solar system, overtook the four large moons of Jupiter.

The very universe of science collapsed.

The common man, however, at first was only slightly concerned. Business went on as usual; the public attention centered in turn upon unemployment, the stabilized dollar, the sensational murder of a Hollywood actress. There was no real panic, even when the "Earth-beat," as the newspapers termed the oddly rhythmic tremors of the planet, became a chief topic of conversation.

Real panic began only with loss of life. Late in March a series of terrific earthquakes and accompanying tidal waves overwhelmed, one by one, Tokyo, Bombay, Rio de Janeiro, and Los Angeles. The cataclysms were progressively more violent. Hardly a paper, so long as papers were printed, lacked its story of a new holocaust.

Even then, the old order did not immediately fall. "Business as usual" was a catchword, though prices rocketed, governments and corporations crashed, and crime ran wild.

New leaders, radical movements, fantastic fads, won tremendous support. New religions, in particular, were widely and feverishly embraced. Ten thousand new prophets rose and were acclaimed; but the greatest following was won by the disciples of that strange oriental sect, the Cult of the Great Egg.

They, alone, professed to understand the change. They, alone, could offer bewildered humanity a rational, if fantastic, key to the astounding riddle of the crumbling solar system. Even though he promised only grim death—death as a sacred duty—L'ao Ku became the master of fanatic millions.

The mad tide of his increasing power, Barron Kane and Foster Ross recognized from the beginning, was sure to be turned against them. They had made a fortress of the

steel mill. They hastened the construction of the space machine to the utmost. They could do no more.

IV.

THE CRISIS came on the night of April 23rd. The Moon was full. The skies, often of late strangely clouded, were clear over most of North America. Horror-stricken millions, that night, watched the change overtake the Moon. Few, having seen it, were ever completely sane again.

It was the madness born of that incredible vision of mind-breaking horror, guided by the fanatic genius of L'ao Ku, that led to the mass attacks on the space machine.

The *Planet*—so June Trevor had named the space machine, since it was to be the sole future home of humanity—lay still upon the concrete pier, inside the fence. And still it could not be moved; the motor-tube was yet incomplete.

Atop the gray, colossal sphere of steel was a little domed space roofed with crystal panels. It was reached by a short stair from a door below. Gleaming mechanisms crowded it, the intricate instruments designed for the control and navigation of the space machine.

On that fatal night, Foster Ross and June Trevor came into the little control room, Foster carrying Barron Kane in his arms. They made the wrecked body of the little scientist as comfortable as possible in an invalid chair amid the shining instruments.

"Last night," Foster said, "observers saw cracks spreading across the Moon. Its crust is splitting. Beneath is something—— It is greenish, incandescent. To-night, we shall see the end of the Moon!

"Watching the Moon, we can see the thing that, in a day or so, is going to happen to the Earth!"

June Trevor moved, quickly, anxiously, to his side. June was a tall girl, dark-eyed, with a grave, classic beauty. She smiled at Foster—it was a wan, anxious little smile. Apprehensive, she slipped her hand into his.

"Foster," she whispered, "will it be very—terrible?"

"The terror of it," he told her, "will not be in what we see. It will be in what it means. In the fate of the Moon, we see the fate of the Earth, of human civilization. But try, dear, not to be afraid."

"I'm not—not exactly afraid," she whispered, shivering a little. "But it's dreadful to think of so many—perishing——"

Foster's hand tightened on her own. "June," he said huskily, "you must try not to think of that. We've each other, remember. Without you, I—I'd go mad!"

"And there's a bigger thing," she breathed. "We've a duty. To save the race!"

Foster turned out the lights, then, in the tiny room. They looked upward through the panels of heavy fused quartz. Flooded with moonlight, the sky was silver-gray; in the south were white, luminous feathers of cloud. The Moon was high in the east, a supernal disk of mottled gold.

They stared at it. June Trevor quivered; she pressed close against Foster's lean body.

"There *are* cracks!" she murmured, breathless. "I see them! Like a net of wire."

"They're spreading," muttered Foster. "And—I see a green something, breaking through."

From his pillow came the queer, voiceless whisper of the paralyzed scientist: "The being is emerging."

Breathless, speechless with fearful awe, the three watched the Moon —as maddened millions were watching it over all the continent.

They saw the familiar seas and ring craters of the lunar topography dissolve in a network of cracks, black and shining green. They saw the face of the Moon, for the first time in human memory, misty with clouds of its own.

They saw a thing come out of the riven planet—an unthinkable head appeared——

It broke through, in the region of the great crater Tycho. It was monstrously weird. Colossal, triangular, a beak came first, green and shining. Behind it were two ovoid, enormous patches, like eyes, glowing with lambent purple. Between and above them was an enigmatic organ, arched, crested; it was an unearthly spray of crimson flame.

Incredible wings—reaching out—stretching——

They pushed through the shattered, crumbling shell, which already had lost all likeness to the Moon of old. Wings, alone, could human beings term them. Yet, Foster thought, they were more than anything else like the eldritch, gorgeous streamers of the Sun's corona, which is seen only at the moment of total eclipse, spreading from the black disk like two wings of supernal light. They were sheets of green flame. They shimmered with slow waves of light, that faded indistinctly at the edges, like the uncanny fans of the aurora. They were finely veined with bright silver.

A body, both horrible and beautiful——

It came into view, when the slowly expanding, supernal wings pushed back the cosmic débris that had been the Moon's crust. It uncoiled into a sinuous loveliness, long and slender, delicately tapering. It was green as emerald, bright as flame, and strangely marked with silver and black.

The color of all the sky changed appallingly from silver-gray to green, with the fearful radiation of the thing. The shadows it cast, inky-black, green-fringed, were uncanny —dreadful.

It hung for a time in the sky where the Moon had been, nearly motionless. Monstrous appendages like serpents of blue flame reached out of its head, beneath the purple ovoids. They writhed over its slender, terrible body and its diaphanous wings.

It preened itself.

Amazingly, then, it wheeled across the sky. Its fantastic shadows crept like living things. With luminous waves, like some strange force, pulsing outward through the wondrous sheets of flame that were like wings, it flew away. The dread green illumination faded from the sky, and the terrible shadows died, and the thing became a minute fleck of emerald light, dwindling beside white Vega.

"The Moon is gone!" breathed Foster, dazed with wonder.

"As the Earth will go," came the voiceless whisper of Barron Kane, "in a few days, now."

"Beautiful!" gasped June Trevor, in a queer, shaken little voice. "It was lovely—and horrible——"

She shuddered, and Foster was surprised to find her firm, warm, straight body in his arms. Unconsciously she nestled against him, instinctively seeking comfort; and his arm tightened, before he released her.

"Our world must go—that way, dear——" he breathed; and her shivery, tiny whisper finished: "But we have—each other——"

BARRON KANE was still looking out through the crystal dome. Since the going of the Moon, the sky was a dome of splendid stars. The low, rolling Pennsylvania hills loomed dark under it, picked out with tiny, winking lights of house and motor. The lights of the mill town, under the towering bulk of the *Planet*, were little bright rectangles in the blackness.

"There are too many lights on the roads," said Barron Kane, and his whisper was edged with alarm. "Cars and torches and swinging lanterns. They are all coming toward the *Planet!*"

Foster and June looked down from the lofty windows. Over the dark hills they saw the rivers of dancing, flickering light, flowing toward them.

Foster rasped a single bitter word: "Mobs!"

"Mobs?" echoed June wonderingly. "Why?"

"People aren't human beings any longer," Foster told her grimly. "They are animals—frightened animals. They are mad with fear, since they've seen the break-up of the Moon. They're driven to fight, like any fear-crazed thing. We can't blame them—but we must defend the *Planet.*"

Tenderly, he put the girl from him.

"I must go down to warn the guard," he said, "and to help the men in the power rooms. They're installing the motor-tube."

"When," rustled the anxious whisper of Barron Kane, "when will you be able to move the *Planet?*"

"The castings came this morning from the foundry," Foster informed him. "It will take a day to put them in. Then—if the mob hasn't wiped us out!—we can see whether the *Planet* will move. Whether the human race is to live—or to die with the Earth."

"A day?" breathed Barron Kane despairingly. "Our fence won't hold them back so long."

"It will take that long," Foster told him, tight-lipped. "Twenty hours, at the very least. We'll save every second, of course. And the entrance valve is ready to close. We'll make an inner fort of the *Planet*, itself. But I must go!" He squeezed June's hand and ran out of the little room.

The girl and Barron Kane waited there, amid the gleaming instruments that were to navigate the space machine—if it ever moved. The sick man was whispering orders into a telephone mouthpiece, to help organize the defense.

Impatiently, June waited; at last she demanded fearfully:

"Is there much—danger? The people are mad with fear; I understand that. But why should they attack us?"

"The priests of a fanatic religion have stirred them up against us," grimly whispered Barron Kane. "In Asia, the priests of a secret sect foresaw the doom. They based their faith on it, and on the duty of man to die. In their eyes, we are heretics. They seek to destroy us.

"To destroy us," the dread-chilled whisper went on, "and perhaps to sacrifice some of us, for atonement, at the ceremonial altar of the Great Egg, in the temple in the Gobi."

June shuddered, as if with a premonition of horror.

"I'm going after Foster," she cried, fighting to keep a thin edge of hysteria out of her voice. "I want to be with him."

"You had better wait here," Barron Kane advised her. "Or rest in your room, just below. Foster is very busy." And he added grimly:

"You will be safer here—you are in the greatest danger."

"I'm not afraid!" she burst out, wild-voiced. Then calmness came back; she went on quietly: "Not for myself, I mean. It's the terror of it, the thought that so many must die. And the awful, awful thing we saw, that came out of the Moon! I want to be with Foster. But I'll stay, if you think best."

And she sank on a seat, face buried in her hands, and fought to control her sobs.

ALL THE terrible night, June remained in the little room. The mob still increased; ten thousand small fires flickered upon the hillsides; swinging lights crept here and there. The voice of the mob was a ceaseless, menacing murmur; again and again she heard a rattle of shots.

Barron Kane slept, in his invalid chair, at dawn. June covered him and watched a while. Then the loneliness, the strain, became so terrible that she went down to her own room and tried to sleep. But she could not, and before noon she came back into the bridge. The sick man was awake again.

He gazed at her.

"How is—everything?" her anxious question greeted him.

"They attacked three times in the night," the little man whispered. "The wall held them back; many were killed, by the charge on the wall, and by the guns. But a thousand more poor wretches have come, for every one that died."

His quiet gray eyes looked out through the thick quartz panels, down upon hillsides that were brown and swarming with the horde.

"There must be a million," his voiceless whisper went on. "They came every way you could imagine. On foot, on bicycles and trucks and freight cars, in cars and airplanes.

"You can't help pitying them, so frightened, so soon to die. A great many of them seem to be ragged and cold; they can't have brought food enough. Most of them didn't bring any weapons.

"But the disciples of L'ao Ku have taken them over. You can see rings of them gathered around the priests, who are fanning their hate against us. You can see them marching, drilling. And some of them are unloading explosive and weapons that came this morning on the railroad. L'ao Ku is making an army out of the mob."

Wearily nervous, June was peering with sleepless eyes through the heavy panels.

"I see a plane!" she cried suddenly. "Flying low over the hills. It's going to land!" She watched it, adding: "It's a huge ship, black, and it has scarlet circles on the wings and the fuselage."

Grimly Barron Kane whispered: "That is L'ao Ku's own ship. He has come to direct the attack in person. And, perhaps, to take one of us back——"

Silently, biting her lips until they bled, clenching her small hands, June Trevor watched—until the mob rolled toward the *Planet*, a resistless wave of fanatic, terror-mad hate.

Flashing like golden blades, the narrow, blinding jets of the poison ray silenced the machine guns in the armored turrets. Bombs of high explosive, hurled from cunningly improvised catapults, demolished the electrified wall. A million men, commanded by a pitiless fanaticism and armed by a secret science, stormed the great steel valve of the *Planet*.

Racked with an agony of sus-

pense, June waited in the bridge room, until her straining ears caught the dull crash of a heavy explosion, and then the sharp rattle of gunfire —inside the *Planet!*

"They've taken the valve!" she whispered, then, forcing the words through a black haze of despair: "They're coming on board. I must go to find Foster."

Barron Kane began some protest; she stopped him with a fierce gesture.

"I'm not—not afraid," she gasped. "But the—finish has come. I want to be with Foster."

She ran out of the room and hastened down toward the sound of desperate battle.

IN THE exact center of the great steel globe of the *Planet* was a sixty-foot, spherical chamber. In that chamber, mounted in hugely massive gimbals, was an immense tube of fused quartz and steel, fifty feet long.

Foster Ross, with a score of other grimy, haggard, red-eyed men, was laboring to complete the assembly of that tube. A manhole was open in the top of the tube. With hoisting tackle, they were lifting a four-ton casting of a new alloy, to lower it through the manhole.

The confused, terrible roar of fighting burst suddenly into the chamber. "They've stormed the valve!" came a terror-laden shout; and consternation shook the men.

"Wait, men!" implored Foster desperately. "We can't quit the job. A few more minutes, and we'll have it done. We can take off into space. Come on——"

But some one, in his fright, had left his post. The tackle slipped. The great casting swung; it toppled out of the creaking sling and crashed to the floor. A man's legs were pinned under it. He made a low cry, thin, dreadful, and then began to whimper like a child.

Some of the men started a rush to leave the chamber.

Faint, himself, with the shock of unexpected disaster, Foster struggled grimly to keep his self-command.

"Here, boys!" he shouted, forcing a show of unfelt confidence. "Let's try again! Yet, we may have time to get——"

The panic-stricken men hesitated. Foster seized a bar, and struggled to lift the casting off the legs of the trapped man. The others came back to help. The man was freed, and the tackle quickly adjusted to the casting again.

The four-ton mass of metal was lifted, and lowered, this time, safely through the manhole. It was being bolted into place, when the mob, howling with maniacal fanaticism and led by yellow-visaged demons armed with the weapons of a secret science, stormed the room.

Foster's recollection, after that, was a red haze of horror.

He led the resistance of the doomed defenders. He made a fortress of every angle of the corridors, of every door and bulkhead, of every stair and elevator shaft. To the last, he guarded the way to the bridge, because he thought June Trevor was still there with Barron Kane.

His six hundred men fought with the courage that became the flower of the race. Their six hundred women stood beside them. Even the children gave the aid they could. And the *Planet* had been well-armed; each new position was a fresh arsenal. Yet the conclusion was inevitable.

Foster made the last stand on the little stair beneath the bridge. He

staggered back to it, with four others—three men and a woman, all of them wounded. They had a machine gun. With that, until the last ammunition drum was empty, they kept the howling, triumphant mob at bay.

Then they contested the way with bayonets, with clubbed rifles, with pistols, even with bare hands. One of the men, dying, leaped forward and cleared the stair as he went down. The woman fell. Another man was dragged down by the mob, eviscerated, dismembered. Foster's last comrade shrieked and collapsed before the stabbing orange blade of a poison ray.

Foster dragged himself, then, to the top of the stair, to make the last defense. He looked about the tiny room for June and saw that she was gone. Sickness of utter despair rolled in a black flood over him at the discovery. Strength left him; he felt, for the first time, his many wounds and fell senseless.

Only Barron Kane was left, lying helpless in his invalid chair. Clumsily, his half-useless hands raised his big automatic and shot down the first grim-faced Asiatic who leaped into the room over Foster's still body.

That was the end of the defense. L'ao Ku's black plane with the scarlet circles rose, an hour later, and fled into the flaming sunset, toward the temple of the Great Egg, in the Gobi.

V.

FOSTER ROSS came to himself, lying on the bloodstained floor of the wrecked bridge room. His body was a stiff mass of cuts and bruises; dull agony throbbed from a swollen wound in his temple; a lock of his hair was stiffly cemented to his forehead with dried blood.

He stood up, reeling with a sudden sickness, biting his salty, blood-crusted lip to keep back a cry of pain. The smashed room, littered with broken instruments, swam before his darkened sight. For a moment he had no memory.

"Foster!" Barron Kane's faint, heartsick whisper brought him a shock of dim surprise. "L'ao Ku told me he was leaving you alive. I thought he lied, to torture me."

"L'ao Ku!" It was a dry, harsh gasp, from Foster's burning throat. "He was here?"

"He came," whispered Barron Kane, "when we all were helpless. He left us alive, he told me, because our sin is too great to be punished by the hand of man. He wanted us to live, he said, to know that we had failed, and then to die from the opening of the Great Egg."

"June?" rasped Foster's dusty voice. "Where is she?"

"I don't know," the weary, hopeless whisper answered. "She went to look for you, when they stormed the valve. I don't know——"

"Did L'ao Ku take her?" Agony leaped in Foster's heart.

"It may be," admitted Barron Kane. "L'ao Ku went back, in the black plane. He may have taken her. That, or else she will be—among the bodies——"

Foster reeled dizzily toward the stairway. "I'm going to look," he rasped. "If I don't find her, I'll finish the motor-tube and fly the *Planet* to the Gobi and take her back from L'ao Ku!" A glare of terrible madness flickered in his blue eyes.

"You couldn't do that," whispered Barron Kane. "It's just two days, L'ao Ku told me, until the Earth will break up. And we may not live even that long."

"Eh?" said Foster, with a staring blankness on his blood-caked face.

"A tidal wave is coming from the Atlantic," Barron Kane informed him. "It has overwhelmed the coastal cities. New York is gone and Boston and Washington. It will reach us to-night—a terrible rushing wall of sea water, a hundred feet high."

Foster did not seem to be listening. He reeled, and stumbled against the standard of a broken telescope; he gripped it with both his bruised hands, as if making a terrible effort to keep upright; his dry lips murmured: "I'll finish the motor-tube and look for June."

"Lie down again, Foster," advised Barron Kane. "You'll faint."

Foster paid him no heed, and the dull whisper ran on:

"Even if you finished the motor-tube, the *Planet* couldn't fly. L'ao Ku told me that. They blew the entrance valve open with explosive. It was wrecked, so it can't be sealed any more. If we got off into space, the air would leak out, and we should die."

"I'm going to find June," Foster muttered faintly.

His gripping hands slipped off the standard. Beneath its stain of grime and blood, his lean face whitened. He fell heavily, at full length, on the floor.

IT WAS twenty hours later, when Foster went down to close the valve.

Some strength had come back, as he lay unconscious on the floor; the throbbing agony in his temple had become more endurable. He had washed his wounds, when he woke and bandaged the worst of them; he had found a little food for himself and Barron Kane.

His first trip had been to search for June.

"I've looked at all the dead," he informed Barron Kane grimly, when he came back to the bridge. "I didn't find—her."

"Then," the sick man whispered, "the black plane must have taken her to L'ao Ku's altar."

"I'm going after her," Foster told him, with the quietness of a terrible fatigue and of a determination that was invincible. And he said in a tired voice that held no triumph:

"The motor-tube is finished. We had the elements in place before the mob came. I stopped to make the connections, and seal the manhole, and start the pumps to evacuate it. In ten hours, it will be ready."

"Still," protested the hopeless whisper of Barron Kane," we cannot seal the valve. We can't live, in outer space——"

"I'm going down, now," Foster told him, "to close the valve. Then, we'll look for June."

"It was two days," the sick man reminded him, "until the end. And one has gone. It is killing me, Foster, to give up. But we can only die."

"The water is rising," Foster told him. "I must hurry."

And he went down to close the valve.

The tidal wave had come, as he lay unconscious—the same racing wall of the advancing ocean, gray, dreadful, that had drowned the coastal cities. It had routed the triumphant mob, at the very moment of victory, before they had plundered the ship; it had overcome them as they fled.

A tremendous blow, it had struck the gray, steel side of the *Planet;* a stormy sea still crashed against the concrete pier beneath the space machine. The green surrounding hills of yesterday now were barren, rocky islets, drenched with spray.

The huge steel-entrance valve had been torn open with a charge of high

explosive. The hinges were twisted, the lock demolished.

Grimly, Foster surveyed the damage. The massive steel disk of the door itself, he decided, was not much injured. If he could straighten the hinges, to allow it to fit, and then find some way to fasten it——

He dragged himself to the machine shops and staggered back with hammers and wrenches and lifting tackle; he went again for a portable welding torch. Grimly deliberate, he set about heating the massive hinges and straightening them, so that the valve could close.

The massive concrete pier trembled constantly beneath him, as the whole Earth trembled. At thirty-minute intervals, it rocked and swayed dizzily beneath him—as the whole planet yielded to the ever-stronger pulse of the awakening thing within.

The mad waves of the conquering sea thundered endlessly against the great pier. Spray kept Foster drenched; sometimes it put out his torches. The wild waters came up, as he worked—he was sick with fear that the valve would be covered before he could close it.

Paroxysms of a tortured, outraged nature threatened his life, moment by moment. A weary, naked pygmy, wounded, scalded, blistered, Foster worked doggedly on, pitting his puny efforts against the convulsions of a dying giant.

A pall of dreadful gloom had covered the sky, that did not change when day should have come. It was crimson with dull volcanic light. Gray cinders showered out of it intermittently; and huge drops of boiling volcanic mud. Hot winds parched his skin, suffocated him with the reek of sulphur.

Thunder boomed endlessly above the chaos of a world in the agony of death; blue lightning stabbed in an endless blinding torrent against the top of the sphere, as if the heavens themselves had conspired against mankind.

Sometimes Foster left his tools a moment, to look down into the black, crashing waves, that were always higher. Under the red, uncanny gloom that did not change between night and day, in the violet, sudden glare of lightning, he saw the débris of a lost world. Remains of men were flung past him, shattered, twisted. Sometimes he shuddered to the horror of a drowned face, gray and bloated and pulped.

Despair, then, would overcome him. He would drop wearily upon the brine-drenched pier and gaze hopelessly into the red, mad gloom of the disintegrating world.

But then a picture would always come to him—a picture of June Trevor, tall and grave-eyed and beautiful, about to die on an altar before an image of the Earth and an obscene monstrosity emerging. That picture always banished his sense of helpless futility and brought back that strange, impersonal, self-forgetful resolution that had come to him first in the fight in the garage, so long ago.

Moved by a purpose that was racial, above anything of himself, he would pick up his tools again.

NUMB with exhaustion, dull-brained for want of sleep, Foster came at last into the little bridge room again.

"The valve is sealed," he announced in a voice heavy and faint with unutterable weariness. "Now I can start the generators, and see if the motor-tube will work——"

He stopped, for his haggard, bloodshot eyes had seen that Barron Kane was sleeping. He tried a little

to wake him, and make him eat—he had paused, on the way up, to snatch a little food from the storerooms, oranges, a can of broth, and crackers. But the frail little man did not stir. He had fever, Foster decided, and his pulse was fluttering irregularly.

"He wanted so to live to see us win," Foster breathed to himself. "But I think he won't wake up. Anyhow, he still—hoped——"

Then, moving in his great weariness like a slow mechanism, he turned to the half-wrecked instruments. His first glance at a chronometer shocked him with horror and despair.

Twenty-two hours had passed, while he labored with the valve. The second day had almost gone. In hours, now, would come—ultimate cataclysm——

He reeled drunkenly, as if from a blow, and stumbled back to the wall.

For a time he leaned there, lifeless with the shock of it. His red-rimmed eyes, dull and stupid, gazed fixedly out through the heavy quartz panels. The sky was a sullen mask of crimson gloom. Lightning ripped out of it in a fearful cascade of violet fire. Brown, boiling liquid mud fell against the steel hull of the *Planet* with a continual booming roar that drowned the thunder. The tempestuous black sea had risen over the hills; now it covered the pier, and its gigantic breakers hammered against the *Planet* itself. Littered with tiny, pitiful fragments of human wreckage, its wild dark surface reached to horizons of red, chaotic gloom.

Even as his blank eyes were staring aimlessly out, a fresh quake shook the space machine, so violent that it sent him staggering across the room. And a second tidal wave, a gray-crested, tremendous black wall, thundering with incredible velocity out of the advancing Atlantic, struck the *Planet* resistlessly.

Like a chip, it tossed the million tons of the space machine away from her cradle; she was carried away upon the mad sea.

The impact stirred Foster from his daze. He remembered June Trevor. And that lofty purpose, that was a thing not of himself but of the race, came back.

With a weary patience, he set to work to repair the controls and then to start the generators and transformers and otherwise prepare the *Planet* for flight. Her machinery was automatic, so that one man could drive her from the bridge. But the mob had broken half the instruments.

The space machine, as he worked, was tossed and battered by the maddened elements. Terrific waves thundered against her steel sides; floating wreckage hammered her; she floated at last against a new reef and was driven against it, crushingly, again and again, until Foster was despairingly certain that her hull must yield.

He toiled on.

And at last the thing was done, and still she floated. Foster turned the current into the motor-tube, his aching hands trembling with anxiety. He stepped it quickly up. Then he stumbled back—waiting—waiting——"

The *Planet* lay on the black, terrible sea, beside the gray fury of the menacing reef. Out of the crimson gloom of the sky poured livid lightning and clattering fragments of volcanic rock. Furious winds drove at her with a force that rivaled that of the insurgent sea.

She was swinging back toward the hidden fangs of the reef; and Foster knew her hull could not en-

dure another blow. Would the motor-tube lift her? Would it——

He ceased to breathe. His teeth ground together. He reeled heavily against a chair, and his bruised hands fixed themselves upon it with a grip like that of a dying man. His glaring, dark-rimmed eyes alternately watched the instruments and looked out into the fearful red gloom of the dying world.

The *Planet* lifted! She rose off the dark, furious sea, into the scarlet darkness of the sky. She rose, through mighty winds, through rain of volcanic mud and cinders, through blazing sheets of purple lightning. At a great altitude, the rain gave way to thundering hail.

And the space machine, at last, came through the clouds; and Foster saw the stars.

He was full of a great serenity. A kind of lofty elation had come with the rising of the space machine. It was a sense of triumphant power that lifted him far above any human concern.

His great weariness had slipped from him. He felt, no longer, his mind-deadening want of sleep, or even the dull throbbing of the wound in his temple. For a moment he attained the supreme tranquillity of a god.

It was sublime, awful Nirvana. He had forgotten even June.

IT WAS NIGHT, and the stars flamed at Foster. As the *Planet* came above the turbulent atmosphere, they burst into a greater splendor than any man had ever seen. In an emptiness that was utterly black, they burned motionless and ghostly, more brilliant than jewels. They were infinitely tiny, infinitely bright. Mysterious and eternal, they flamed in the black void.

Foster stared at them, transfixed with the strange wonder that came from the knowledge that each of them was a sentient thing.

And still the *Planet* rose, on a high, swift arc, toward the living stars. Foster felt himself one with them; he was no more a puny man, but a serene and deathless entity, of supernal power and supernal vision.

Then Barron Kane's frail body moved, uneasily, in its feverish sleep. And Foster was abruptly a man again and filled with pity. He tried again to wake his uncle—once more in vain. He smoothed the pillow under his head and drew the blanket close about him.

He went back, then, to the controls. He remembered June again and her frightful danger. His purpose had come back, even stronger for its lapse as he first soared toward the stars. He was moved as if by some vast power without, as if he were simply a puppet in the hands of a racial will, itself as sublime and eternal as the undying stars he had looked upon.

Still, he grimly realized the multiplied odds against him. In the universal, cataclysmic storm that raged about the whole Earth, he might be unable to find the lost oasis in the Gobi—in time. If he did, he would be only one man, battling hundreds. He might, the fear pierced him like a cold blade, find the sacrifice already consummated. Or he might—to judge from what he had seen, it was even probable—find that the temple and all in it had already been overwhelmed by storm or earthquake or volcano or the terror of the rising sea.

Yes, bitter realization came, the chances against him were hopelessly great. It was useless to go. But that blind, sublime purpose, that was like an external force, moved him

to drop the *Planet* back into the dark, furiously agitated clouds that totally obscured the face of the disintegrating globe.

Down sank the space machine, through terrible crimson gloom, through the furious chaos of a tortured, disrupting world. Hurricanes tore at the steel ball; it was bombarded with volcanic débris, struck with flaming lightning, sluiced with boiling mud.

Foster, watching through mud-stained crystal panels, at last saw the surface of the earth where the Gobi had been—and it was a black and fearful sea.

The temple of the fanatic cult was gone, and June Trevor—— And with the girl, all the meaning was gone out of his life and out of his superhuman struggle to live. The sublime purpose that had so long sustained him flowed out of him utterly; it left him a lonely, weary, haggard wreck. He had been more than human; now he was less—sick and old and useless.

June was gone. The thought beat through his tired, dull brain, a refrain of despair. *June, gone!* Only he and Barron Kane were left, two useless, aimless men, with nothing to live for; and nothing to hope for but death.

And Barron Kane was obviously dying. Soon he, Foster, would be alone—more alone than a human being had ever been. He would be alone in the void of space. He would know that the Earth was gone, that there was no other man or woman anywhere.

He would be alone, with the living, mocking stars!

A frantic terror grasped Foster's throat, at the thought, with icy fingers that choked him; he was faint with the most dreadful fear he had ever known.

Sick with it, trembling convulsively, he tried desperately to wake Barron Kane. He shook the little man's shrunken shoulder and dashed water into his face. He wanted terribly to speak to a human being again, to listen again to a human voice not his own—even the voiceless whisper of the dying man.

Barron Kane gasped in his sleep, he breathed strangely, a sudden spasmodic trembling disturbed his thin limbs. But he would not wake. Aching with a pity deeper than he had ever known, Foster covered the slight, drawn body again.

He looked out again at the scarlet, lightning-split darkness of the sky, at the black, wildly heaving plain of the sea that had swept away the secret temple and all the essence of his life.

VI.

THE SEA was riven, as Foster looked. It was cleft, as if by a Titan's blade. The two dark halves of it were thrust miles apart. Stupendous, unthinkable, an abysmal gulf yawned between them, with black water plunging into it from either side, like a million Niagaras.

The world had parted.

Hanging in that dark storm sky of lurid and dreadful red, Foster stared with horror-glazed eyes down into the new gulf. Mile upon mile, incredibly, fell the jagged walls of the broken Earth crust, crumbling, splashed with dark sheets of the oceanic cataracts.

Below—scores of miles below—was a smooth, shimmering surface of green, bright as flame, marked strangely with silver and black. It was moving with weird paroxysms. It was the body of the Earth entity, struggling in the agony of birth.

Foster watched it, dazed with astounded horror.

The two halves of the split sea were thrust back, with a fearful quickness, until they were lost under the dark sky, which now was changing from dull red to a terrible, ominous, reflected green. The space machine hung between the menacing pall of the sky and the bright surface of that dreadful body that was struggling to life within the Earth.

Foster's mind perceived the new danger. But in the lifeless, purposeless, hopeless apathy that had settled upon him he felt no alarm; he didn't care, nothing mattered, now, since June was gone.

The wind struck. The atmosphere, disturbed by the movements of the waking thing, drove against the *Planet* with the solid, battering impact of an avalanche. With a force no hurricane had ever equaled, it hurled the steel globe down toward the green body, helpless as a toy balloon.

Foster's blue eyes, sick with an agony unutterable, looked dully, without panic and without hope, at the eldritch doom ahead. All aim and direction had left him. His life had become a bitter joke, fantastic as the fate of humanity.

It was only the blind instinct to live that kept him wearily at the controls. His mind sat back, a weary, disinterested spectator, as his bruised, aching fingers moved automatically, and the *Planet* battled to survive.

The steel ball was drawn down, resistlessly, toward the fantastic markings on the side of that unbelievable body. Foster watched with lackluster eyes that held no fear, while his automatic fingers flung on the full power of the motor-tube to fight that freakish, fiendish wind.

He felt no triumph when the machine broke free; he had no elation as it drove upward through mad, torn cloud masses that were fearfully illuminated with green. He stared out, through the heavy crystal panels, still beyond panic and beyond hope.

Above the green clouds, he came; above the air and into the freedom of space. The sky was a hollow globe of darkness, pierced with a million, many-hued points of light —each of them, he knew, a thing alive.

The earth hung below—a huge, swollen globe, dark and fantastically patched with green.

A wing broke through the clouds —a stupendous sheet of supernal fire; a shield of green flame, wondrous as the aurora of the solar corona, and veined with bright silver. With its first, uncertain unfolding, it brushed close to the *Planet*—a blade of amazing death.

Foster's instinctive fingers flung the space machine away, and the glorious, dreadful wing passed beneath, harmlessly. And the *Planet* drove on away into space, on her voyage that had no destination.

The Earth fell away behind.

And a thing emerged from the shattered crust of it that was like the creature that had come from the Moon. The beaked head was crested with a spray of crimson flame; it was marked with two ovoid patches, glowing lividly purple, that were like dread eyes. Flame-green, its body was slender and tapering and marked weirdly with black and silver. Slow, shining waves shimmered through its wings, that were like green fans of the aurora and veined with burning white.

It moved uncertainly in the void, as if to test its members. It preened itself with thin blue appendages that were thrust from the head. Then, with a beat of strange luminous

force in its wings, it wheeled away from the Sun, and drove outward into the void of space.

Mercury and Venus, the two inner planets, Foster saw, had also changed; they had become winged, greenish motes, drifting away from the Sun. And the light of the Sun itself, he fancied, was already dimming, fading slowly toward crimson, toward ultimate darkness.

"The Sun is dying," his dry lips muttered the thought from his disinterested, dully observant brain. "It's the end! The mad finish of man's universe——"

"You see?" Foster was startled to hear the faint whisper of Barron Kane, awake again on his invalid chair. "We are seeing the solution of the last riddle, Foster—the riddle of the suns! We are watching one die. We have seen many born."

Foster hurried to him and lifted his head higher on the pillow so that he could see the room and look out through the crystal panels. And he spoke to the sick man of food, but Barron Kane did not seem to notice him. The small whisper ran on:

"The planets were the seed of the Sun. Strange life developed in them, through the ages, under solar radiation. The Sun will die, now; its work is done. And the new creatures have gone forth, to feed themselves upon the star dust, to absorb diffuse radiation and the cosmic rays, to consume, perhaps, fragments of old suns, until they themselves are suns, spawning planets, and the cycle of their life is complete.

"And there you have the answer, Foster, to many a problem that has baffled science. We've won, Foster!" There was a vague triumph in the muted whisper. "Even if we die to-day—we're on our own!"

"What's the good of it?" muttered Foster, too weary, too hopeless to be bitter. "We're—alone," he went on dully. "Soon we'll be—dead. The *Planet* will drift on, perhaps forever. A little world, with all that life needs, but dead——

"Listen!"

FOSTER stopped speaking, suddenly, and a fearful silence hung in the room, grimly deep, haunted only with the sounds of their breath.

"Listen!" A wild, strange ring of madness had come into his voice. "There's no sound—no other voice! We're alone, Barron; we're the last men. There can't be another voice anywhere! Think what it means—not ever to hear any one speak again! When we are dead——"

His voice dropped again abruptly, for his straining ears had caught the pad of human footsteps.

He rushed, trembling with incredulous hope and a fear born with it, down the steps to the door of the bridge room. He flung it open and stood swaying in it, gazing wildly, unbelievingly, at June Trevor.

She was grimy, bedraggled; her clothing was black with something thick and viscid and dripping; her hair was plastered against her head with it; her face was scratched, and a blue bruise was on her forehead. Yet he saw still a beauty in her tall, straight form; in her clear brown eyes was a dawning, luminous joy.

They stood a moment face to face.

Foster wet his lips. "June?" he whispered. "June——"

She reeled a little, and he started forward to catch her.

"Don't touch me," she gasped weakly and swayed back from him. "I'm all soaked with oil—I was in a tank. You'll get covered with it."

"You poor kid!" he breathed, and something made him laugh a little.

He slipped his arm around her grimy shoulders, held her up. And

she clung to him suddenly, ignoring the oil. In turn, she laughed—a shaky, happy little laugh of relief.

"Oh, Foster!" she cried. "I'm so —so glad—that you're here. I thought I was the only person alive. And I was so miserably soaked with oil."

"How did you get here?" Foster asked as he helped her into the bridge room and made her sit down beside him. "When you were gone, we thought that L'ao Ku must have taken you—to his temple."

"L'ao Ku?" she breathed, in weary surprise. "No; I didn't see him. You see, I went to look for you, Foster, when the mob was coming. I asked the men where to find you. They sent me from one place to another, until I was down in the generator rooms. I couldn't find you anywhere."

She had relaxed, happily, against his great shoulder; unconsciously her hand had caught his arm, as if she feared that something might take him from her.

"What then?" Foster asked. "How'd you get away from the mob?"

"I was down in the generator room," her tired voice went on. "I couldn't find you. All of a sudden, there were shots and screams. The mob was killing the enginemen.

"One of the enginemen ran to me. 'The damn' chinks have come, miss,' he said. 'But I'll put you where they won't find you.' And he made me come to a tank, and opened a lid, and made me climb down a ladder in it. It was full of oil—it came up to my chin. And he let the lid back down on me.

"I waited. It was dark in the tank. And the fumes of the oil made me sick. I nearly fell off the ladder. For a while I could hear shots and roaring voices. Then—silence.

"Nobody came to lift the lid, and I tried to get out. I was faint. And the lid was so heavy I couldn't lift it. I worked until I couldn't move. Then I rested, and tried again. At last I found a way, standing on the top of the ladder, and using my back."

"You poor, game kid!" whispered Foster, and patted her shoulder.

She shuddered; her brown eyes seemed not to see him—they were dull with remembered horror.

"I came out," she went on grimly. "And every one was—was dead. The floors were all covered with blood and—bodies. And the quiet—it was terrible. You know how still it was, Foster. I couldn't hear a voice. Not a sound! I thought I was the only one alive."

"Why didn't you come back here?" asked Foster. "Barron was here."

"I did," she whispered. "I looked in and saw him lying there—so still. I spoke, and he didn't move. I thought he was dead, like all the rest. I thought I was the only one still living——"

"You must forget all that," Foster urged her. "But where have you been?"

"I was—looking"—she paused, shuddering—"looking—among—the bodies for—for you, Foster."

He held her trembling body close; for a moment she did not speak.

"I thought I was the—the last," she went on jerkily, with an effort. "I thought I was—alone—alone with all the dead. I was looking for you, Foster, so that we could be together. And then——"

The sick horror ebbed slowly from her brown eyes; she smiled a little, wearily.

"Then I felt the machine moving, Foster. I had been asleep—I was so weary from searching and so grimy with oil. I woke and felt that

we were moving. I knew, then, there was some one——"

Her brown eyes shone bravely into Foster's blue ones, alight with hope and joy and new confidence. Then they closed; her body relaxed in his arms; she had gone to sleep. Her lips parted, and she smiled a weary little smile, in her sleep.

"She's worn out, the nervy little kid," Foster told Barron Kane. "I'm going to take her down to her room, where she can rest. I'll come back in a minute, to help you down——"

"No, Foster," the little man whispered. "I want to look out—at the stars."

Foster lifted him a little, propped up his head with the pillow. "Men can carry on, now, Barron," he said. "We can make a new beginning."

Foster took up the girl's quietly breathing body and started toward the door.

"Yes, Foster," the sick man whispered after him, "we've really won."

THE SCIENTIST'S gray calm eyes watched Foster until he had vanished down the little stairs. Then he looked back at the motionless, splendid stars. They were tiny and unmoving and many-colored, swung eternal in black space.

"We've won," he whispered again to himself. "I had hoped to live—for this. Men will now be small parasites no longer, to be crushed like vermin by any chance tremor of the beast that bears them. In the *Planet,* men are free, on their own."

He seemed to like the phrase, for he whispered it again: "On their own."

He lay still for a time, musing.

"We're off in the *Planet,* to a new beginning. And it's just a beginning."

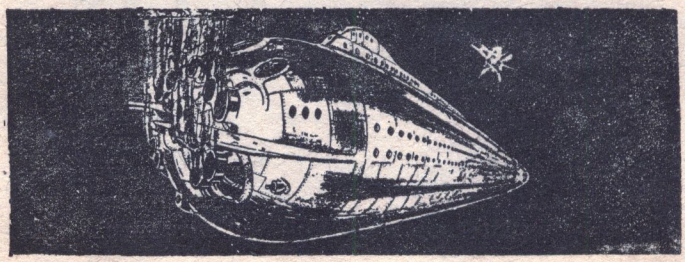
His serene quiet eyes stared at the mocking points of the stars, and he whispered to them:

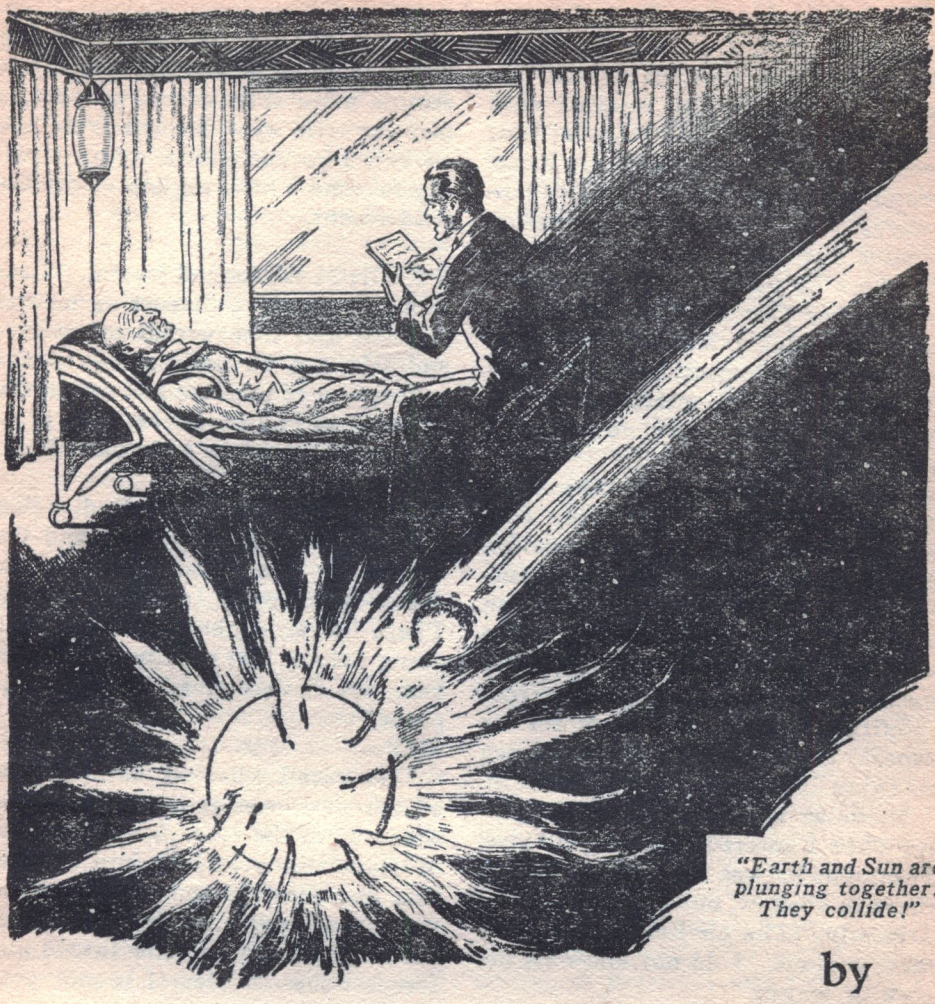
"You're alive, all of you. We owe our lives to you—we've been parasites on your kind. But we aren't any longer. We're beginning all over again, on our own."

His dying breath whispered a last prophecy:

"There will be many *Planets,* and greater ones. The new, free race will be greater than the old. The children of Foster and June will conquer space, to the farthermost one of you!"

A joy seemed to linger in his tranquil eyes, that still looked out at the stars.





"Earth and Sun are plunging together! They collide!"

by Donald Wandrei

The Man Who Never Lived

Illustrated by M. Marchioni

ON many occasions, I had discussed questions of metaphysics and ontology with Nicholas, but I never realized how deeply and afar his mind roved through all the reaches of time, space, matter, and thought, until to-night at the gray shrine in his home.

Nicholas van Allensteen is a strange man whose nationality and past life I have not known. I met him when he joined the faculty of Minnewaska University as assistant

professor of philosophy. He was of striking appearance, from hair as long as a prophet's to aquiline nose and eyes of a deep and singular hue, from his gnarled hands to his loose, proud carriage. He knew many languages. He had made extensive studies into the physical sciences. To these he added a creative, intuitive power that led him into more abstract fields. Beyond the Einsteinian mathematics, he had evolved theorems and calculations of his own which I am sure no one else ever grasped.

The gray room was his temple of refuge. Drapes of dust gray covered its walls, and only one pallet, like a bier, relieved its quiet austerity. This low rest, resembling an altar, fronted a shield-shaped niche wherein an Easter Island sculpture gazed with conquering eyes across infinity. I liked that room for its repose, and I welcomed the chance to enjoy its serenity again to-night.

Nicholas was lying upon the pallet when I entered. He did not rise. I thought he was sleeping, as he lay there in shadow, but his eyes opened dreamily. The air held a fragrance most curious. I do not know its nature or origin.

I hastened to his side. "Are you ill?"

A flicker of the lids motioned me toward a chair, the only chair I ever saw in that gray chamber. I sat beside him.

"No, Paul; but my experiment has already begun. I am glad you came in time. Did you bring the notebooks?"

"Yes. Dictate all you wish."

"Later. I must speak fast. This is an experiment in mental monism, you know, along the time-space continuum that forms material totality."

I looked at Nicholas and, despite all my conversations with him, I did not comprehend. He was wearing robes of gray, which made him resemble more than ever a prophet, a mystic. His eyes burned from the sockets like coals in a dying shell. My face must have registered my bewilderment.

NICHOLAS looked fretful. "Last Monday, we were discussing mental monism, the theory that all matter and life can be understood in the conception of one mind of which the universe and all its works, past, present, and future, are only parts."

"I remember."

"Nothing is ever lost. Bodies that die change to other matter, and the breath of life inhabits each new child and every growing thing. There is an unbroken continuity along which, at this hour of this year, we have arrived at a specific point."

"Yes?"

"We recall what we have learned of the past, and it lives forever in the mind of the race. But the author of Revelations looked into the future and foretold some of the realities of to-day. To-day, there are those who peer into the future and forecast the realities of to-morrow."

"Yes?"

"Who can say that these are not all manifestations of one mind, one whole, of which everything is part? That mind, wherein all time, all space, all matter, all life, and all thought are contained, may have implanted in one exceptional individual of biblical days a vision of the world to come. It may be implanting in unusual intellects to-day a vision of the future. And the prophet of the Bible and the scientist of to-day may be existing, each in his age or part, and yet simultaneously in the eternity or whole which comprises that mind. If we

could develop our mental powers sufficiently, we might understand in a flash of supreme knowledge."

Nicholas' speculations outran the ability of my brain to follow. His voice, low, monotonous, continued unbroken, but fainter. "Any human intellect that understood each particle of Earth to-day could predict the entire future course of history and reconstruct all the past. The past behind us, and the future ahead, broaden from the focal point where we stand to-night.

"I am close to that all-encompassing mind, Paul. I have been working toward it my whole life long. I have been training to interpret its parts and to follow its design. To-night I think I shall succeed for the first time, and I want you as witness to record my comments."

"What comments?"

The voice faded further still, and I bent low to catch his words. "I am pursuing that mind into those parts which form the past as we know it. My own mind will be divorced, in a sense, from my body, while it roams across the ages and approaches the monistic whole. But my consciousness will not be completely divorced. In other words, the conscious part of my mind will be questing away from here, but it will be linked to the physical part of my brain which remains behind. I think my brain will mechanically induce speech. I hope so. I want you to make notes on everything I may say. Do you understand?"

"Not altogether," I answered candidly. I was drowsy.

"No matter. All you need to do is to be a reporter. Will you do that? For me? And make no effort to interfere?"

"Yes." I hauled out notebooks and pencil.

His voice was barely audible. His eyes had closed. "I knew you would. Four-dimensional time-space continuum—the past is the definite and completed part of the whole—easier to follow—I shall go back—in time—and space——"

The phrases trailed off. His voice stopped. On any other occasion, I would have sworn he was dead. He lay, hands folded, as if for burial, and I could not detect a sign of breathing. The lids were shut over those mysterious eyes. A queer silence enveloped me. In the gray shadows of the room, I felt like a lone watcher of the dead. Eerily, faint light crept from the window upon Nicholas. The fading spice in the air still gave me an impression almost of dreaming. There was a long pause, during which I waited, like one relieved of mortal limitations, in a gray world beyond life.

A VOICE spoke. I swear it was not the voice of Nicholas, for his lips did not move. A voice spoke, clearly, but softly, and echoing as if across the centuries and æons; a voice of excitement, interest, awe; a voice that marveled; a voice ringing with realities and yet divided from me by walls that I could never cross. A voice—it was the voice of one who slept to dream, but knew his dream reality.

"There are shells bursting all around and men die by thousands in gouts of flesh and blasts of flame," the alien voice murmured. "The world is at war. Now the war has not begun, and rumors are flying fast. There is a panic in Wall Street. There is a rebellion in China. A man is trying to fly a machine—it rises from the ground. A president is assassinated. Brothers kill each other in civil war."

The voice went on—or shall I say went back? This was history in re-

verse, and I listened, and I wrote, in a sort of automatic daze. The World War, the panic of 1907, the Boxer Rebellion, the Wright brothers' flight, these rose again. The tempo of the voice increased, and I found the years slipping backward, faster, through the Victorian era, the Georgian period, the age of Elizabeth, the Italian Renaissance. Shall I convey the myriad details of that voice—details which I have never found in any history? I could write dozens of volumes. I could add tenfold to known history, but I could only cite the voice for authority.

"A colony in the Western Hemisphere. Eadweard Arderic is fighting wolves on the coast of Labrador. Leif Ericson is pushing toward him with vikings clad in mail. They are crossing the unknown sea. They are in Norseland, about to set forth."

Thus the story retrogressed, like a film run backward, producing pictures of earlier and ever earlier years. "There is a continent in the Pacific. The Murathians are building statues on Easter Island, upon Ranopon, and Alaku, and a thousand others. King Oale is being crowned. King Oale's father has been slain. Rebellion is brewing in Alaku. Alaku has risen from the waves. The sea rolls around Murathia, and the settlers from Asia rejoice in a fertile land from the sea. The sea boils. Murathia has not yet risen."

I found it puzzling to follow that voice backward. So accustomed are we to thinking in continuous terms that I was often perplexed, but I made notes even when the statements were obscure.

"Heliogabalus is slain. A thousand Goths fight a thousand beasts in the Colosseum. The streets of Rome run wild. The prætors and consuls lead the march to Heliogabalus' last feast. The flower girls dance ahead. Hundreds of thousands of citizens line the way."

There was a sacrifice in Mexico. "Spouting volcanoes subside. People terrified by doom hurl a virgin into the river of lava. At Lothai-Memsis, the priests bring news of a dark-skinned captive blown ashore out of the Eastern Sea."

So the queer, devolutionary narrative flowed backward. At first I had found it difficult to follow, but now my mind became attuned to the reversal.

"I am far away from you, Paul. You do not exist. You will not exist for ten thousand years, except as an eventual reality and a present conception of the universal mind. You are a part of the unfinished whole. You hear me, I hope, and I know that ten thousand years from now, you will be born and will live to await my coming."

I ALMOST jumped at those words. Coming across the centuries and the leagues of space, yet from one beside me whom I knew, they gave me a sensation of bewilderment that I cannot express.

"I have gone far enough back, Paul. I am very tired. I have unlived a hundred lifetimes. I will retrace my way through the great mind and go forward to you."

There was silence for a long, long pause; how long, I do not know. I bent breathless over the marble form and watched the closed lids and the motionless lips for a sign of recognition, of returning animation. None came. This might have been a corpse that I stared at. Then the voice spoke again, but in oh, how strange a whisper!

"I cannot go forward to you, Paul!" In those words, there was a quality suggesting a sleeper faced with nightmare. "The universal

mind has absorbed me and is forcing me to keep on. I am not the first to discover this secret, but like all who preceded me, I am compelled by the one whole to continue going back. I fear the end, but I cannot go forward!"

Again there was silence, and now the darkness of night lay over the gray chamber, and I could scarcely see the figure of my friend. The voice came anew, with a note of despair added to its breathless recapturing of oblivion.

"The glacier is retreating northward over Europe, and the hairy men are surging back from the south. Now they are roving eastward and into a vast, fertile plain in Asia. They are building huts. The mammoth and the saber-tooth tiger attack them. Wangh of the tribe of Lu is gored while defending his beloved. Wangh is striding through the mountains of Alai. Now Wangh's parents are deciding whether the child shall be sacrificed to Bud-ra or retained for the tribe.

"Paul, I cannot stop. I infringed on the supreme mind, and I am lost. Can you hear me? I will tell what I see for as long as I can. Everything happens in an instant. I can only give you the high lights. Swifter than I can speak, entire lives and events flow backward, tracing the completed parts of the mind. I am fighting it, but I cannot win. I am only a fragment, and it is all."

The resignation of Nicholas reached me across eternity. I could sense his struggle with a power beyond control.

"There are no men," Nicholas went on. "There are shaggy things shambling across Asia and Africa and Europe. A continent sings beneath the Atlantic. Atlantis is unborn. I do not recognize some of the animals. There is one with enormous teeth and claws on a body as thin as a snake. And the trees are growing strange. They are like ferns. The beasts are getting larger. The shaggy apes are becoming one with the beasts. A great sea covers Central America. Greenland is drifting closer to England. I am trying to return, Paul. I want to go forward, I want to go ahead to my allotted life, but I cannot, I cannot! Mind greater than mine is forcing me back."

The voice of Nicholas sounded like a cry. I gripped the arms of my chair. The pungent atmosphere made me faint.

The voice went on:

"The seas are warm. Colossal monsters roam on land in forests I cannot describe. Conical trees. Tremendous fungi. Moss and ferns and slimy pools. Brontosaurus roaring against dinosaurus. South America and Africa are only a span apart. The Sun blazes larger and hotter. There are no apes. Volcanoes everywhere spout torrents of fire and ash.

"Such moths! And pterodactyls! There is a creature I shall never see in museums of my future. It resembles vaguely a diplosaurus, on smaller scale, but it has wings. It is sweeping at a triceratops. Now it is back in its nest in the cliffs of Olphar. The seas begin to steam. The land vegetation is decreasing. The coniferous trees are gone, and the ferns, and the vertebrates. A polypod is coming ashore in a continent where the Pacific will roll."

I LIVED each lifetime and saw each epoch as it unfolded to Nicholas, and as I am convinced he saw them. Geology and history and all the experience of my life never taught me as much as I learned from

that prophetic voice in that apocalyptic hour.

"The Sun is hotter than I shall know it, Paul. It is incandescent. It blazes upon the soft, rank vegetation of primal land life. It is almost white-hot. The land is steaming and the seas—they boil. I am weary. I am still struggling against the universal mind. The will is greater than mine. I think I am being punished for tampering with secrets of the gods. No matter. It is more exciting than life. Lichens and mosses and scarlet slugs retreat across flat plains.

"Somewhere afar, the increasing number of volcanoes spout colossal stalks of flame into the heavens. The air is thick with moisture, rotten with decaying matter. A slime has come across the continents. Algæ and moss alone exist. The moths and the birds and the beasts are yet to come. The seas are hot. Even the cephalopods and polypods are vanishing. The infusoria alone remain. All America is settling beneath the oceans. All Europe and Asia and mid-Pacific Mu are subsiding. There is no land. The sea seethes. The animalcules and infusoria are rapidly disappearing.

"Now the world-wide sea is too hot for life. It bubbles and boils, and a misty blanket enwraps Earth. Storms of steam and vapor howl incessantly. Deluges of rains alternate with steaming evaporation. The ocean shudders and heaves. It is murky with sediment. And still the sun grows whiter and hotter, and closer. The temperature is frightful. There are no stars by night, so dense is the atmosphere. The Moon shows as a vague and immense sphere. There are only boiling seas and steaming air by day. And no life lives in the seas.

"The Moon is swinging closer to Earth! It is rushing downward night by night and day after day. It is larger than the Sun, larger than a hundred suns, and falling closer. The seas rise to mountainous heights. Terrific storms shriek around the world. All Earth is a hell of sound and an inferno of activity. The Moon is plunging into Earth! The break has come! With a noise like the blasting of worlds, the Moon has untied with Earth from which it will part. The seas pass into steam, and in the red-gray glare of birth, Earth and Moon are swelling to the incandescent globe which will give birth to them both.

"I never saw such furious fire. Land and sea and sky are blazing to one white furnace. Earth is gone. Its solid parts became molten. A ball of incandescent and liquid fire flames where Earth will rise. The liquids turn to gas. Earth is as the Sun shall be.

"Paul, the Sun is speeding toward Earth!"

THE VOICE was a tragic whisper in darkness. I heard it, and I yielded to its power. The lead of my pencil cracked, and beads of sweat gathered on my forehead from the intensity of my concentration.

"The Sun and Earth are plunging together. Earth is a ball of vapor. Its temperature is beyond measurement. Only a thousand miles separate Earth from the Sun. They swing closer. Earth and Sun collide. Tongues of flame like comets blaze forth.

"Now the planets are grouping together, narrowing their orbits as they circle. They are all larger and brighter and closer. Time must be retracing itself in strides of a million years. Mars plunges into the Sun! Again a gigantic flame as they crash. One by one, the planets are

hurtling into that central hell. Jupiter, Saturn, Uranus, Neptune, and now Pluto, crash! The solar system is unborn. A nebulous star, blinding hot and terrific in fire, revolves alone.

"But all the skies are moving. I cannot convey the blackness of space nor the brilliant flare of stars and star-clusters. The sky grows steadily brighter. Time is retracing itself in leaps of millions upon millions of years. All the worlds of the galaxy are in motion. It is a cosmic parade. The spheres throng together. The Milky Way narrows. Out around Antares, a second star draws close. It crashes. The new star glows, an eighth the size of the Moon. Another star approaches, and still another. One by one, they plunge.

"Antares is swelling to immense girth and light brighter than the future Sun. I seem to be hanging inert in space. It is a strange sensation. I feel close to some invisible watcher of the process of creation, or rather uncreation; yet these events, separate in time, are coexisting parts of the universe in its full picture and totality from beginning to end.

"Now the crash of stars comes faster and faster, a rush, a brighter flare from the central sun, another rush, a vaster blaze. The Antares mass is a magnet drawing the far-flung suns of the Milky Way like iron filings.

"Only a huge and gaseous incandescence burns where the galaxy will be. Out in space are more of these gigantic patches, hordes of them. They, too, are moving. They withdraw from the utmost reaches of space. They cluster toward Antares. The nearest collides. The blaze is terrific. I can hardly bear to watch. The most blinding light of the Sun will be darkness compared to this.

"I am afraid, Paul. The smash of worlds in unbirth will be only a pageant. This is ecstasy; to watch masses, from each of which will erupt the millions of stars in each galaxy of years to come, fuse into ever-growing splendor is a sight for the gods alone to witness. Nebula by nebula, swifter than I can tell it, by thousands and millions, they are swelling the central nucleus.

"And now there exist only the nucleus and the first nebula. The nebula returns to that prime source of things. There is no universe. Space is a black and measureless void inclosing one stupendous core of gas, flame, and matter.

"But it, too, is changing. The core is mushrooming out. Its brightness lessens. Something dreadful is going to take place. The original nucleus spreads farther through space. It streams away in all directions like a universal gale. It dims as a dying candle. It is not yet blinding or even white-hot. The dissipation is complete. It is gray and dark, and all space has become a vastness, at rest, like a fog. There is absolutely no motion or world or light or——"

What happened, I shall never know. In his deific retrogression, I can only conclude that Nicholas was driven by the supreme mind before the beginning of time, for his voice halted in mid-sentence. At the same instant, I stood up with a cry. His body vanished from the pallet, leaving neither flesh, bones, dust, nor the slightest trace to indicate that any one had ever lain there, save the loose and crumpled robes whose sleeves were still folded.

Manna From Mars

Were the Martians serious? Or were they playing a ghastly joke on the world?

by STANTON A. COBLENTZ

Illustrated by M. Marchioni

IT WAS IN the closing decade of the twentieth century that the so-called "manna from Mars" fell upon us like the blessing it was meant to be; and it was then also that the world was startled by the strangest, the most unforeseen, the most shocking series of events which history records.

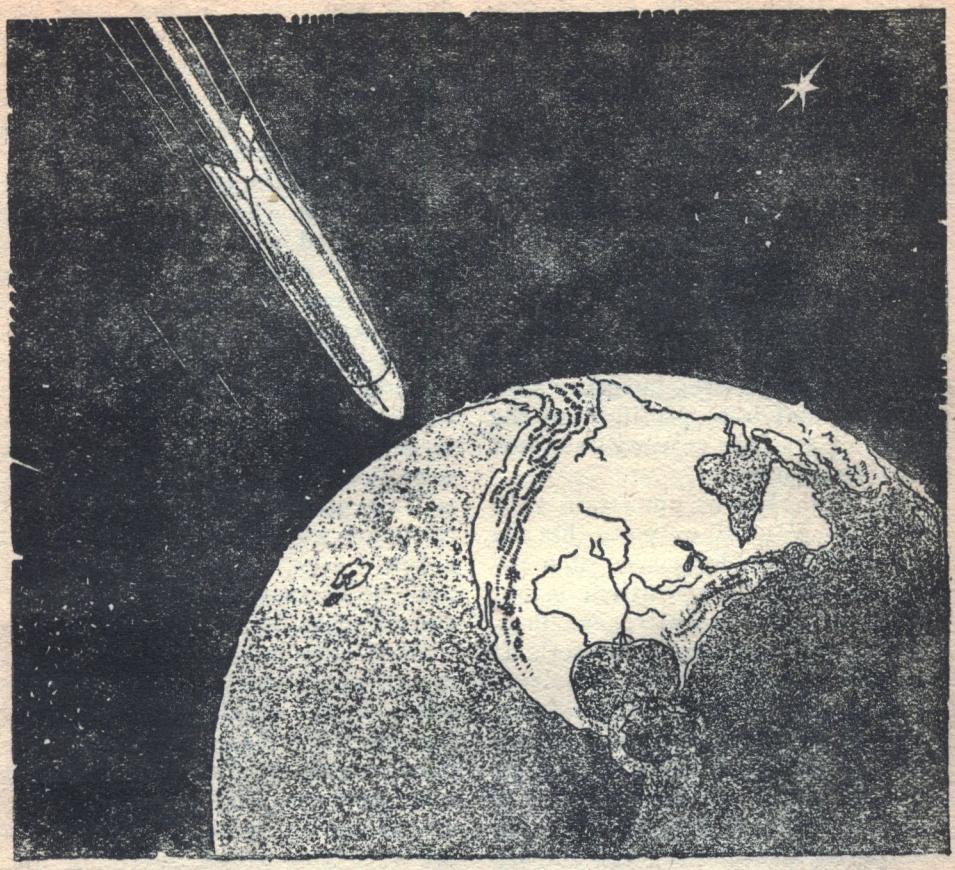
The general facts leading up to the disastrous culmination are of course engraved on the minds of all who were out of their swaddling clothes in the never-to-be-forgotten '90s. Had it not been for Harl Cumberland's radio-amplifying plan of interplanetary communication, this little globe of ours would have been spared much in the way of turmoil and dissension; and had other scientists not followed in Cumberland's footsteps, and developed the famous Saurier code-method of deciphering and replying to Martian signals, we might have remained much less wise but considerably more happy.

I shall not weary the reader by repeating the well-known facts as to the first interplanetary messages; how we confirmed the century-old belief that Mars is inhabited by a superior race of intelligent beings; and how, being assured of the good will and the solicitous attention of our neighbors in space, we did not hesitate to exchange reports as to living conditions on our two worlds, and were amazed to learn that Mars, though a much older globe than our own, though afflicted with a scarcity of water vapor and of oxygen, and though a good deal farther from the Sun than we, yet enjoyed a contentment and prosperity never known on Earth.

Naturally, we were intensely interested, not to say envious, upon being assured that a population of several hundred thousand million Martians dwelt in ease and almost in luxury, with boundless leisure and with little or no strife; and we would have been less than human had we not desired to learn how it was possible for conditions so ideal to prevail in a next-door section of the universe, while we on Earth lived through the old ordeal of wars and famines, of hardship, want, and poverty, of riots and insurrections, of class inequality and of social oppression.

Was it that our planet was after all but ill-favored from the astronomical point of view? "Not in the least!" our friends in space reassured us. "You can be every bit as well off as we, if you desire. And, if you ask, we will show you how!"

"Of course we ask!" our scientists flashed back the immediate reply.



How slowly the time dragged while that projectile winged its way through space!

"Show us, and we shall be everlastingly in your debt!"

Then, while the world breathlessly awaited the response, there came that message which, had we been wiser, we should have consigned at once to the flames.

"The secret of our success," responded the Martians—and having proved the accuracy of some of their previous statements, we had now no reason to doubt them—"the reason for our success is that we have conquered hunger. All the heartache, the suffering, the feuds and wars of your race, as of our own in the far-distant past, have arisen from the fact that we must battle for our daily food. If all of us could be sure of a sufficient supply, which would be brought to us regularly without forethought or trouble, we should be a happy as well as an amiable people. Such, at least, has been the case on Mars, and so also it has been among the people of Venus, whom we have taught our secret. Do you wish us to continue?"

"Yes, of course, of course, continue!" the plea was radioed back through a hundred million miles of space. But the Martians, being a slow-moving people, kept the world in suspense for three days before they were ready to proceed.

"The secret," they at length ex-

plained, after we had almost despaired of hearing further from them, "has to do with a fortunate discovery made six or eight million years ago by one of our botanists. It is what we call the sugar-leaf bush—the most marvelous product of horticultural ingenuity that Mars has ever known. Imagine a plant which will grow anywhere—in the desert or marshland, on rocky hillsides or sandy plains—and which bears an edible leaf with the flavor of the most savory dessert; imagine, also, that the plant is so prolific that the output of a single acre will support a hundred persons.

"But no! Let us not strain your credulity. We will only say that the sugar-leaf plant, by virtue of a peculiar chemical composition, is not dependent upon the nitrogen, phosphorus, or potassium in the soil. It can thrive equally well on other substances, such as calcium or silicon; while it is adapted to catch every whiff of water-vapor from the atmosphere, to combine it with the carbon also extracted from the air, and so to manufacture the sugary and starchy ingredients of its leaves. At the same time—and here is the most remarkable fact of all—it differs again from the other plants in that it takes nitrogen from the air itself, incorporates it into organic compounds, and so makes a food ideally suited to support life—food which is really fruit, bread, and meat all in one."

IT IS HARDLY necessary to describe the pleasure with which mankind heard this report. "Marvelous! Perfectly marvelous!" was our admiring reply. "Teach us, O Martians, how to grow this extraordinary plant, that the day of peace and plenty may dawn upon the Earth."

"Then listen to us!" came the quick response. "Listen, and you shall learn!" And forthwith we were told the details of that plan which was greeted with such universal acclaim, and which was to lead to such widespread disaster.

In essence, the scheme was simple enough. A hermetically sealed packet filled with the seeds of the sugar-leaf plant—which were very minute—was to be inclosed in a thick, concrete envelope, so impermeable and so heat-proof that the outside temperature might rise to thousands of degrees without materially affecting the contents. Shot toward us by interatomic energy in an interplanetary rocket, this seed container would reach Earth within a few weeks, and the seeds might then be extracted and planted here according to Martian directions.

Once the crucial period of a month and a week had passed—the seeds would require careful attention for that length of time—the plants would develop without effort or expenditure, and shoots might be shipped to the various parts of the Earth, which within a year or two would be blessed with great thickets of the food-producing plant. "Not a desert, not a barren hillside, not a polar wilderness, but may be made to produce the sugar-leaf in unlimited quantities!" promised the Martians.

Naturally, mankind was elated. Few subjects other than the sugar-leaf were on any one's lips; the streets of cities were filled with acclaim and rejoicing; orators, in wild bursts of enthusiasm, foresaw that the sugar-leaf would prove a historic boon second only to the invention of fire; politicians announced that the day of universal amity was at hand; warring statesmen agreed to abandon their differences; the conflict of class with class and of

race with race was declared to be at an end, for now that the world would produce a sufficiency for all, what further occasion could there be for disagreement?

Who is there that will ever forget the celebrated fifth of December, 1998? For then it was that, following a long series of messages, the projectile containing the seeds of the sugar-leaf was discharged from our fellow planet. Now at last the manna from Mars was to be poured upon the Earth! True, we still had a little time to wait; so vast are interplanetary distances that, though the projectile was approaching at a speed of many miles a second, twenty days and eleven hours must pass before its arrival. Twenty days and eleven hours before we should be able to convert our planet into Utopia!

There was, it must not be denied, one slight drawback which served slightly to dampen our enthusiasm. Since the Martians were skilled mathematicians and could calculate the rocket's course with the utmost accuracy, they could determine its precise destination, and accordingly had been anxious for mankind to choose the landing place. This, unfortunately, had occasioned not a little argumentation among representatives of the various nations, each of which was eager to uphold the honor of his native land. The Germans favored a point near Berlin; the French a location near Paris; the Americans a spot near Washington, and so on; and the Martians, losing patience after whole days had been consumed in futile debate, settled the dispute arbitrarily on their own account and picked a goal on the outskirts of the Gobi desert.

Naturally, none of us except the Chinese were satisfied with this selection; all the principal nations felt slighted, and the Japanese and Germans went so far as to threaten to withdraw from the conference. However, it was generally realized that there was nothing to do except to put a good face upon the matter and assent; and consequently most of the nations dispatched delegates, both scientific and political, to that remote region where the life-giving seeds were to arrive; and the Gobi desert, for the time being, assumed an importance such as it had not known throughout all history.

How slowly time dragged past while the projectile winged its way through the lonely abysses of space! Work on the Earth had come to a virtual halt; none but the most necessary labors were performed; all ears were fastened upon the radio, which, acting upon information relayed from Mars, told us day by day of the flight of that rocket which was to bring us security from want and freedom from toil. Was it not appropriate, we asked ourselves, that the all-important date, the time of the projectile's arrival, was to be Christmas Day—a time of "peace on earth and good will to man"?

WHEN AT length the long-awaited day had dawned, however, how differently things turned out from what any one had anticipated! At precisely six in the morning—Gobi desert time—the rocket was to arrive and was to be greeted with international ceremonies. But six o'clock passed; six thirty; seven; seven thirty; eight—and still there was no sign of a messenger from the skies.

Had the Martians merely been deceiving us? Were they only playing upon our credulity? Was there after all no such marvel as the sugar-leaf bush? So men began to ask as,

with blank, bewildered faces, they turned to one another, trying as best they could to veil their depression and chagrin; while still the hours went by, and the manna from Mars did not arrive.

So great was our disappointment that, within a day, we were in a state of mind to commit violence upon our pretended benefactors. It was fortunate that a wide distance separated us from Mars; for had an interplanetary war been possible, millions of hotheads would not have hesitated to indulge in it.

"The Martians have been duping us! They have been playing us for dunces!" shouted these wild declaimers; nor were they silenced by the warnings of the scientists: "Hold your tongues and wait! There is always the possibility of an accident; perhaps the rocket was struck and destroyed by a meteorite somewhere out in space. Or else we may have mistaken the date; the sugar-leaf plant may arrive to-morrow."

To-morrow came, however, and passed without the arrival of the sugar-leaf. And the suspicions of the great majority found fresh fuel when our excited messages to Mars, demanding an explanation, at first received no answer. Even though our neighbors in space were in the habit of procrastinating, was more than one interpretation possible in view of their present silence?

Mocking laughter had blended with the cries of indignation and dismay, and accusations and recriminations had leaped back and forth across our globe, when at length, after forty-eight hours, the eagerly awaited report from Mars greeted us over the radio:

"Our friends of the Earth, you will pardon our delay. We have been so busy seeking the cause of the rocket's nonarrival that we have had no time to answer you. But be of good cheer, men of Earth! We have an encouraging message. We now find, upon checking the flight of the projectile, that an unforeseen obstacle slightly altered its course. Twenty-five million miles from the Earth, it passed but a few thousand leagues from the small comet which we call X 4235 KZ—an insignificant body, not previously noticed and, therefore, neglected in our calculations. Slight though its gravitational pull, however, it apparently deflected the rocket from its prearranged route, although not sufficiently to matter. It did actually come to Earth at the specified time, but some distance south of the promised point. You will find, if we are not mistaken, that it reached the region of Earth that is known as Australia."

"Australia!" The amazing word went flashing around our planet. "Australia!" Here, indeed, was occasion for bewilderment! To find the proverbial needle in a haystack would be child's play compared to locating a minute seed container in the several million square miles of the Australian continent. On the face of the matter, the situation appeared worse than hopeless; hence there were many who, ready to abandon all thought of the sugar-leaf, maintained that the Martians had not only deliberately deluded us, but were now playing with us for their own amusement, somewhat as the cat plays with the trapped mouse.

But cherished dreams die hard; and the world as a whole, not able to surrender the Utopian visions conjured up by the sugar-leaf bush, addressed urgent entreaties to the Australian government, requesting that it spare no effort to discover the missing seed container.

IT WAS DUE to these solicitations that a startling announcement was made on the 29th of December. Somewhat belatedly, and in a manner at once guilty and defiant, the Australian authorities broadcasted an astonishing fact. The rocket from Mars had really arrived. At about six in the morning of the 25th, a flaming missile had been noticed to descend on a remote Queensland sheep range; and the owner of the land, one Isukimo Kama, a Japanese sheep herder, had delayed two days before instituting an investigation of what he had mistaken for a meteorite. It was only upon the third day that a scientist, flying from Melbourne when Kama confided to State officials some suspicious details about his discovery, examined the supposed meteorite and reported that it was the missing seed container from Mars. There was no slightest doubt about it.

One would have imagined that, the discovery having at last been made, all the agony and despair of the unforeseen delay would have been forgotten and the world would have proceeded to utilize and enjoy the priceless gift from the skies. Such, however, was not to be the case; the rapacity of mankind was to intervene; and fatal complications were to ensue from that mishap whereby the rocket descended in Australia instead of in the Gobi.

The first sign of danger was apparent in the very announcement of the discovery. It would not be too much to say that the Australians took the familiar dog-in-the-manger attitude, which has caused so much trouble throughout history. "Since the seeds fell in our territory, they are ours!" the rest of the world was notified. "We will, however, develop them for the benefit of mankind. Whoever desires any of the shoots may purchase them at a price which we will fix."

"What? What is that? Purchase them at a price?" men everywhere cried, in astonishment and indignation. "A price? Who said anything about price? Didn't the Martians send the seeds free for the benefit of all?"

However, the Australians, according to the established manner of monopolists, held to their demands. They seemed to feel that theirs was an excellent commercial chance, and that, in conformity with time-honored methods, they should extort all they could in return for the sugar-leaf bush. And when they first mentioned their terms for shoots of the plant, the figures ran into so many digits that their prospective customers literally saw red.

It was then that Japan, on the ground that the seeds had descended on the property of one of her subjects, claimed legal right and title to the sugar-leaf. It was then also that America, on the pretext that it was her scientists who had made interplanetary communication possible, contended that the plant should be hers exclusively. It was then likewise that Russia, acting through a special emissary to Australia, threatened to break off diplomatic relations unless her rights in the bush were recognized. And it was at the same time that Great Britain, heatedly backing the attitude of her colony, entered into an alliance with France, Italy, Poland, and Czeckoslovakia, whereby she promised all of them free shoots of the sugar-leaf in return for their support of Australia's policy.

It seemed that all things were moving with the speed of a hurricane; in less than a week the world was divided into two great groups: the pro-Australians, and the anti-

Australians—or the P. A.'s and the A. A.'s, as they were called for short—the former led by Great Britain and her allies, the latter dominated by the United States, Germany, Japan, and Russia.

Each group railed furiously at the other; each maintained that the other conspired to misapply the sugar-leaf for its own selfish purposes; each began to hold military parades, to flaunt flags, and to blare out the old familiar cry of "National honor! Defend the national honor!"

Despite the threatening aspects of things, however, it is probable that no ill effects would have followed and that the world would have come to its senses and perceived the absurdity of fighting for the plant had it not been for one unfortunate incident. This incident—the immediate cause of all later disasters—was the airplane raid reported on the never-to-be-forgotten fifth of January, exactly a month after the departure of the seed container from Mars.

Just who had planned and executed the raid was never officially proved, but few have ever seriously denied that it was initiated by the A. A.'s. It is known, at all events, that on the evening of the fifth a concerted attack of ten bombing planes was made upon that Queensland town where the sugar-leaf was thought to be growing; and the raiders, who had evidently expected to find the plant unprotected, were met with a defensive fire that brought three of their machines to Earth and scattered the others in flight.

So far, so good! But this attack, unsuccessful as it was, served as the inspiration for others, and on the following day the entire Australian army was busy beating off onslaughts from the sky. It is not certain whether any of the marauders succeeded in securing specimens of the sugar-leaf, though it is thought not; but certain it is that the city of Sidney was blasted with a devastating conflagration, and that a tenth of the cultivated lands of Australia were blackened by the hostile fire.

It was on the seventh that the P. A.'s, having vainly demanded an apology and indemnities from the A. A's, officially issued their declaration of war; and thus was ushered in that conflict which for a while made us forget the very name of sugar-leaf.

The Thirty Days' War, it was called—and, despite its brief duration, it was more calamitous than that Thirty Years' War which had earned an evil fame some centuries before. Equipped with drugs and gases that annihilated the population of whole cities, and with bacteria and creeping blights that destroyed the fruitage of wide countrysides, the combatants succeeded in making a desert of half of Europe, Asia, and America, while leaving not one green leaf in Australia; and the population of all these areas was reduced by more than half.

When, after a month, the combatants were forced to a halt by sheer exhaustion, they were faced with pestilence and famine owing to the fact that they had wiped out each other's food supply; and, thanks to these new afflictions, half of the remaining population was killed.

IT WILL BE needless, however, to record all those events, which for a time seemed about to put an end to civilization. Suffice it to say that now, after a quarter of a century, the world is barely beginning to recover. It was indeed a treacherous boon that the well-meaning Martians had sent us. To-day the very men-

tion of the sugar-leaf brings an angry light into the eyes of the survivors; the very term "sugar-leaf" is rarely used except in reproach or execration.

For when at length the Thirty Days' War was over, we were after all to receive no benefit from the plant that had cost us so dearly. Neither seeds nor shoots of the bush could be found, although all Australia was ransacked for them; apparently they had been destroyed in the conflagration!

Worse still, the Martians, when we resumed communications and requested them to send another seed container, peremptorily refused our demand. "No, men of Earth," they replied, "no; we made one mistake and shall not make another. Having half destroyed you, we have gone quite far enough; for we should not like to blot out any race, even the most debased."

There was little use to argue; the Martians remained obdurate. Although starving and more in need of aid than ever, we were denied the priceless gift. But to this day there are some who maintain that no such plant as the sugar-leaf ever existed; that the Martians merely hoaxed us and sent us lifeless husks instead of seeds; while we, taking their ruse seriously, permitted ourselves to be overwhelmed and ruined out of greed for a mythical bush.

A pink screen spread upward toward that last thin strip of blue sky.

The Man Who Stopped the Dust

Illustrated by C. R. Thomson

The thought-variant

by JOHN RUSSELL FEARN

PROFESSOR BORIS RENHARD was a curious, violently temperamental man. A scientist by profession, and something of an idealist by nature, his main objective in life was the improvement of mankind's environment, and the obviation of needless work in order to attain a specified objective. At thirty, he had been a brilliant inventor; at forty he had achieved wealth by that very reason; at fifty his extraordinary power of perception and conception had become a trifle dulled; and at sixty, as we find him now, his great mind was but a ghost of its former self.

It still retained its inventive faculty in some degree, but that careful insight upon cause and effect; that wonderful, almost intuitive sense of being able to see ahead the outcome of almost any invention, was entirely missing.

And that, perhaps, was why he did not foresee the tragic, unbelievable things that were to result from his curious idea of "stopping the dust."

He had one confidant, the thirty-five-year-old Dr. Anderson, who did his utmost to keep the professor on the path of sane reasoning—a task of formidable proportions with a temperament so volcanic and didactic as that possessed by Renhard.

It was on a January day of completely unreasonable inclemency when the professor suddenly propounded his latest and most extraordinary theory to his friend.

"Anderson, something has got to be done about all this!" he announced decidedly.

"About what?" Anderson had merely dropped in for one of his weekly chats, which he managed to sandwich between a steadily growing medical practice, and was not feeling particularly intrigued by the possibility of scientific elucidations of the professor's type at the moment. He was standing at the window looking out on the dense London murk.

"About *this!*" Renhard said, jabbing a bony index finger at the pall.

"Oh, you mean the fog? Well, after all, London expects fogs in January—at any time during the winter, in fact. It's had them for centuries. Caused by the evaporation from the Thames, you know."

"You are telling *me* what causes a fog, John Anderson?" The professor's eyes gleamed. "Don't I know what *causes* it? What I am going to do is *remedy* it! Science is making great progress in other fields—the bigger, wider fields where my old brain cannot reach; but so mighty are their aims, so celestial

their ambitions, they forget the little, everyday inconveniences. They strain at the gnat and swallow the camel, Anderson. I am going to stop a fog, my young friend; more, I am going to stop all dust!"

There was a faint twinkle in the eyes of Anderson. He laid his hand on the elder man's shoulder.

"You get some queer ideas, don't you, professor?"

"There's nothing queer about stopping dust, is there?"

"Nothing except the fact that you can't do it. It's been tried—fog devourers, air-cleaners, molecular vacuums——"

"Fog devourers—bah!" Renhard snorted, and reaching forward snatched up a daily paper from the table. "Look at that!" he commanded.

"'Four ships lost at sea in the worst fog of years,'" Anderson read aloud. "'Airplanes lose their way and crash despite radio signals.' Well, what about it?" He tossed the paper back onto the table. "It's one of those things that's inevitable—they call it 'Act of God,' don't they?"

"'ACT OF GOD'?" Renhard groaned and spread his emaciated hands. "I should have thought that a physician with a rising clientele would have had greater breadth of vision; would have been more ready to admit the possibilities of science. Instead you drivel like a first-grader about the clause of 'Act of God.' A little while ago you hinted at the fact that you knew what a fog is. What exactly *is* the process that causes all this inconvenience and loss of time and life?"

"Why, fog is caused by dust particles, estimated at about 0.001 inch in diameter. The particles might be composed of evaporated ocean spray, disintegrated dust from shooting stars and meteorites, volcanic dust—anything like that. Fog particles are bound to have some kind of dust for their nucleus."

"Beyond question, we are improving," said Renhard sourly. "You admit, freely, that fog is caused by dust particles?"

"Certainly it is. But what of it? You can't stop dust. It is just bound to take place."

"And as long as it happens life will be endangered," Renhard added grimly. "That isn't right, Anderson. Man has brains enough to overcome the difficulty—even as he has overcome everything else.

"You have perhaps heard of the ingenious instrument that contains a pump, a lens, filter papers, and a glass plate divided off into millimeters? Samples of air are sucked into this apparatus, and the number of dust particles determined. In a crowded city there are about 100,000 dust particles to the cubic centimeter; whilst over an ocean the amount is lowered to only 2,000 per cubic centimeter. You appear to know three of the operative factors which cause dust—evaporation of ocean spray, disintegrating shooting stars, volcanic dust; and the fourth is the action of wind over the earth's surface."

"This sounds more like a treatise on the cause of dust, than how to remedy it," Anderson remarked dryly, lighting a cigarette.

"If you will be so good as to give me an opportunity, my dear friend, I will come to my point in due time," Renhard replied acidly.

"Firstly, one must expound the qualities of the particular thing in question, then decide upon the necessary plan to defeat it. We will start again with the phenomenon known as twilight. This happens

only because of the refraction of dust particles—the dusty, translucent curtain through which the sun's rays have to pass. Raindrops and hailstones all have a particle of dust within them that serves as the original point upon which to condense. Again, when condensation is sufficiently vigorous, the water vapor becomes small globules of water with the dust speck as the center—and so clouds are formed.

"Suppose we take an example of how vital a point is volcanic dust. The eruption of the volcano of Krakatoa in or near Java in August, 1883, sent dust twenty miles into the air! That dust impregnated the whole atmospheric envelope and took years to descend. That occurrence provided mankind with some of the most glorious sunrises and sunsets in earthly history. Yet that same beauteous creation can be also the deadliest enemy—the destroyer of life and liberty."

"Admitted," Anderson nodded. "And what do you propose to do next?"

"I am making a machine, Anderson, which will have a 2,000-mile radius of dust elimination when I have completed it. It is what I call a dust vibrator. You admit, of course, that a dust particle is composed of atoms—and that those atoms when aggregated create a molecule?"

"True enough."

"We are indeed improving. You admit also that the electron is essential to the structure of an atomic formation—and the atomic formation to the structure of a molecule? Splendid!

"Now, it is conceivable that in time the atoms would lose many of their electrons, owing to the terrific velocity with which the latter move. The disappearance of all electrons would make the weight of the molecule too heavy for the atom to support, and the result would be collapse. That occurrence would take a time that I do not wish to compute, for the simple reason that I evolved a way of destroying all electrons within the molecules that go to make up a dust particle. The result would be collapse of the molecule—and, incidentally, collapse of the dust particle. You get the idea?"

"It certainly sounds all right," Anderson admitted.

"The electrons can be disrupted—a feat hitherto believed impossible—by vibration. Not an actual force, but a shifting plane of disturbances powerful enough to destroy the electron. The result will be complete absence of dust wherever my vibrator gets to work. Think of that!"

"The idea certainly isn't at all bad," Anderson said slowly. "But how exactly do you propose to go about this disruption of the electron? You said something about a vibration—but I'm afraid I'm not so well up in such matters."

FOR A SPACE the professor sat in silence. Then:

"I'll make it as clear as I can to your limited understanding, Anderson. I propose to disrupt the electrons by negative electricity in the form of *vibration.* An electron is of course pure negative electricity; it will be repelled by my vibration. Now, electricity, if one gets down to fundamentals, is vibration in a certain form—a vibration of such a periodicity that it becomes light. My vibration will be below that of light. It will be invisible, but tremendously destructive. It will repel and smash an electron completely. In the machine I am making normal

electricity is converted into vibration, and when I have finished, the bombardment of electrons will commence—that is, the bombardment of dust electrons."

"I get all that," Anderson said, "but how will you confine your efforts solely to dust? If you disrupt, or rather 'collapse,' the molecules of dust, I don't see what is to prevent the very structure of all matter, since it is all atomic, collapsing. And that would be catastrophe indeed."

"There are molecules of different orders," Renhard answered. "True, certain things might break down as well as dust—and that is why I am going to project my vibration scheme into the sky, where the only damage that can be done is cloud disruption and dust disruption. That will not affect anything on the earth."

"Correct me if I'm wrong, professor; but once you have started this disruption, there will be nothing to stop it, will there?"

"Yes. I have evolved the cause of disruption, and the cure," Renhard answered. "I have it in my mind what will be necessary to stop the process I create, and thus when I have seen the effects of dust disruption, I will stop the process spreading by setting my subsidiary machine to work. It won't take long to build; anyhow, not long enough for spreading disruption to do much damage."

Anderson looked his uneasiness. "But surely, professor, would it not be better to build your counteracter as well before starting the experiment? To be on the safe side?"

"Needless precaution, Anderson. Besides, I want to be sure that my vibrator works before I go to the expense of building the counteracter. If the machine is a failure, there is no need for me to be too much out of pocket, you know."

"Something in that," Anderson confessed. "If you do succeed in this you will undoubtedly stop the dust, all right."

"More than that," Renhard answered slowly. "I shall be a benefactor of mankind. That is what appeals to me most of all."

"That all depends on the point of view, of course. Personally, I have always found mankind only too ready to turn on a fellow if his treasured plans don't quite mature to the expectations of the majority."

Renhard smiled faintly. "I see, Anderson. You are embittered. Because you once made a slip—because the public held you up as a failure in your work, you have never forgotten."

"I can never forget that slip of mine." Anderson brooded through an interval. "I, a surgeon, on my first great case—a slip of the knife, and a life was lost. I killed a woman with that slip, professor—a young woman. I lost my position as surgeon and became purely a physician. Such things are not easy to forget when——"

"True," Renhard said; "but you must learn to forgive and forget whilst you are young enough to do it. Now, may I discuss my plans with you, if you have the time to spare?"

"Why, assuredly. Carry on."

IT TOOK Professor Renhard three weeks to purchase and erect his machinery. The erection was accomplished with the aid of Dr. Anderson, when he could spare the time; and upon the night of February 1st, three weeks later, the last bolt had been driven home, and the curious apparatus, a large, complicated mass of machinery, stood be-

fore an open window in an empty room at the rear of the professor's luxurious Kensington home.

The view from this window commanded a portion of London's back streets with their glimmering gaslights; farther beyond were the hazy uprisings of light that betokened the packed and brilliantly illuminated centers of the Strand, Piccadilly Circus, Trafalgar Square, and other nerve centers of the great metropolis.

Dr. Anderson looked up at the frosty, star-studded sky, and then buttoned up his overcoat tightly.

"Everything seems to be in order, Anderson," Renhard remarked presently. "I see no reason why we shouldn't experiment."

Anderson shrugged.

"Just as you like," he said, coming forward. "Give her the juice, and we'll see what happens."

"Right!" Renhard flicked a button on the controlling panel of his vibrator, and it began to purr very softly as the self-acting and self-sustaining generator within proceeded to function.

"It works!" Renhard breathed, rubbing his hands in silent glee.

"I don't see anything," Anderson said, frowning.

"Nitwit! You don't expect to *see* vibration, do you? The negative electrical energy, being transformed into vibration by the machinery inside here—which after all you know quite as much about as I do, since you helped to assemble it—is even now being hurled forth into the air outside, is invisibly disrupting the atom electrons of dust particles, over an area of two thousand miles. Think of that!"

"I am thinking of it, but I'd like to see something. Listening to this glorified vacuum cleaner of yours isn't exciting enough."

"Glorified vacuum cleaner!" Renhard exploded. "You dare make such a comparison?"

Anderson smiled faintly. "Sorry, prof; I didn't mean to offend you. But look for yourself! The whole thing's a fizzle! Nothing has happened! It certainly does not appear that you'll need to build that counteracter after all."

The professor moved slowly to the window, taking care to keep out of the direct path of his vibration beam, and looked out on the unchanged view from the window. He bit his lip in vexation.

"Certainly nothing is different there," he admitted reluctantly. "I wonder if I made a slip somewhere in my calculations? Let's go to the study and work it out again."

"All right," Anderson agreed. "You'll be catching cold in this ice house if you don't. You always were hopeless at looking after your own comfort. Come on."

The professor moved disconsolately to his apparatus and reversed the switch upon the panel, which should have put the machine completely out of commission. He was not aware, however, that inside the instrument a whisker of wire had worked loose from the contact screw and was shorting across the two terminals. The movement of the switch only served to cut the machine's power down about fifty per cent; low enough to make its humming imperceptible, but strong enough still to give forth that curious negative vibration to the atoms of dust——

Silently the two passed into the study, and still in silence lighted cigars and sat down. Then the professor brought his fist down on the table with a resounding thump.

"I can't see where there is a mistake!" he growled. "I worked every

bit of the thing out with painstaking care. If there is a fault at all it is either in the apparatus itself, or else we are expecting things to happen too soon. I'll take the infernal thing to bits to-morrow if nothing else presents itself."

"Well, if that's all there is for it, I may as well be going," Anderson remarked, rising to his feet. "I've not had much sleep lately, what with helping you, and trying to get through my own work——"

"I know," Renhard said, in a quieter tone than usual. "You've been very good, Anderson, and I appreciate it. I know I'm intolerable at times. I'll have to try to take myself in hand."

"I should," Anderson said with a faint smile, pulling his hat down comfortably. "I—— Hm-m-m! Seen my right-hand glove anywhere, prof?"

"Eh? Why, no."

"I could have sworn I left it on this table with its fellow. Here's one, but where is the other?"

Renhard pressed a button upon his desk, and presently his one manservant, Gaston, appeared.

"You rang, sir?"

"Yes, Gaston. Do you happen to have seen one of Dr. Anderson's gloves about anywhere?"

The peculiar, unaccountably glowing eyes of Gaston turned to Anderson, then back to the professor.

"No, sir, I have seen no trace of the glove in question."

"Very well, Gaston, thank you."

Anderson shrugged. "Well, it doesn't matter. See you to-morrow, prof. Good night."

"Good night, Anderson," Renhard answered absently.

He sat for a time in deep thought after his friend had gone. Then he arose to his feet and went once again in the direction of the back room where his apparatus was housed.

"Must be the apparatus itself," he said, for about the fiftieth time. "I'll fix it to-morrow, but it occurs to me I had better shut the window and stop this devilish draft whistling down the passages."

He entered the room, picked his way among the electric cables and impedimenta, and presently came to the window, reaching up and seizing the frame.

It was as he performed that action that it seemed as though a knife of white-hot steel was passing through his body. He gasped with sudden pain and dropped involuntarily to his knees. It came again, but more piercing and terrific, snapping the life out of his vitals.

He turned his head and saw that he was in a dead line with the vibrator lens. But surely he had switched it off?—something said in his pain-bemused mind. He made a last gasping effort to call for help, to call Gaston; then a sledge-hammer blow seemed to rip his brain asunder. He collapsed without another sound to the floor, stone-dead, his vibrator still issuing forth its mysterious negative energy——

II.

DR. ANDERSON awoke early the following morning with the distinct inner conviction that somewhere something was amiss. What it was he could not define. It was a very acute form of that peculiar sense of coming danger that we all feel at times in everyday life.

It was still dark when he awoke, and a glance at his luminous watch showed him it was six thirty. The room was in darkness, and the only sound was the deep breathing of his wife.

Following his usual custom after his ablutions, he crossed to the window to open it and allow the fresh morning air to enter, so that he could perform his brief breathing exercises. Humming a ditty to himself in a pleasing baritone, he slipped back the catch and flung the frosted glass sash wide open. It faced the east, and it was just past the hour of sunrise.

At what he beheld, poor Anderson nearly fainted and dropped through the window. Not quite doing this, he collapsed limply upon the window frame, supported by his forearms, and stared with goggling eyes to the east, muttering soundless words.

The sun was in the sky, just clear of the horizon—but what in Heaven's name had happened to it? It was just a blazing, yellow-white ball, with a vague hint of solar prominences caressing its edges, rising in an almost dead black sky! The stars were still shining, despite the sunlight. Nature was suddenly intoxicated.

"Great God!" Anderson whispered at last, drawing himself up and trying to imagine if there was perhaps some kind of eclipse in progress.

"No—no eclipse," he said to the dawn. It's something else!"

Recovering from his first terrific shock, he tightened the girdle round his gown, and marched off downstairs—to encounter Cawley, his manservant. For once in his imperturbable life, Cawley was looking oddly shaken and uncertain. He jumped as his master almost violently clutched his arm.

"Cawley—I'm not mad, am I?" Anderson asked quickly.

"If you refer to the dawn, sir, no. You are quite sane—but, with all respect, sir, it's a hell of a queer thing!"

"I'll forgive your language, Cawley. It's apt, for once." Anderson stood still and thought for a moment, then he glanced again at his watch. "Cawley, I do believe I have an idea what is causing all this! The professor! Renhard! The vibrator! Of course! What an idiot I am!"

"Beg pardon, sir?" Cawley elongated himself into stiff servility.

"Nothing, Cawley, nothing at all. Just thinking aloud. Listen carefully. I'm going out. When Mrs. Anderson comes down, tell her I'll return shortly; tell her that I've been called away on a very urgent case. Urgent! I'll say it is! The most urgent I've ever known. You understand, Cawley?"

"Perfectly, sir."

Within ten minutes, Anderson was dressed, and stepped out into that astounding dawn. Almost immediately he became aware of pale, frightened faces staring up at the inky skies, of milk boys and news venders shouting with a tremor in their usually husky voices, of affrightened glances cast to all points of the compass, as though in expectation of some approaching terror. Anderson reflected that he was perhaps the only man in London who could smile under the circumstances. Of course, that infernal vibrator had worked—but too effectively!

Another thing Anderson noticed as he plodded on to the professor's home was the utter blackness of shadows when out of the sunlight. They were like ink, triangular enigmas in which he floundered about helplessly, able to see the sun beyond, yet not a thing where he stood. Diffusion of light, refraction, had gone.

He was bruised, hot and troubled when he finally arrived at the professor's home, only to be met by an-

other shock. Two policemen were at the gate, and a little knot of curious sight-seers were gazing at the closed front door. Even the astounding sky failed to impress them, evidently.

As Anderson made to turn in at the gateway, a strong, blue-clothed arm detained him.

"Sorry, sir, you can't go in there."

Anderson looked blankly at the constable. He seemed very solid and unworried.

"Can't go in? Why not?"

"There's been a murder. Professor Renhard, who used to own this house, has been killed."

"KILLED!" Anderson clutched the gatepost for support. "But—but that's quite impossible! Why, I was only talking to him last night! I'm his greatest friend—Dr. Anderson. I *must* go in, I tell you!"

It seemed that a strange light entered the constable's eyes.

"Dr. Anderson, eh? That's different, then. You'd better come in and see Inspector Wade."

Anderson was escorted into the familiar study, and there beheld another constable and a plain-clothes man. This latter personage looked Anderson up and down sharply.

"You are a friend of Professor Renhard's?"

"I am his greatest friend, his dearest confidant. My name is Anderson."

"You can prove that?"

"Of course. Gaston, the servant, will do that. Ring for him."

The inspector complied, and presently Gaston was before them.

"This gentleman here says his name is Anderson and that he is a close friend of Professor Renhard's. Or rather he *was*. Is that so?"

Gaston's strange eyes were gleaming.

"Yes, sir, that is Anderson, certainly." Then he turned aside and muttered something in the inspector's ear. The inspector nodded grimly.

"Dr. Anderson, when did you last see Professor Renhard alive?"

"Last night. He was in perfect health. Where was he found? How do you know he was murdered?"

"He was found in the room next door here—with a knife hilt deep in his heart!"

"A knife!" Anderson echoed in horror. "But—but——"

"A surgical knife; I believe it's called a scalpel," the inspector proceeded in a slow, grim voice. "And what is even more peculiar, it bears your name on the hilt!"

"My name! But there is some absurd mistake here, inspector——"

"I don't think so," returned the implacable voice. "I was intending to have you looked up in any case, but it seems there is some truth in the old adage that a criminal always returns to the scene of the crime!"

Anderson straightened up. His face was suddenly crimson with indignation.

"What the devil are you talking about?"

The inspector did not answer. Instead he led the way into the adjoining room.

Mute, Anderson looked about him. The professor's body lay where it had fallen by the open window. The only other peculiarities were that the vibrator had ceased to function completely—not that Anderson considered there was anything unusual in this, since he fully believed it had been switched off properly the night before—and that a surgical knife was buried in the professor's chest, directly above the heart. A crimson stain discolored his coat and the white boards of the floor.

IN SILENCE Anderson went down on one knee and looked at the knife closely without touching it. Sure enough, his name was neatly executed on the ivory hilt.

"Why, this knife vanished from my surgical instruments years ago, just a few days after I had performed an unsuccessful operation on a woman," he said, looking up, startled. "How in the name of the devil did it get there?"

"That is a question only you can answer," Inspector Wade replied coldly. "I will reconstruct your crime. First, you entered here last night by some means or other, got the professor into this room, and killed him with this queer machine, which in some diabolical way broke every bone in the professor's body —even his skull! I have that fact from experiments on a dog—you see its body over there. We switched on that damnable contrivance and found that it destroys life. Lastly, to make sure of your victim you stabbed him to the heart with a surgical knife. Your motive is at present unknown. Then you departed, but, unfortunately, you left your glove behind on the floor here."

"A glove?" Anderson turned startled eyes to his own right-hand glove lying on the floor. Vainly his mind tried to link things together. "But I lost that last evening, and asked Gaston if he had seen it, when the professor was *alive!*"

"Gaston saw you return and commit the deed!" said the toneless voice.

"Gaston saw me return!" Anderson repeated incredulously. "But—but the man's crazy! I never killed the professor with this machine! It's an instrument for taking the dust out of the air, and that is what has caused this black sky this morning. It splits electrons and——"

"You dare to make use of a perfectly natural eclipse to aid your tissue of lies?" the inspector thundered.

"Eclipse! But this isn't an eclipse. In that case the sun would be obliterated, and there would be distinct evidences of the corona!"

"I'm scientist enough without your explanations," the inspector snapped; then, turning to the constable behind him: "All right, take him away. He'll have to be medically examined. There's neither sense nor reason in this butchery. Out with him."

Utterly dazed and dumfounded, the unfortunate Anderson was whirled into the next room and handcuffed for a moment to the massive iron fireplace while the constable departed to hire a taxi. As he stood there, panting and furious, Anderson became aware of the sleek, strange-eyed Gaston standing beside him. He was smiling bitterly.

"Well?" Anderson snapped venomously. "What in hell are you laughing at, you swine?"

"Remember the young woman you killed in that operation, Anderson? Remember the young girl, aged just twenty-four—young and beautiful charming—suffering from a mere abdominal growth that any surgeon should have removed without difficulty? And remember how your knife slipped? How you killed her? Destroyed her?"

Gaston's lips writhed back from strong teeth in a deadly snarl. "That girl was my sister, you devil! My sister, all in the world to me, and I intrusted her to the hands of a—a *butcher!* But the knife that killed her will kill you! I stole it from your instruments; yes, I've kept it all these years, and waited and waited for the moment when I could get you where I wanted you.

You will be certified mad, Anderson; I will see to that! I know enough about the vibrator to stop and start it, and I'm hoping to experiment to the full while you are in a cell—a padded one, I hope! Yes, I took your glove. I stabbed Renhard after he had died through getting in the way of the vibrator after it was supposedly switched off, and actually was not, because of a loose whisker of wire."

"I did not purposely kill your sister, you fool!" Anderson panted. "It was a mistake; too much talc powder in my glove—my hand slipped on the knife. I have never operated since."

"No, and you never will again," Gaston muttered. "I'll see to that, Butcher Anderson!"

Law was ruthless with the unfortunate, helpless Anderson. Before he scarcely realized what had happened, and mainly owing to the insidious tongue of the vengeful witness, Gaston, he was certified insane, inclined to violence with murderous intent, and promptly removed to an asylum. All the efforts of his distracted wife and influential friends failed completely to alter the decision.

He was probably the only man at that time who could possibly hope to avert the catastrophe that only too plainly was approaching from this mad idea of stopping the dust.

III.

AND THINGS began to happen in the outside world.

In some ways, Gaston was a scientific man. He understood what the vibrator did—that it destroyed dust, and human life also, if one chanced to get in direct line with the stream of vibration. So it came about that Gaston operated the machine to his own satisfaction, pointing it always to the black sky, until one day an accident happened.

Somewhere inside the instrument a wire or piece of mechanism slipped, and all the external efforts of Gaston failed completely to stop the machine running. The interior he dared not explore for fear of coming into contact with the deadly energy. He feared that stored-up energies might be released if he investigated too closely.

Thus the machine just ran on, he himself becoming more afraid of it every day, striving to think of a way around the difficulty, but failing. Only Anderson knew enough about the machine to stop it and repair it—and he was safely put away. Gaston from then on became a peculiar study in hatred and fear.

On the day of Anderson's arrest, London experienced the most amazing morning of its life—a morning that brought about an almost incredible return of religious revivalists and so-called seers, who read in the black, sun-and-starlit sky, a potent message of impending destruction from the Almighty.

Collisions in the streets were remarkably frequent, occasioned mainly by the absolute blackness of the shadows of buildings. In these shadows it was as black as Erebus; there was no diffusion of light whatever, and the result was that, in areas greatly overhung by tall buildings, busses and motor cars crashed helplessly into each other, drivers strangely confused by the swirling lights of approaching traffic, and unable to distinguish the innocent from the dangerous. Even collisions between pedestrians were equally prevalent, and the hospitals experienced the busiest morning for years, treating casualties.

Toward noon, as the black sky and panic continued unabated, a deputation visited Greenwich Observatory. The official in charge was sympathetic, but vague. He confessed that he had no idea what had caused the celestial phenomenon. The only explanation possible was that by some peculiar means all the processes of refraction and defraction had suddenly become set at naught —perhaps through an agency of some annihilating gas in outer space, through which the earth, following her orbit, was passing.

It was not a cheering observation, at the best.

Naturally the reporters of the leading newspapers were quick to turn the information to their own uses, flavored, as ever, by their own distinctive "scare" methods. The first evening newspaper editions were permitted to have bolder, larger headlines than usual.

EARTH IN DANGER OF DESTRUCTION!

DISTURBANCES IN OUTER SPACE THREATEN THE EARTH!

The man in the street, to whom the newspaper is all-in-all, the peak of perfect information, became a trifle worried. Business became jerky. In subways, trains, trams and busses, the one topic of conversation was the black sky. Men and women who previously had been so absorbed with their daily task that they would have been surprised at being told the sky's normal color was blue, suddenly took on astronomical tendencies and revealed latent and unsuspected scientific qualities.

Picture audiences, audiences at all public halls, were curiously restive that night. The condition lasted at the pictures until the show began, then at what they beheld the audience sat in sudden awed silence, astonished at what they saw.

For the screen images were cut as though with stencil—were almost three dimensional! Yet between the screen and the projector box there was no *beam!*

The more thoughtful of the audience pondered over this curious fact. More than one puzzled operator surveyed his sizzling carbon arcs with troubled eyes, unable to account for the sudden blinding brilliance, which certainly had not been in evidence the day before. Other operators studiously checked their ammeters to make sure their arcs were not taking an overload—and found everything in order. The trouble, whatever it was, must be in the air itself. And another occurrence in the picture theater upon which almost everybody remarked was the almost unnatural clearness of the sound apparatus. Every word was clear-cut and keen; the most mumbling actor could be heard distinctly, and those who were acknowledged masters of elocution seemed as though they were going to walk right out of the screen and come down into the audience, so lifelike was the effect.

Outside, the astounding clearness of sound was again evidenced. The very air seemed to crackle with crispness. The hooting of tugs on the Thames, the whistle of trains from the stations and yards, came clear and shrill above the deeper roaring note of the traffic.

It was a suddenly changed world —a world of unaccountable happenings, a world in which sound and actual light had increased, and yet where silence and darkness were more profound than ever before.

And still, in a little laboratory in Kensington, reposed the answer to the riddle.

By midnight London, for a change, was comparatively silent. The populace, worried by the events of the extraordinary day, had retired earlier than usual. Hundreds heard Big Ben chime that night who had never heard it before, so distinctly did the sound carry through the still air.

The following morning, the sky was still black; once more there was an unearthly sunrise of a blazing yellow-white ball that shed its pitiless brilliance on a panicky city. Then it became known that this black area had only a radius of two thousand miles, and beyond that radius was the blue sky and sunshine and shadows which man holds dear. As a result an exodus to places beyond the two-thousand-mile limit began.

The newspapers, as usual, were full of remarkable information, the most important being two columns by the astronomical correspondent upon the finding, by the observers of Greenwich Observatory, of several new galaxies that had never been seen before! Also observations of Mars and Venus were greatly simplified, the markings on their respective surfaces being startlingly clear and comparatively free from vibration.

It did actually jar the ordinary business man to discover that, despite a night of intense coldness, there was no trace of frost the following morning. Nor dew! Yet the air was keen—incredibly, strangely keen.

THERE WAS one man, however, who surveyed the strange happenings from a scientific angle.

His name was not prepossessing—Samuel Brown—and his personality was obscure. To the outer world, Sam Brown was a lawyer's clerk, but there were some who knew him to be a man of natural scientific talents, who now found ample scope for his hobby in the sudden odd happenings that had come to pass.

It was on the second evening that he confided his opinions to his not-too-brilliant wife.

"Elsie, there's something more behind all this business than an agency in outer space!"

His wife sewed deliberately for a space, then cocked one doubtful and slightly protruding blue eye upon him.

"Suppose there is? What are you going to do about it, Sam?"

"I don't know—yet, but I'm going to have a shot at doing something. The death roll is mounting day by day. This is the time for those who understand a little to expound their views! The scientists are baffled, but I'm not so sure that I am."

He screwed his head round, struck by a sudden thought, and pensively surveyed the sideboard—a massive heirloom from his great-grandmother. Then he ducked his head, and looked intently along the top of the thing.

"If you're looking for dust, Sam, you'll find plenty!" his wife remarked presently. "I haven't cleaned that sideboard for days. What with cooking and washing, I never get the time. Why you don't get a smaller sideboard instead of that lumbering thing, I don't know."

Sam looked up, pondered for a moment, then quietly but forcibly took his wife's arm and led her, protesting feebly, across the room. When they came to the sideboard he pushed her head down with delightful familiarity until her eyes were level with the sideboard top.

"Look along there!" he commanded.

She obeyed, and then gave a sharp exclamation.

"Why, Sam, you've cleaned it for me! Why—and the polished wood round the carpet edge, too! What's come over you?"

Sam slowly shook his head. "No, Elsie, I haven't cleaned anything. The solution is exactly what I've believed all along.

"There is no dust!"

And he stood looking at her solemnly, his round face full of the intensity of his statement.

Elsie's brows knitted. "No dust, Sam? Oh, go on with you!"

"I mean it, Elsie. Here—come to the table and I'll figure it out for you."

They sat down. Sam tore the margin from the evening paper and produced a stump of pencil; then he proceeded to execute what he was pleased to call "higher mathematics."

"Black sky, amazingly brilliant lights, remarkable astronomical observations, inky shadows, clear sound, and now—no dust on a polished surface. Elsie, somebody or something is annihilating dust!"

"You—you mean stopping it, Sam?"

"Yes, stopping it. But why, and how, is the point. I'm going to sort this out."

Elsie sighed and thoughtfully scratched the end of her nose. "And we've only just paid the first instalment on the vacuum cleaner! If there's no dust, we shan't need it."

Sam smiled grimly. "Elsie, there'll be a lot of things we shan't need if this dustless world goes on. But it won't go on! I promise you that!"

His wife resumed her armchair and sniffed.

IV.

"GENTLEMEN," said the chairman of the Cleenwurld Vacuum Company's board of directors, "our sales have dropped nearly seventy-five per cent during the past week. It is a week since this strange condition of a dustless, rainless, dayless world began. And our firm is on the brink of disaster! These conditions cannot go on!"

Unfortunately, however, the chairman found no means of preventing the conditions from going on, with the result that shortly afterward, in common with other dust-removing devices, the Cleenwurld Vacuum Company vanished from the commercial map.

About the same time, the street-cleaners of London were summoned and at once instructed to cease work. London was a city without dust. One or two mechanical contrivances could quite easily cope with the slight amount of paper litter and other details. So it was in every case where dust was the fundamental of employment. The figures of unemployment began to mount.

Little by little the gray face of London underwent a change as the eighth day of black sky and blazing sun appeared. The buildings, buried for years in the grime and filth of ages, began to reveal their real faces from under the canopy. The dust was disappearing from their black façades and soot-encrusted ornamentations. Here and there the long-hidden eyes of gargoyles appeared and looked out anew on the infinite strangeness of the dustless city. The gray dinginess of the Thames Embankment took on a clean newness, as though sprayed with some all-powerful cleansing fluid.

Everywhere dust was on the march, was vanishing and exploding beneath the force of the still-unchecked vibrator in the center of the city. The exploding of the dust atoms that had begun in the upper reaches of the air had now spread downward to the lower quarters—was making itself manifest in every nook and cranny.

Limehouse, long lost in the filth and dirt of accumulated centuries, became a place of slowly whitening wonder. At each turn one was met by a building or street rendered suddenly and unaccountably unfamiliar by the change in its appearance. Even the grime of the great railway stations began to vanish, and as time passed Londoners were presented with the incredible spectacle of seeing Euston and other stations rearing up as bright-red buildings with clean glass roofs, every engraved foundation stone as clear-cut and plain to read as though an army of cleaners had scrubbed at them for centuries.

So complex is the human mind, so unexpected man's reaction to environment, it was considered quite natural when the earlier fears of the populace changed into awe and then pride. They became accustomed to the black sky, and powerful floodlighting now rendered shadows no longer dangerous. The first disasters were now absent. The steamship companies, ever up to the topic of the moment, advertised cheap fares for visitors from other lands to come to view the transformation of a city.

So it was at first. Then, presently, rather alarming reports began to be received by the world's press.

The blackness was spreading!

It covered an area now of three thousand miles, and was spreading gradually with every hour, in a fan shape. The annihilation of dust atoms would go on, now it was started, until something was found to counteract it. Dr. Anderson, in his asylum cell, heard this news indirectly, and cursed the fates, circumstance, and Gaston.

WITH THIS new information, fear began to reappear slowly—the novelty died away. The benefit of disappearing dust and its consequent lightening of labor, the rising of new clean cities out of the black masks of the old, could not allay that new deep-rooted fear. The terrible thought that perhaps blue sky would never return began to become an obsession. The fear heightened when a strange illness broke out in London. It commenced with a sensation of irritation upon the skin, more particularly on exposed parts, which rapidly spread to the entire body, finally to the mouth, and causing death from uncontrollable coughing.

The physicians could not understand the malady in the least; it was something that had never been known before. They were still in the dark when there appeared none other than Samuel Brown himself, neat, inconspicuous, and carrying a brief case in his hand. After a great deal of trouble he was admitted to the sanctum of the head surgeon of the most important institution—Dr. Long.

Dr. Long was not very gracious.

"It is to be hoped, Mr. Brown," said this individual testily, "that you have something of import to convey. Only on those conditions can I possibly spare the time to converse with you."

Brown smiled faintly. "You may perhaps feel a trifle more disposed to converse when you are aware that I have come to tell you what is the

cause of the peculiar malady that has broken out in the dark areas."

Dr. Long permitted himself a faintly cynical smile. "You are the fourth person to-day who has undertaken to explain that," he said coldly.

"Man is ever ready to make capital out of either accident or circumstance," Brown responded calmly. "I know what I am talking about. I have not come here to waste your time. As a lawyer's clerk I know that time is valuable, and——"

"A lawyer's clerk! And you dare to come here and attempt to expound the nature of a new disease! Sir, this is preposterous!"

"But the truth, all the same. Dr. Long, the cause of this deadly disease is dust destruction!"

"Dust destruction?" Dr. Long's eyebrows shot up and then down again. He fixed the unmoved Sam with a deadly stare.

"The cause of the black skies and a clean London is occasioned by the same thing—annihilation of dust," Sam went on steadily. "The trouble has now spread to human beings, who are always, no matter how clean, covered with a certain amount of dust. This dust is disrupting upon their skin, and, when it reaches the mouth and nose, sets up a fatal irritation. That is the explanation."

"Utter rubbish!" Dr. Long snapped hotly. "I have never heard such balderdash in the course of my entire professional career. The disease is simply an advanced form of —er—erysipelas."

"You do well to hesitate before using that word," Sam said grimly. "You know as well as I do, Dr. Long, that this disease is as much apart from erysipelas as the North Pole is from the South. You don't like being taught your job; that's what's the matter with you!"

"How dare you, sir? How dare you? I am sorry, Mr. Brown, but I have no time for you. Good day!" The strong chin projected adamantly.

Sam shrugged. "Very well, then, Dr. Long. But you will be *very* sorry you have no time for me. Good day to you."

FROM THERE Sam went direct to his flat. His wife, curiously greasy and besmudged, with a cretonne apron tied almost painfully round her middle, came shuffling into the little drawing-room as he entered.

"What's the matter, Sam? Why aren't you at the office?"

"Because I've more important things to do, Elsie. Law doesn't interest me when the fate of a planet is at stake. Here I am, with the one cure for a world disease in my very hands—written down on these very papers—and Dr. Long won't listen to me because it looks as though I'm telling him his own job. Bah! The little-mindedness of it all! I think I prejudiced him by telling him I was a lawyer's clerk. Had I given the Russian name of Brownofski, and presented myself with a bushy beard and a fierce compulsion in my eyes, I might have got somewhere with him."

"Well, I told you to stick to law, Sam." Elsie wiped her lard-smeared hands on her apron and thoughtfully sucked a hollow back tooth. "You should have stuck to your affidavits and——"

"Elsie," Sam interrupted her suddenly, "I married you because I loved you—and I still do—but if you keep on harping on what I ought to have done, instead of what I am going to do, I'll hit you over your dense head with your own rolling pin! So think that over. Now get

on with your cooking, and leave me to think."

"Oh, all right—but goodness knows what you're going to think with."

"Something you haven't got, if you must know!" Sam snapped. "Now clear out!"

Elsie slowly obeyed, and Sam did set himself to think—hard. He spent a time gazing out of the window over the lowering roofs of the tenement houses contiguous to his own flat. Then he looked up at the black sky.

"Either a devil or a saint," he whispered. "Either the creator of this trouble sought to improve the world, or else he sought to make it a world of terror. The destruction of dust! Now what could cause that? Vacuum? Not on such a scale. Or tremendous wind pressure? No; that would necessitate a gale, and it has been as still as the grave ever since this business started. Electricity? Hm-m-m, that might be responsible for anything, as so little is really known of its fundamentals. I'll work that out."

After some difficulty he located a writing pad and flung it on the table beneath the electric light—a light that had never been extinguished for nine days except during sleep, for the flat was in the shadow—and set to work to figure the matter out. The moment he began, Sam Brown, the clerk, vanished, and the precise, unerring mind of the true scientist came into being.

By the time Elsie had shuffled in again he had the thing clear in his mind.

"Elsie," he said decisively, "it's disruption. Electrical disruption. Figures prove that it could be done."

"What's electrical dis—dis—whatever you called it?" Elsie inquired.

"Disruption of the atoms, of the molecules, of the very *being* of dust, by some electrical energy."

"Well, now you've found that out, what do you propose doing about it?"

"I'm going to *stop* it!"

"How?"

"By an improved system of my cure for the disease. You see, when the atoms of dust start to disrupt upon a human being, the only thing to stop it is the removal of the dust atoms themselves. I didn't know until I worked it out that it was the *atoms* of dust that were causing the trouble. I merely thought the dust itself was somehow disrupting. The thing to stop the latter condition would be a very powerful but minute electrical vacuum capable of drawing off every particle of dust from a human form. That would stop the disruption spreading until it became fatal. Once it reaches the vital organs nothing can be done about it, of course; the thing to do is to check it in its incipiency.

"But now that I know it is the atoms of dust that are being disrupted—possibly the disintegration of the electrons causing collapse of the atomic structure—I can work even more successfully. The dust atoms that are whole must be *divided* from the disrupting atom areas by a beam or shield of sufficient vibration to prevent the further disruption of atoms continuing. Like an asbestos screen would stop a fire spreading any further. You get the idea? A shield *between* the disrupting sections and the whole sections. And it must be vibration capable of exerting a negative effect upon the exploding atoms. That will require some working out."

"And you gave up a steady job to discover that!" Elsie sighed. "I've not the least idea what you're talk-

ing about, and I'm not altogether sure that you have, either."

Sam chuckled. "Leave it to me, Elsie. You won't regret this day. You'll rejoice in the future that it ever came to be. Now be a good girl and leave me to work in peace."

V.

THE NEXT two days brought trouble and strife in the dustless world. The farmers rose in a body and made a vehement deputation to the government—an urge to make some attempt to remove the conditions that were existing. Plants and crops were commencing to die from the continued lack of moisture. Never a cloud was seen in the sky—it remained coal-black; never any dew or frost. All rivers and brooks were at the lowest ebb for years, and becoming still less.

And now a greater and more serious problem was hovering on the landscape. Water was coming to an end! The chief water office engineers for London and environs reported that the water supply in the reservoirs was dropping lower and lower, and there was not the vaguest chance of rain. Little by little troubled humanity began to realize that it was being forced into a tight corner.

The water shortage was the seed of disaster, creeping over the world with the gradual spreading of the dark areas. More and more remote was becoming the view of a blue sky. Sam Brown, realizing this, worked night and day, that he might have a blue, dusty portion of sky left on which to experiment.

The advance of time brought about water rations. This involved the railways, and they ran on a skeleton service to conserve steam power. Even automobiles were run only occasionally, for the water ration made it almost prohibitive to use water in the radiators. For a time milk and spirits were used, but after a while, with the slow dying of cattle, even this ceased.

So desperate was the position becoming, a conference of the world's governments was convened to review the situation. It was at best a pretty absurd idea, with the cancer now so far advanced, but public force demands action. The meeting, naturally, came to nothing. Nobody could explain the cause of the trouble, and nobody knew how to stop it. The idea of consulting some of the great scientists and electricians never seemed to occur to these political geniuses. Probably the idea was as far from their minds as the thought of Sam Brown having the key to the problem in his hands.

For he most undoubtedly had.

So, very gradually, utter and complete catastrophe began to make itself felt. In all countries where the dark areas were at their worst, trouble was rife. Death, famine, and pestilence was the order. Cattle, plants, trees, the very grass was shriveling, warped and withered under the black, star-and-sun-ridden sky. At night there was no change, save for the fact that the sun vanished to give place to a steely moon, and strange, hitherto unknown constellations gleamed forth from various quarters of the heavens.

Presently, efforts were made to filter the oceans, but so complicated was the task, and so short the water to give to the workers, that the idea fizzled out. To supply the world with filtered sea water became a stillborn idea on the threshold of impending death.

London, New York, Berlin, Paris, Brussels, Vienna—all were no longer cities of business. They

were cities of thirst and misery, of pestilence and incurable disease. And yet everything, by grim irony, was as bright and clean as though washed with flowing streams. Nowhere a speck of dust—and nowhere a drop of water!

Only a track of five hundred miles of blue sky now remained, and this had its center over the plains of Central Russia—the one point in the world where the atomic disruption had not yet reached, where the consummation of dust destruction still hung fire.

But minute by minute that stretch was narrowing; minute by minute the sky of man was melting away.

IT WAS at this point in the tragic history of stopping dust that Sam Brown completed his invention. It was a brilliant piece of work, but only his eyes admitted the fact. To his wife it was a cumbersome affair of boxes and dials that consumed a great deal of privately generated electricity to keep it going—for the ordinary current had long since ceased, owing to failure of water energy.

"My figures prove that it works, Elsie," Sam said. "The only way I can get help is by getting somebody to finance me to Central Russia where the remaining path of blue sky exists. If that gap vanishes, I'm powerless! All dust will be gone and I can't separate the normal from the explosive. I'm going to the government—to Downing Street—right away."

"Downing Street?" his wife echoed.

"Yes, and if I don't come back, don't worry. I haven't a moment to lose: I'll return when my work is ended. Now be a good sort and help me pack these things up."

At Downing Street, Sam was listened to attentively, mainly because of his earnestness, his apparatus, and his perfectly logical reasoning. The chairman of the meeting, at Sam's request, sent for an electrical expert from Greenwich, and this individual, after checking up Brown's figures, sat in awed silence for a while.

"Mr. Brown, it's a masterpiece!" he declared at last. "If the cause of the disruption is what you think it is, then undoubtedly this machine will stop it. I——"

He paused, and the chairman frowned as a clerk entered, bearing a card.

"All right," the chairman growled. "Show him in, please."

A tall man with bushy eyebrows entered and bowed stiffly.

"Your mission is urgent, Dr. Long?" the chairman asked. "I am much occupied."

"My mission is a matter of life and death. People are dying by hundreds. It is essential that something be done. Everybody must help in this crisis. I wish you to have the government issue an order that all houses are to be opened up for public service—as hospitals. I seek your most earnest coöperation, and——"

Dr. Long paused and stared hard at Sam, who had just raised his face from his notes.

"Mr. Brown!" he ejaculated. "You!"

"Who else?" Sam inquired pleasantly. "But don't let me interrupt you, doctor."

"I've been searching all over London for you," Long said intensely, clutching the unmoved Sam's arm. "You never left your address when you visited me. That cure of yours! We are ready to try it! Ready to do anything to try to stop this malady——"

Sam shrugged. "I have had too much important business elsewhere recently to try and interest other dolts in my antidote for the malady," he remarked coldly. "Here are the papers—take them and perhaps they'll help you to learn that nobody is ever too clever to learn."

Long almost snatched the papers and raced from the room.

"Mr. Brown," the chairman remarked, "it indeed seems as though you are going to be our savior. We will do anything you wish; even if you do not succeed it cannot make things any worse. What are your orders?"

"The fastest possible airplane to Central Russia. I require several trained electric experts, and a good pilot who knows his way to the one remaining fragment of blue sky by the shortest route. That is all."

"It shall be done immediately, Mr. Brown."

SO IT CAME about that when the last stretch of blue sky in the entire world had shrunk to only ten miles in width, Sam Brown set up his apparatus among the barren hills and plains of Central Russia, amid cutting winds and bitter cold, surrounded by his little group of picked experts, two high-powered airplanes, and the intensely anxious government representative.

"If my theories are correct, the vibration energy from this instrument of mine should give a fan-shaped extension of vibration upward to a fourteen-mile limit," Brown said. "If we calculate the velocity of the disrupting vibration at 180 frequencies—and that is about what I think it is—it stands to reason that the frequency of my 'curtain,' working transverse to the disrupting energy, and having a frequency of over 2000, will block the path of the disrupting atoms and save that bit of normal sky which is left. After that, when the last of the disrupting atoms on the disruptive side of my screen have exploded, we can remove the shield, and very gradually the dust will again spread and multiply from that blueness, and disseminate throughout the world again. We will build fires, make great smoke columns, do hundreds of things to make a dust.

"Now, are we ready?"

The instruments were set up in their predetermined positions, and for a time everything was strain and anxiety. Sam flitted about in his huge overcoat like some goblin, peering at this and inspecting that until at last he raised his hand and gave the signal.

Sam Brown's apparatus immediately worked, and a pinkish screen spread outward and upward toward the blue sky that remained, its edges sharply notched out with the encroaching black.

In utter silence the watchers stared upward; then with a bitter oath Sam tore off his hat and flung it on the iron-hard ground.

"Failed!" he groaned hoarsely. "Look! The black is still spreading! My judgment has been at fault!"

"But your figures—your calculations!" the electrical expert protested.

"I know that, but——"

Brown stopped dead; then suddenly he snapped his fingers.

"Got it! Whatever is causing the disruption is *still working*, and it is stronger than my apparatus. I underestimated its power."

He looked round on his silent colleagues.

"Gentlemen, we have about twenty-four hours in which to locate the instrument that is causing

the damage, and get back here. What are we to do?"

The engineers scratched their heads, the government representative stroked his chin, and two plane pilots fingered their coat belts. And above the blackness encroached a trifle further through the pink screen.

"We have not the time," the government expert said at last. "We have not the time."

BACK IN LONDON, however, certain curious events were taking place.

At the house of the late Professor Renhard, a wild-eyed, unshaven individual was creeping down the stairs in utter silence. He crept down the hall and opened the front door. Then, like some hunted animal, he descended to the street—a street lit by the sun in the black sky; a street devoid of traffic, where the corpses of dogs and cats lay scattered here and there.

"Destruction! Death!" Gaston murmured. "Because I couldn't stop the machine! I cannot stand it any longer. I must find Anderson! Do you hear, *I must find Anderson!*" he shouted to the black, starry skies, and wandered through the inky shadows, only one thought in his burning brain, tottering on the brink of insanity through lack of water, and a nursed revenge.

Tattered and unkempt, he drifted through the streets, halting ever and again at a despairing shout, slinking into the pitchy darkness as a huddled form would slink past him like an animal in the gloom.

Fear, darkness, and death. The three grim ghouls stalked through all the cities of the world.

At the gates of the asylum where he knew Anderson was imprisoned, Gaston collapsed. He was carried inside by attendants, into the main office.

"Anderson!" he muttered, clutching the coat lapel of the supervising officer. "I must see him! Let him free! *Set him free!* He is not mad; he is the only man who really knows how to stop this world disaster—how to take away this black sky. I got him in here by a trick. For God's sake, let him out!"

"We can't take your word for it," said the officer stolidly. "There are many formalities to be gone through."

Gaston sat up and looked at the officials with burning eyes. Then suddenly he whipped out a loaded revolver from his hip pocket. "Will you do as I say or not?" he demanded thickly. "Hurry, you idiots! There'll be no red tape this time—just action!"

Other officials appeared, but they hesitated at the vision of Gaston's blazing eyes and the revolver. Holding them at bay, dodging about with superhuman agility, he circumvented their every move, until at last he had forced them into the main corridor of cells.

"Get busy!" he commanded; and the wardens, all weakened by the strain of recent events, and their own torturing thirst, obeyed—obeyed with a weakness which certainly would never have obtained under normal circumstances. Down the passage a cell door opened and Anderson came staggering out, gaunt, hollow-eyed and bearded.

"Gaston!" he ejaculated hoarsely.

"Yes, it's me, Anderson. I've done irreparable damage, and this is a slight effort to atone for it. That damnable vibrator has jammed—is running perpetually on its own power. It hasn't a water generator, or else it would have stopped long ago. For God's sake, stop it!"

Anderson clutched the ex-servant's shoulder. "But even if I stop it now, the atomic disruption will go on!"

Gaston nodded weakly. "True. But when the last atom of dust has exploded, there will be no more disruptions if that instrument is shut off. Dust will gather again and settle, and the world of men will return. Go on, Anderson, do it—save the world of the future at least. I'm—done!" And with the words Gaston collapsed to the floor.

"You're not leaving here; we must have proof of your sanity first," snapped the supervisor.

"Proof be damned!" Anderson snarled, swinging round on him. "I'll give you a proof such as no man has ever had before. Come with me—give me this one chance. Bring strait-jackets, guns, revolvers—anything else you like, and if you're not satisfied when I've finished, you can lock me up for life. Now come on."

And not ten minutes later a powerful car swept out of the asylum drive toward the abode of the late Professor Renhard—the man who had stopped the dust.

"THE BLACKNESS has ceased!" Sam Brown exclaimed suddenly, pointing upward. "We win, my friends! We win! See—the blue is spreading very slowly—already the dust is spreading outward—giving us back our blue sky—our world of men!"

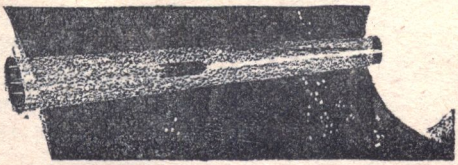
In silence the others looked upward, all unaware that at that identical moment in London Dr. Anderson had stopped the outflow of power from the vibrator. Instantly Sam's counteracter was able to exert to its full effect.

"Yes—we win!" Sam said again, in a voice of triumph.

And those were the last words he ever uttered.

For, quite abruptly, as the blueness began to spread, it seemed as though the pink screen suddenly warped and bent downward. There came a blinding blue flash from the instruments and a terrific explosion that tore up the ground for a mile in every direction. Men, apparatus, planes, instruments—all vanished in fragments—but the blue sky still spread, bringing back normalcy to a tortured world.

For with all his careful calculations, with all the careful checking of his figures, Sam Brown had forgotten one thing. The hurling forth of the negative power to stop the explosion of atoms would entail a recoil thousands of times greater than that of firing a shell from a big gun. Hence the recoil had compressed itself into the useless confines of the instruments, and blown them—and the men—to fragments.



BLACK DEATH

An experiment which proves that man advances rapidly

by HENRY J. KOSTKOS

A FRIGHTENED sob escaped from the girl as the old man lowered himself wearily into the plate-glass casket. "I am so afraid, father," she whispered. "Suppose that we find ourselves unable to awaken you?"

"How many times have I proved to you that my experiment cannot fail?" Doctor DuPrey's voice was kindly, although tinged with impatience. "You have worked with me long enough to know that I exercise the greatest care to avoid any unhappy results. Now, Miriam, you must have faith in your father, just as these gentlemen here, my colleagues, have." Doctor DuPrey sat upright on the cushions in the casket and turned hopefully toward the four scientists who fidgeted restlessly on their laboratory stools.

Hal Godfrey, who had been busily engaged in the laboratory making last-minute preparations, walked over and placed a consoling hand on the girl's shoulder. Godfrey was DuPrey's protégé; he had taken post-graduate work in bacteriology under the doctor and was present to assist him in conducting his greatest and probably most dangerous experiment.

"I can assure you, Miriam, that while he is undergoing suspended animation, Doctor DuPrey will at all times be entirely conscious of what is happening in his laboratory, and he will be under our control constantly. Why, you yourself admitted only yesterday that the experiment is absolutely safe. And you wouldn't want the public to think that the most famous girl bacteriologist doubts her own conclusions?" He smiled at her warmly, and she responded with a wan smile that failed to bring color to her pale cheeks.

"It isn't that I doubt father, or you, or myself, but, Hal, when it is one of your own—— I didn't mind a bit working on guinea pigs, nor on those poor souls who are lying in the isolation ward of the hospital or," she could not suppress a slight shudder, "even on those cadavers, but this is different——"

The girl avoided his direct gaze as she bent her head and aimlessly picked a piece of filter paper into tiny pieces. Hal could not help noticing that Miriam was restless and more nervous than the occasion demanded. And her face now flushed with a blood-red color that was unnatural to her.

Hal picked up a helmet of gleaming metal, from which emerged many tubes and wires, and placed it carefully on Doctor DuPrey's head. Next he strapped the man's legs and arms with webbed bands that had been attached to the sides and the bottom of the glass casket. The old bacteriologist was breathing deeply; he closed his eyes as if in sleep. Godfrey examined the tubes and

Illustrated by Paul Orban

He stopped abruptly as Miriam swayed and fell to the floor in a crumpled heap!

wires that ran through the side of the casket to a series of valves and a group of switches on a control board. He turned the controls and watched the dials of the meters as they began to register.

He called to the watching scientists to help place the heavy glass lid on the casket, and by screwing down on the wing bolts they sealed it hermetically, whereupon the vacuum pump began rapidly to exhaust the air. As he worked, Hal explained in a lecture-room voice the purpose and the technique of the experiment.

"As you gentlemen know, Doctor DuPrey has devoted most of his life to research work on pathogenic microörganisms, having for his ultimate purpose the destruction of bacteria that produce diseases in man and animals. It was my good fortune to have become associated with him two years ago, just as he was on the verge of his greatest dis-

covery, the results of which are now to be demonstrated."

The vacuum pump had stopped working, and the white-tiled laboratory was silent except for the throbbing of the artificial breathing apparatus that maintained the small supply of oxygen needed by Doctor DuPrey while under suspended animation.

"You have been mystified by this glass casket," Hal continued. "It is simply a device which will permit Doctor DuPrey's body to remain undisturbed while his brain and nervous system, in other words, his disembodied energy, leaves and flows out into the antitoxin that we bring to bear against the bacteria that are to be destroyed."

AS THE FOUR scientists listened impassively, Godfrey opened the doors of the copper-lined incubator to remove an Erlenmeyer flask and hold it up for their inspection. They saw that the sides of the flask were covered with a granular deposit from which delicate stalactite-like growths hung down into the culture fluid.

"This is a culture of bacillus pestis, the ætiological factor of plague, the terrible black death which swept over Europe during the fourteenth century, killing twenty-five million people, and which has taken toll of countless millions before and since.

"Now let us take a look at these bacteria to see how much life there is in them."

He transferred a drop of the culture medium to a hollow slide and placed it under the microscope. Miriam adjusted the instrument and brought into view thousands of wriggling, red-shaped creatures. She was entirely familiar with these bacilli from having observed them constantly during the past week.

In fact only two days before, she had the fright of her life. A test tube in which she had isolated a culture knocked against a piece of apparatus and broke. Although she snatched her hand away instantly some drops of the culture medium had spattered on it. She immediately scoured her hands with germicide and hoped that none of the tiny microörganisms had penetrated the slight cut made by the broken glass.

The four scientists in turn peered through the microscope and were satisfied with the liveliness of the tiny bacteria that swam across their field of vision.

"Now we come to the real problem. How can we destroy this and the thousands of other forms of bacteria that are responsible for the ills of mankind? As you know there are numerous agencies which are used in sterilizing and disinfecting cultures, but these methods are effective only after the organisms have been isolated, that is, after they have been removed from the body. The use of light and heat and chemical agents destroys bacteria, but it is obvious that these agents cannot be introduced into the blood stream nor made to penetrate the tissues of the patient. Now if we had only some means of intelligently directing an invading army of microscopic creatures equipped for physical or chemical warfare, we could inject them into the blood stream and kill off these harmful little bugs."

The four scientists smiled incredulously, then flushed with anger. Was this to be a hoax? It was true that the professional standing of Doctor DuPrey was unassailable, but how about this young assistant of his?

"Now look here, Godfrey," Simon Kendall, dean of the Lister Medical School, pointed a long, crooked fin-

ger at the young man, "we did not come here to be humbugged. Are you in earnest about this experiment and do you know what you are doing?" Kendall thrust his leathery face close to Godfrey's, but the young man did not flinch. Instead, he shrugged his shoulders carelessly and turned his attention to his apparatus.

"If you gentlemen would favor us by leaving, we should be better able to continue with our work. The nature of our task is so delicate that we cannot risk failure through unstrung temperaments." Godfrey delivered this ultimatum in an even voice that was devoid of feeling.

The four men looked at one another in surprise. Why, the young whippersnapper, who was he to dare address them in that insulting manner! They, the foremost bacteriologists of the western world. Then Kendall eased the situation. He stroked his white Vandyke beard thoughtfully and the ripples broke out on his face.

"If it's satisfactory to you, young man, we will stay," he declared positively. "You have the courage of your convictions and we are willing to be shown. Proceed!"

HAL TRIED to assume the nonchalant attitude that he knew Doctor DuPrey would have manifested in the circumstances, but his boyish impetuousness and sense of humor took possession of him, and he grinned as he responded with a very unprofessional, "O. K., boys," and continued his explanation.

"For ten years Doctor DuPrey has sought a means of personally combating these microscopic bits of life. When I say personally, I mean just that. Gentlemen," Hal's heart was pounding heavily in his excitement, "while the doctor's body is lying in there, his other self, reduced to infinitesimal size, to pure energy, will be directing a host of creatures that are in the antitoxin in this tube." He held up a test tube containing a purple liquid. "Now here is the important point—each of these animalculæ is able to emit a tiny but intensive phosphorescent glow, somewhat like the firefly. That is the weapon which kills the bacteria."

He paused eagerly to scan the faces of the four men. He was relieved to see that every trace of skepticism seemed to have been erased from their features. They were hanging intently upon his words.

"However, these troops of ours, while they are fearless and deadly fighters, are entirely lacking in intelligence. They need a leader to direct them against the enemy, otherwise they would destroy the useful organisms and even the tissues of the body. And, as I said before, that leader, that directing intelligence, will, in this instance, be the brain of Doctor DuPrey."

Again the young man paused.

Miriam glanced tremulously toward the still figure in the glass casket. She heard Hal's voice, as if from afar, while pains were shooting through her body and she was alternately hot and cold. She took a grip upon herself; she must not let herself go that way, at least not until she knew that her father had been safely revived from his sleep.

"Now we are ready to send this army, directed by Doctor DuPrey, against these deadly bacilli of the black death that I have removed from the incubator. We will, from time to time, shunt some of the organisms from the apparatus onto the stage of the microscope to observe their vitality. When they have

all been destroyed, we will awaken the doctor."

Simon Kendall was following Hal's words intently, and when the young man finished he asked: "How soon will it be before it is possible to try your bacteria-destroying experiment on a human case?"

Hal appeared a bit startled. "That I cannot say, for, you see, it still involves a considerable amount of danger. Not to the patient, but to the controlling brain. Here," he pointed to his apparatus, "we have a simple circuit through which Doctor DuPrey's directive forces can flow without confusion, but once they are introduced into the complex arterial system of the human body we are not sure that they can ever find their way out. It might take another year, perhaps longer, to develop that stage of the experiment——"

He stopped abruptly, as Miriam swayed and fell to the floor in a crumpled heap.

WHEN THE glass lid of the casket grated into place, Doctor DuPrey closed his eyes contentedly as if he had finished a long day's work and was taking a well-earned rest. What his sensations would be on the strange journey that he was about to undertake he could not even surmise. As the air was being exhausted from his hermetically sealed chamber, he began to breathe the oxygen and argun-vita-thusol mixture that was to cause his body to lie dormant while his energy forces would be freed.

What if the body and soul could not be synthesized again?

For a moment he was lost in a feeling of wild panic; he tried to rise, but the straps held him so securely that he could not do more than twitch an eyelid. Then a sensation of repose stole over him, much like the time he took gas in a dentist's chair, yet he remained entirely conscious of everything that was going on outside in the laboratory.

He saw his young protégé lecturing to the four scientists, saw his daughter standing aside in deference to the men. He found that he could not keep his eyes from her. She seemed so delicate, yet beautiful with a frail beauty. There was that flush of girlhood on her face which he had always remarked on the face of his wife Margaret when they were young together. Now she was gone, perhaps he, too, was soon to follow. He caught Miriam's eyes as she turned toward his casket, pleading, looking to him for aid. Her body swayed; she seemed to be in distress. Why? he wondered. Was she worried about him? He wished that he knew.

Then things began to get more hazy, and his head was throbbing painfully. He could no longer see the laboratory, nor the four scientists, nor Hal Godfrey, nor Miriam.

THE DOCTOR found himself in a red tunnel carried along swiftly by a grayish fluid. From time to time a large red creature or a more gigantic white body collided violently with him and tumbled him over. He had the horrible feeling of being lost in a nightmare. The tunnel was strange to him, like a huge water main, yet it was composed of some substance softer than metal, a substance that pulsated regularly as the gray fluid and its red-and-white cargo coursed swiftly through it. He thought it strange that he could not see his own body, could not determine its shape. But he had command of all his senses. He could hear, see, and feel.

There were other shapes, too.

Horrible-looking crooked corkscrews of gray matter that twisted past him, their long tentacles dangling and whipping at him through the fluid. Then, like an avalanche, thousands of black capsule-shaped monsters descended upon him, crushing him under with their weight. He looked up to see their swiftly moving forms being carried along in the stream.

While he was lying thus he had time to think and puzzle this thing out. Slowly his mind began to function, and he could bring his reasoning faculties to bear upon the situation. He recalled what he had seen when he peered through a microscope at a drop of human blood taken from a diseased patient. There were jagged round shapes, the red blood corpuscles; huge white shapes, the white corpuscles; the corkscrew shapes, spirilli bacteria; and the straight capsule-shaped ones, bacilli.

Yes; there was no doubt about it. He was in the blood stream of a giant. How he came to be here he could not tell, nor could he surmise for what reason.

The army of bacilli had passed by, and he arose. After being bowled over a number of times by the red-and-white corpuscles he learned how to avoid these awkward but harmless creatures. And by clinging to the corrugations of the tunnel wall it was possible to retard or entirely stop his swift journey through the artery. After a time he even enjoyed the sensation of drifting through the blackness, deep within the body of the giant, to emerge into a pink daylight when the tunnel approached the surface of the skin. He felt that such an existence would be a very pleasant one indeed were it not for those treacherous spiral and rod-shaped creatures with their ever-searching tentacles.

He was surprised at the possibility for adaptation shown by his body, the very fact that it was able to exist in an environment so foreign to it. Yet he did not stop to philosophize over-much, taking almost everything for granted. But there was one thing that puzzled him: Why was he here? He was positive that there was some definite purpose, some very vital reason for his being in the blood stream of this giant. Think as he would the answer did not reveal itself.

In time he was able to forecast with definite certainty his itinerary. He could predict when he was about to reach the depths where the pitch blackness was illuminated only by a faint phosphorescent glow radiating from some of the creatures; and he could tell in advance when he was about to be carried out into the pleasant pinkish light where existence seemed infinitely brighter and more pleasant. Then periodically he would be shot from the end of the tunnel and flung into chambers so vast that he hadn't the least conception where their boundaries were. Even in the darkness he could distinguish a difference in the coloring within these chambers. One was dark red and the other blue. No doubt about it; they were the ventricle and the auricle chambers of the giant's heart.

From time to time fragments of red-and-white corpuscles as well as bits of torn white-and-pink tissue floated by. Gradually, yet he could not help noticing, the number of the capsule-shaped black bacilli kept increasing, until they entirely dominated the blood stream. Right before him he saw the elemental struggle in which swarms of bacilli attacked the corpuscles and savagely tore them to pieces. And he himself was brought to the realization

that he was not immune from the ravages of these terrible creatures.

It was while he was clinging desperately to the walls of the tunnel, watching the uneven struggle, that a chain of three horrible black monsters bore down upon him, their short tentacles reaching out to tear him from his hold. He tried to retreat, but found his escape cut off by the swarming mass of bacilli. There was but one thing to do. In sheer desperation he launched himself against the wicked-looking chain. Upon impact their black soft bodies enmeshed him, their tentacles lashed out wildly as if to flay him to death. Not till then did he realize the weapons he had at his command, long powerful arms equipped with fingers as strong as steel pincers, with which he tore into the gelatinous bodies of his adversaries.

"I must not let myself be beaten, I must not," he kept repeating to himself, each time lunging forward and tearing huge chunks from the demonic bodies. Finally he penetrated through the cystlike membrane that protected the vital nucleus. That was the death blow to the bacilli; one after another they released their hold and drifted off lifeless and disfigured in the swiftly moving blood stream. There was a feeling of relief not unmixed with exaltation in having won this gruesome fight, a feeling of security that was soon to be displaced by one of panic.

On his next plunge into the auricle, that vast, boundless chamber of the heart, he was alarmed by the paucity of the red-and-white corpuscles which he had come to look upon as friends and protectors. He tried to cling to something solid to avoid being hurled into that seething cauldron of bacilli. There must have been millions of the horrible black capsules, all intent upon one thing—to seize and destroy every other kind of organism they could find. Fortunately he was washed ashore to a ledge which afforded him a foothold. Here the bacteria were farther apart; they could be encountered singly instead of in chains and clusters. Yet he was far from safe, for every beat of the giant heart pumped a fresh and ever-thickening supply of the horrible creatures into the chamber.

The bacilli swarmed around him, but they had not as yet sensed his presence. He shrank into a recess in the dark wall and scarce dared to breathe. Suddenly a convulsive shiver seized the slowly beating heart and speeded it up until it began pumping at a tremendous rate, acting as if some artificial stimulant had been injected into the giant's veins. The wall against which he crouched in terror shook like a house that was doomed by an earthquake. He clutched wildly at everything that offered a hold, but he lost his footing and was flung into that maelstrom of horror.

With one accord the black creatures pounced upon him. There was no escape. He could deal with the few within reach, tear them into jagged strips of gelatin, but as soon as one was disposed of, a hundred were struggling to take its place. Such an uneven battle could not go on much longer. He was becoming exhausted, his body substance was being torn by the whipping sharpness of a hundred tentacles. Strangely, however, he felt no physical pain, nothing but a great mental anguish that tortured him with the thought that the purpose for which he was sent into the blood stream of this giant was about to be frustrated unless he could free himself from the clutches of these monsters.

ALL THIS while it had been dark within the chamber. Only by means of the faint phosphorescence of his enemies' bodies could he distinguish them. Now suddenly, like the release of a thousand pent-up suns, a brilliant light flooded the chamber. Light in every direction, as far as his dazzled orbs could penetrate. With the coming of light a great change was wrought among the black bacteria. Struck senseless by a new enemy, their tentacles ceased their whipping and fell dormant, their bodies, no longer activated by a nervous system, floated hither and yon with every beat of the heart.

Then Doctor DuPrey saw what had caused the welcome flood of light. A swarm of round creatures, about the size of the red corpuscles, crowded into the chamber, each having within its body a luminous substance, flashing a light a thousand times brighter than that of a firefly.

And coincident with the coming of light he, too, saw the light of reasoning. Now he knew the answer to the question that had puzzled him, knew that he had been sent here for one purpose: to lead these light-bearing creatures in a battle against the enemy, the bacteria of the black death.

The army of light did not pause for long after having vanquished one detachment of its enemy's troops. It sped on in the surging blood stream, seeking other creatures to conquer. Unless he could immediately establish his right to leadership and bring them under control, the bearers of light would be a scourge not only to the harmful bacteria but to the red-and-white corpuscles and even to the walls of the blood vessels. He saw at once that the bearers of light were absolutely devoid of reasoning power. Therefore they needed his generalship. He thought of shouting, but even before the idea fully formed in his consciousness he knew that it would be futile. Speech in this world was impossible. There remained only one chance—the transportation of commands by means of thought waves.

"Gather about me and be ready to obey," he transmitted hopefully, yet fearing that they would be unable to understand him.

There was a surging of the army. Those farthermost moved their flagella in a rowing motion, and their bodies dipped gracefully toward him until he was completely surrounded by a countless multitude. Yet none came too close; they all kept at a respectful distance.

The blood stream carried them swiftly along. Whenever bacteria were overtaken, the rays of light immediately did their deadly work in annihilating them. But at the same time many white-and-red corpuscles also were killed. He told himself that this slaughter must cease; these friendly creatures must not be exposed to the devastating light.

"Lights out," he transmitted frantically, not knowing if his army had the power to obey. Immediately in response the blinding light died down to a faint yellow tinge which was in turn extinguished. The darkness was much easier on his body than that awful glare. Inured as he seemed to be to short flashes of the light, he knew that a sustained exposure would soon devitalize him. Already he was weakened and scarcely able to keep his position at the head of his army.

The rapid pulsations and the heavy pumping of the giant heart which had dislodged him from his niche in the wall of the auricle were becoming more feeble. No longer were he and his army swept at a mad speed through the circulatory system of

the giant. Their pace became sluggish; there were more bacilli choking the passageway, and he had to order an almost steady use of the blinding light rays. The effect of the powerful light on his body wore him down until in his weakened condition he would have gladly sought refuge in a convenient cavity.

Something, however, seemed to tell him that he must not give in; that he must fight to the bitter end. The soul of the giant now seemed very close to him, something very intimate, not like the soul of a strange creature, but more like that of some one he knew and loved dearly.

But though his will was indomitable, his body could not long endure the fearful strain imposed upon it. Its very chemistry was breaking down. There was another army of bacilli coming, an army larger than any of the previous ones. He gave the command, "Light," though he knew that this same light would sear his own body mercilessly. But to his relief the blinding glare of the luminous bodies of his army dimmed suddenly—there was a blessed relief in darkness, even as his senses became clouded simultaneously with his vision, and he drifted into oblivion.

DOCTOR DU PREY awoke to find himself in a white metal bed. He was in a small room having white plastered walls and two windows. The windows, however, did not serve to mitigate the cheerlessness of the room, for they were darkened by drawn shades. Doctor DuPrey felt far from being comfortable; he was weak, horribly weak, as he soon learned when he attempted to arise. His mind was hazy, too, with a thousand nightmares coursing through his brain.

Then he remembered. He had been in the glass casket, undergoing a test of his great experiment. What on earth had happened? Did they disobey his instructions in conducting the experiment? Had he failed? The thought chilled his heart—unthinkable—— But something must have gone wrong, for all the strength had ebbed from his body and he knew that he had been a very sick man. He must find out. He called in a weak, shrill voice.

A uniformed nurse entered almost immediately, but after one glance at him she hurriedly left again. Indignant and perplexed by her indifference, he was about to shout angrily in the general direction of the door when Hal Godfrey and Simon Kendall hurried in.

"Oh, we are so glad, doctor!" Godfrey greeted him anxiously. "Are you feeling all right? I know that you are extremely weak, but is your —can you understand what we are saying? Did the experiment effect your——"

"You should know better than I," Doctor DuPrey broke in testily. "How should a man who has been stripped of his consciousness know how he is, tell me that? Of course I'm all right. Even your blundering could not kill me. Oh, I know that you did something contrary to my orders; don't try to be evasive. Now, tell me about the experiment. Was it successful?"

The doctor's eyes were now pleading. His voice had sunk to a hoarse whisper as if he feared to hear the answer.

Hal's face wreathed into a smile. He took the doctor's hand and stroked it soothingly.

"Tremendously successful, doctor, successful beyond even our wildest dreams!" he enthused.

Simon Kendall grasped the doctor's thin fingers. "Doctor DuPrey,

on behalf of the medical society, and I might even include the civilized and the savage worlds, I want to congratulate you. There is no doubt in my mind and the minds of my colleagues that your method will unquestionably enable us to destroy all pathogenic bacteria and bring about the elimination of disease on this earth."

The doctor sank back on his pillow and closed his eyes happily. Then he turned and looked at his young protégé.

"I am so glad, Hal, so glad for your sake. You have contributed so much. Also Miriam——

"But where is Miriam?" he asked sharply.

"She is on her way here now," Hal assured him. Then he shifted uneasily on his feet. "Doctor, I have a confession to make." And as the doctor looked at him with questioning eyes, he continued uncertainly: "I disobeyed your instructions, as you surmised."

"I did not surmise. I knew it," the doctor snapped. "Why?" he demanded.

Hal took a deep breath. "We began our test on the culture of bacillus pestis as you instructed. But before we could inject the light creatures and transmit the directing force of your brain to guide them, something terrible happened that—that made us—you see, doctor," he floundered weakly, "it was a matter of life or death——" Hal did not know how to continue and sighed with relief at the interruption caused by the entrance of Doctor DuPrey's daughter.

Miriam appeared to be far more healthy now than during that trying ordeal in the laboratory. She seemed rested, and the natural bloom had returned to her cheeks. When he had greeted his daughter, the doctor turned again to Hal.

"Proceed!" he commanded.

"Well, as I was saying, we were forced into trying the experiment on a patient stricken with the black death." Hal delivered this information with a precision prompted by desperation.

Miriam shuddered, but nodded her head to encourage him to continue.

"What?" the doctor shouted, attempting to rise from the bed. "You deliberately disobeyed my instructions? Dared to risk the success of the experiment?"

"It was a matter of life and death, dad," Miriam interposed softly. "Hal had no choice; he had to do something after everything else had failed."

"Who was he—the patient?" Doctor DuPrey demanded.

Miriam looked at him, with tears welling in her eyes. "Dad, it wasn't a he, it was I——"

"You?"

The trembling hands of the doctor reached out to infold his daughter. She dabbed at her cheek with a tiny lace handkerchief and related what had taken place while her father had been unconsciously battling for her life.

"When I broke that test tube containing a culture of bacillus pestis, some of the bacteria must have penetrated through the cut, even though I scoured my hands with a germicide, for the disease struck me down. I felt it coming on while you were preparing for your experiment, but I fought against it—but," she wiped a tear from her cheek, "I went under. Then, after everything else failed, Hal in desperation switched the light cocci and your brain power against the black devils. It almost—took your life, dad, to save mine."

Illustrated by Don Hewitt

REBIRTH

Concluding the story of the building of the new civilization of science

by THOMAS CALVERT McCLARY

UP TO NOW: William Goddard, superscientist of the year 1957, looked on the world of men and found it evil. Before the great world council he pleaded that the governments disarm, abolish poverty, work together harmoniously toward a better, happier life for every man. But the old lawmakers laughed at him, though in their hearts they feared his power, and plotted to have him confined to an asylum. And Goddard, white-hot with fury, told them that, since they were afraid to act, he alone would change the world—give it rebirth.

He would wipe out the memory of every man, woman, and child on earth, though leaving them their native intelligence and instincts. So reborn, through pain and tumult and conflict, they could build the world anew. The weak, the selfish would die—the strong, live.

Perhaps!

Goddard was willing to take the chance.

But he took precautions. One man, a philosopher friend, he sent by his genius into space; made him well-nigh immortal, gave him superpowers of vision, so that he could witness all that passed on earth and, ultimately, return.

Another friend, Eric Petersen, Goddard took with him to his secluded laboratory, whence the magic mirgroid waves would emanate from their generating machine to wipe clean of knowledge the mind of man. And in great vaults beneath, Goddard stored books, films, weapons, food—concentrated knowledge. But only very slowly, as their minds advanced, could they gain entrance to these vaults. Otherwise, after their minds had been washed clear, he and Petersen might find the weapons too soon and perchance kill each other.

Then Goddard started the machine. Over the world the cloud of mirgroids spread—settled down—entered men's minds——

Cataclysm!

Power ran wild. Men forgot all they knew before. Trains collided, generators exploded, energy burst its bonds. Chaos ruled the earth.

In New York City, as everywhere else, lived a race of people with the minds of newborn babes.

They did not know how to eat—drink—walk—keep warm—protect themselves. But their instincts remained.

And so, very slowly, some order came out of confusion. Little tribes formed. Some lived in caves. Some in apartment houses. Some in museums and libraries. Some did not advance this far, and died.

And the cleanest, most intelligent of the tribes was that led by Silas Brent, strong, honest, forthright—in the old days a mighty capitalist,

who had wished for his life to live over again.

He and the few men and women who gathered round him inhabited one floor of an apartment house on Central Park. Pat Murphy was his strong-arm man. Several one-time professors—who bickered as to whether petticoats should be worn around the waist or around the neck —were his "thinkers."

They progressed. They conquered others. They found fire. They found how to keep clean. They investigated—puzzled—learned. Those of them who broke their simple laws were killed. Grunts and gestures passed as speech.

But one woman, the most beautiful, would look on no man. She had been called "Marion"—and she and Goddard had been deeply in love with each other in the old days. Subconsciously, she knew that he would come again.

And then, as the little tribe found their life growing better, happier, their knowledge rapidly increasing —they were attacked!

Thousands of brutal savages—wild men who had not advanced at all—poured down on them, besieged the apartment house!

And Pat Murphy and his huskies were away!

XII.

ACROSS THE PARK, the sun sank red and fiery. Dusk settled over the scene of battle. Night came on.

Brent, old man that he was, felt disgust for the weaklings who ran and hid. Grabbing his favorite sword, he rushed to the defense of the second floor. As he passed the main hall, he saw Eee commanding a few women who lit firebrands and threw them into the howling mob below. Ryan passed him, running for the roof. A few moments later he had dislodged a huge cornice which crashed into the enemy, spreading havoc. But their leader gathered them, brought them back to the attack.

The second floor was in great danger. Brent, taking the defense of a window, saw a cruel visage appear before him. Hideous and bestial, it gleamed in the light of a flare the man carried. Plunging his sword, he felt it push through something soft. The figure leaped back, screaming, to the ground below.

The enemy now had logs and planks against all the second-floor windows. Streaming up like monkeys, they were overpowering the defenders.

There was a roar of hate as Haw sent a plank and four men hurtling backward into the horde. At the same time, Brent saw a husky figure leap through a window, pause to grab up a woman, disappear into the house. Smith was half jerked through a window by a husky arm, saved by Hirsch, who gouged the attacker's eye.

Rapidly it grew dark. Below, Brent saw countless bodies glistening in the flare of torches, their visages fierce and cruel. He struck back many from his window. A club glanced his head. He fell back, conscious, but unable to move. There were many of the enemy in the room now. He could hear the strange cries of others coming from other rooms.

Memory, like a kaleidoscope, gave him pictures from the day he had discovered water. His mind functioned clearly. In a flash, he saw how far above these beings his own clan had progressed, had an idea of how much further they had to go.

For the first time, he had realiza-

tion of the meaning of civilization and how near his own people had come to solving that dim mystery. He saw the defects of his own rule, realized the lack of order and purpose of his government. He wondered how Smith would fare as slave in a tribe that knew no cleanliness. He thought of the two young girls under his protection. He thought of Pat.

Instinctively, he knew consciousness was leaving him. There was a deafening roar of triumph from the enemy. Then a deep, endless hush. He could not see now; he could not hear. His head felt queer. There was a great bright sun in his mind. He could hear his heart beating.

Weird, terrible noises, the deep hush, utterly dead blackness, the impossible burst of sunlight within his head, sinking, then plunging into limitless, fearful space—— Brent lost consciousness.

YET EVEN as his mind dimmed he had a kaleidoscopic flash of mixed scenes and feelings. Eee, her face black from smoke and ash, driving frightened women to split wood, throwing grease-soaked flares and torches from the windows—Haw, choking from smoke, hauling a blazing mattress to the window—Mrs. Cosgrave, naked, screaming wildly, throwing whatever heavy objects came to hand down upon the enemy.

Bravery amongst the women. While men, for the most part, hid in blind fear or stupidly ran to hide valuables.

But there were those whose bravery and loyalty could be counted upon. Diminutive Mr. Smith fighting groggily with a giant twice his size—Hodges hurling glass to break beneath the feet of the enemy—Ryan, streaming with blood, swinging an ax mightily——

Dirty bodies gleaming bronze-red in smoky light—endless columns of the enemy leaping through windows—a savage laughing brutally as he swept up a woman—the stench of the invaders—a giant brown-skinned warrior tearing an antagonist limb from limb—another one plucking the eyes of his fallen adversary, eating them with gusto—torches bobbing, throwing red, ominous shadows upon the walls—the utter lostness of defeat—the terror of that dark void into which he, Brent, was hurtling, mixed with a great feeling of peace that the end had come——

In the street, the enemy leader gave a guttural roar of triumph as one of his men tossed him a woman from a window. His blood beat hot with battle and animal lusts, but craftily he remained upon the ground, fearing an attack from behind that silver grille that had closed so easily and now could not be beaten open.

The leader was a striking figure. He was large and muscular, with a great red gash running across the bronze skin of his naked chest. He carried a knotted club and was clothed only with some furs hanging from a silver belt about his waist. Intelligence, power, alertness, leadership showed from beneath the dirt and beard of his tanned face. He had caught the woman as if she were a chip and now held her under one arm while pointing directions with the other. A grimace of rage crossed his fierce face as he saw a log holding six of his warriors pushed back from the building. He ached to take part in the fight himself. But there was the dangerous grille and the men behind it. Torches and missiles hurled from the building failed to budge him from his stance.

One of his warriors thrust a torch out a fourth-story window, waving it victoriously. Mightily, his tribe joined him in a deep-throated, savage shout of triumph.

It was dark now, light coming only from myriad red-flamed torches, but the leader was pleased with the victory.

From behind the hill, earlier in the day, he had studied these people. They were rich in clothes and caves and food and many things his clan did not possess. They had weapons better than his clubs. Their women were good to look upon. He leered at the one he was holding, tossed her to a warrior, and scrambled up a log into the house. He did not fear an attack from behind that grille now.

Suddenly, his limbs froze in the midst of climbing. Not since a dim, hazy day long, long ago—a day when the world had crashed down and the earth shot up about him—had he felt such fear. Within the building, in the street, action stopped. There was a murmur of consternation. Then complete silence. Besieged beside attacker, enemy beside enemy, leaned curiously from windows, all thoughts of battle forgotten, a great awe upon all.

The sun, brighter than it had ever been before, as large across as two men's lengths, was sitting in the street—was coming closer!

Was attacking them!

Turning and twisting, it seared those within its path, drove them into a huddled mass before the building. Its light was blinding, its heat terrible. A pile of wounded and dead bodies withered into a crisp as the clans saw its ray center. There was a horrible shriek of pain from a wounded warrior who was only partly in its path and could not crawl free.

INSTINCTIVELY, the warriors dropped clubs, fell upon their knees. The enemy leader, his jaws trembling with fear, dropped to the street. Something brushed him as he squatted, swiftly climbed the log, and disappeared within the building. He could not see it well because of the intense light. The silence continued, dead, fearful, mysterious.

Suddenly, from the sky came a terrible noise, striking horror into the bones of warriors. Like the wind, yet not like it, a noise from far places, a voice of unknown things which lurked in space and could not be seen, but might give harm.

Some of Brent's clan heard, amazed. They knew the terrible noise. It came from the animal with many arms that only one of them could make talk. But the sun! How came it here in the middle of the night? It had attacked their enemies. Would it come into the building and attack them, too? Below them they saw its rays turn upon a piece of wood, saw the wood spring into flame. Then the rays dimmed. The terrible noise from the sky ceased.

Pat, roaring with authority, appeared. He was fierce and mad, yet possessed of a dignity and force new to the clan. A great shining sword hung from each of his wrists, and upon his head, held there by a strap, was a leg, standing inverted and upright. It was brown and looked something like the feet they took off at night in the days before they wore out. He carried a long stick with a great colored thing on the end which fluttered in the breeze. Instinctively, he recognized the enemy leader, walked over, and jerked him to his feet.

Crudely, the two talked with sign language. Guttural grunts punctu-

ated their conversation. Once the leader straightened as if about to strike. Pat lifted his banner. Instantly the sun rays became bright again. From the windows and a circle in the street the two clans saw the enemy leader shrink, finally nod his head, admitting defeat.

With swift authority, Pat made his orders clear. Brent's clan forgot fright, mobilized in the lobby, threw wide the silver grille, and drove the enemy, nearly a thousand strong, from upstairs and the street into the spacious cave.

Crowded, frightened, not knowing what to expect, they crouched through the night and waited uneasily. The room grew hot and air bad. They stirred in a mass as if by an instinctive, silent command. Pat, on guard with his clan, felt that the captives were planning a break. He grunted once. Instantly, there was a blast of the fearful noises again, this time right in their midst. Through the grille came the bright rays of the sun, which had set twice already. Its rays were hot and blistered those in its path. It threw the shadow of the terrible thing that made noises onto the wall. It was a huge, strange bat with a human head, and with many arms. The enemy could not see the bat itself, but they saw the shadow and cringed in fear. They accepted defeat after that.

SADNESS FOR THOSE who had died, aches and pains of broken bones and twisted muscles were forgotten. Joy of victory, the excitement of seeing the captured, the mystery of Pat's return and the sun in the middle of the night, made the next morning momentous in the clan's history.

Brent wakened where he had fallen, his head sore, an arm broken. He was curious to learn what had turned the tide of battle, but he saw there was no time for questions. Descending into the hot, fetid lobby, he saw the size and power of the enemy, realized he must deal carefully. He had his great chair and the royal goblet, which had once been a *vase-de-nuit,* and his gold brought to him.

Before the two clans, he presented his favorite sword to Pat and a gold plate to Hitt. Pat strutted in his glory. Then, pausing in the middle of a step, he stopped and pondered. After a moment, without any explanations, he turned and gave the sword to little Gus Shueller. The clan was curious, but learned nothing of the reason. Nor of the mystery of the sun, which now shone in the sky as usual.

Brent gave valuable knives and soft cushions and articles of apparel to those he knew had fought in his defense the night before. He felt shame for the cowardice of his clan, but pride that they were so much more civilized than the enemy, whose bodies reeked with an odor of filth that nauseated him. He had Scappella bring down his animal and show the enemy how it would talk and sing and make strange, beautiful noises when its tongue was changed, its tail twisted, and its teeth pushed. Smith, with swollen head and aching ribs, yet urged that the enemy be immediately killed or bathed. Brent gestured to him to be still.

He made signs at the leader. The leader did not understand very well. Brent had some of the rapidly diminishing canned meat brought down. He gave it to the leader. With the simplest sign language he could think of, he showed that the captives could live on with his clan if they would obey orders. Pat came forward to sign that if this didn't

suit them, he could call down the sun and burn them all up.

The leader ate of the meat and found it good. He was mystified by these people, though. He had expected death. Instead, they gave him meat. These people were fat and rich and untroubled by dirt and running festers. They had good food and shelter much better than the cave he had spent the winter in. They knew a great deal, for they were able to talk among themselves, while his clan had the greatest difficulty expressing thoughts. These men had fine weapons and clothes. Their women were desirable. They commanded the sun to fight for them, and brought strange, screaming, frightening bats, larger than many men, down from the sky. They had queer animals that made marvelous noises. And they wanted his clan! He could not understand it. If he were victor, he would have killed the men and kept the women.

He asked about his women and children, whom he had left across the park. Brent nodded. The leader turned, made the offer clear to his clan. He impressed upon them that if they failed to obey orders, these strange beings would turn the sun upon them. Their faces relaxed. Some smiled. This was better than victory! They lost their fear and looked about curiously. They realized their captors were more intelligent, and they wanted to learn the things their captors knew. They wanted to have the things their captors had. The leader stooped and placed Brent's foot upon his neck.

All the captives were young and strong. They were the remains of many laboring neighborhoods that had escaped the catastrophe. They had lived a hand-to-mouth existence, spent two hard winters, barely clothed, seldom well fed, always cold. None but the hardiest had survived.

With their women and children, the clan numbered almost twenty-five hundred. They were fed and taken to the lake to drink. Pat saw that many of their women were desirable beneath their filth. Mr. Smith pressed his plea for bathing again, and Brent granted the request. But getting them to bathe was another matter. Not even the threat of calling down the sun would overcome their fear of water.

Mrs. Cosgrave, enticing in white nudity, suddenly jumped into a deep spot in the lake and paddled about. Shamed, the enemy leader jumped after her, sure that he was about to die. Sputtering, more with fear than with water, he was surprised to find he could swim. He realized that merely being a captive of these strange people gave him undreamed-of powers! Huskier even than Pat, he scrambled ashore and threw his lieutenants into the lake. After they learned that no harm came to them, they made a game of it. It was good fun throwing frightened beings into the water! Brent noticed that example had a greater effect on these people than on his own. They were ashamed not to do what others did.

WHILE THE CAPTIVES bathed, Pat secretly explained his appearance to Brent. Going with little Gus on the day before the attack, he had found a huge light, like a flashlight only very much larger, in a tremendous cave. It was on wheels, and little Gus had found how to operate it. You simply pushed its one tooth. You could make it shine where you wanted from behind. He had learned it was hot and exhibited a bad burn in proof. Then he found that it had

eyelids. When they were raised, the light still shone, but it was dimmer and no heat came forth.

It had taken them some time to learn how to operate the thing, and it was dark when they started pushing it home. He had found the swords and the banner and the boot he wore strapped on his head in the same cave. Ever fearful that the captured sunlight would go out, he had not let it shine.

As they neared home, he heard sounds of battle. At first, he had wanted to run back to the defense of his clan, but had seen the size of the enemy and realized the uselessness of regular fighting. Hitt suggested burning them with the light. They had not thought of the mysterious scare it would give until they saw the enemy cringe in fear.

As they pushed the light nearer, they threw on the power. It was so bright that it blinded every one temporarily. Hitt ran into the building, found the man who could make the many-armed animal scream, and had taken him to the roof. Fear of the mysterious noises and sun had won the fight. Afraid that the enemy might revolt, Pat had not dared show his discovery to the clan. His huskies had been sworn to secrecy on pain of death, and just before daybreak the light had been pushed back where they found it.

Pat looked at the huskiness of the captives. Now they wanted to be part of the clan. But some day there would be trouble. He saw the men looking with desire on his own clan's women. Then he noted his own men looking with equal desire on the captive women. There would be much trouble. And soon.

Eee came forward at that. She had named the captive leader "Ug" —his one verbal expression—and secretly desired him. If he was to remain a slave, she feared Brent would not let her go to him. She put forward a thought. Let there be exchanges of women among the leaders of both clans, and let the leaders be free men instead of slaves. This would make for peace as the men and women mixed.

Brent and his council thought the idea good. They wondered if the woman the leader would draw would tame him. Eee, with dramatic effect, offered to sacrifice herself for the sake of the clan.

The changing of women took place. There was little discord, the freed captive leaders keeping order in their own ranks. Brent's clan enjoyed the superiority of being able to teach their new mates. Ryan disliked losing his harem, but was promised first choice of future captives. He kept Mrs. Cosgrave because she was the smartest and most useful, in spite of his suspicions of continued infidelity. As that one saw Eee draw the captive leader, she was sorry that Ryan liked her so much.

Ug was nice, now that he was clean.

XIII.

BRENT SPENT much time in thought and sign-language talk with his council that summer. Hodges suggested that they break the captives up and put groups of them to live with old clan members. The plan worked well, each older clansman becoming something of a pedagogue.

There was much interest as the captives illustrated their history in sign language. A strange, exciting history it was to Brent's people, none too clearly told, nor details agreed upon. Brent found some confusions, due to fabrications of the

story-tellers. But most was due to the backward mentality of the clan. There was little sense of time or continuity in their minds.

All remembered suddenly finding themselves terrified by the catastrophe about them. For that period, their experiences were similar to Brent's tribe. They had lived and worked in industrial sections, far to the north of Brent. When intelligence had been reborn, they had found their number to be about five thousand; Ug was their leader. They roamed about, living in strange caves, eating whatever they found. Luckily, during the first winter they had discovered many four-legged things and killed them for food. Once the four-legged things had been known as horses. They had not known the use of knives, and had ripped things with their teeth and hands.

The winter they had spent in a cold place that once had been a large riding academy. The four-legged things were all eaten, finally, and they had had to move on through bitter cold, terrifying white dirt, and water that was hard and had to be sucked instead of drunk. They had fire, for they had found it burning and carried it in a bathtub they had found. They picked up clubs and fought strange clans as they went along. Many of the dead they ate. Some they captured. But their own ranks died off swiftly. They did not eat the bodies that died, instinctively fearful.

Just before they had come far south to the Park, they had fought a large clan, larger than Brent's, and forced it to flee. They had come across hard water. On their way they had seen many things. But food and clothing, the two requisites of life, were scarce. They could not burden themselves carrying other less-useful treasure. Once there had been revolt, and Ug had had to fight to the death the strongest man in the tribe. They had tumbled into a fire, and Ug had lain across a burning log, which gave him the scar across his chest. But he had won the fight with a firebrand by poking out the other's eyes.

Like little children, the captives now turned to learning the things their captors knew. Sometimes there were cublike fights of ill temper, quickly quelled by orders from Pat and Ug. Ug liked bathing and became the champion of Smith's fundamental rule. He liked Pat and gave him fifty of his huskiest and most trustworthy men to enforce order. He liked Eee and spent much time learning the things she taught him, such as how to break open cans and find food, to use knives, to shut and open doors.

On all sides there was the greatest lack of morals, morals never having been established. Occasionally, a man grew angry that his woman was not handy when wanted, and black eyes were forthcoming. But Eee determined to hold Ug against all outsiders. She did so for some time simply by making herself the most attractive of any of the tribe. Once, her monopoly was threatened by Mrs. Cosgrave. Ug was on the verge of succumbing when the woman heard her triplets wailing and flew to their protection. Long after, she carried a suspicious glint in her eye when Eee was in sight. Perhaps she suspected that Eee had pinched the little one to make him howl at just that moment.

BRENT AND HIS clan banded in an instinctive fight against time, a fight to absorb the captives and make them part of the clan before they rebelled. Quarters were

crowded, but Brent feared to let the captives live alone until they showed signs of loyalty. Nobody had ever thought to investigate, but Brent imagined there were many caves in other surrounding rocks.

Just at this time, Hitt discovered an illustrated chart of army organization in the secret cave where the sun was hidden. Brent pondered over the diagram, tried to pick the pictures of soldiers off the paper. They would not come away. Pictures would never come away, and that puzzled him. He could understand the chart, because it had pictures of men in groups—odd-looking individuals, but still recognizable.

Late in the summer he solved the mystery and organized his own clan similarly. It had squads and platoons and companies. Each chief was responsible to the one above him. Many trouble-makers who were made chiefs took their new responsibility very seriously. Order came out of chaos. Brent and Pat felt relief. Ug invited them to his fire for food for the first time. As an afterthought, he invited Ryan, Smith, and Hitt.

The immaculate Mr. Smith had felt his importance diminishing. To the captives he was not the being who had accomplished the mysterious miracle of The Mighty Belch and Magnificent Bubbles. Nor could he duplicate the performance. He did not know how it had come about himself. He was simply the annoying being whose orders were enforced by Pat's huskies.

This was an intolerable situation, driving him to a far, lone expedition, seeking magic. He found it in the form of a queer animal, even queerer than Scappella's, that had hands on its face. It startled the captives into obeying him and admitting that the little man, too, had great powers. Strange birds came forth and sang at his command. To the captives, the mysterious phenomena was akin to Pat's commanding the sun; the giant bat that made hideous noises in their midst. Cleanliness was thereby reëstablished as a religion. Smith was the high priest. The fact was witnessed by his powers over the Sacred Cuckoo Clock.

Great were the powers of their captors!

Hum—she who had been known as "Marion," long ago—with a puzzled, questing expression, spent the days looking closely at the captive men. She felt many, sat beside some, smelled them all. It was as if she was looking for somebody and had forgotten just who. Several times a smile started to spread across her face. But it would disappear before it arrived, and she would look blank and puzzled again. She was beautiful, and many men desired her. But Brent had promised that she could choose her own man. She gave to the clan one of the greatest contributions of civilization—entertainment. She could make her own animal with the row of many teeth make sounds like Scappella's animal. They were not exactly the same, yet the clan realized they spoke the same language. The difference was the same difference as between grunts of two men.

There was one day of great excitement. Pat found a strange beast which shone and had colored teeth and arms. Its eyes glittered. Its legs were round, like the legs of the carts. It would not have been recognized as an animal except for its smell. It was found in a stable. It moved when it was pushed.

Pat had it pushed before the house. As a special treat, he seated

his son on the beast's back. As he leaned over, his elbow touched one of its teeth, and it made a frightened noise. He jumped back instinctively, his arm hitting something else as he did so. The beast growled and started forward. Consternation came over the clan. It was running away with Pat's baby!

Theft! Stealing his child! Death to the rogue!

Seizing an ax, Pat began a running attack upon the thing. It disregarded him and ran faster. Once it lurched, throwing his baby into the air. Pat caught it, handed it to somebody, continued his fight. He hit the monster in the eyes. But it was undefeatable. At last, he hit it in the teeth. There was a blinding blue flash. The clan saw Pat lifted and thrown by some inevitable force. Long hours after, very shaky from electric shock, he was told of how he had killed the beast in a desperate fight and how the beast had thrown blue flame at him. Once, it had been an electric steam roller.

FOR THE FIRST time, the clan began to think. Its leaders had done all thinking until now; the clan had done what was shown it. Now, it began to wonder *why* things were done. One of the slowest-witted of the captives discovered how to use a can opener. This put the entire clan to shame and inaugurated a wave of discovery and study more intense than any before.

Smith, determined to strengthen his importance, spent days of exploration. At last he made a discovery. With glee, he had a long, heavy iron stick carried to the park, while he brought a large box of colored pieces of flesh. Putting the flesh to the end of the stick, he twisted its arms. The flesh filled out into a large, colored bubble. One grew many times larger than the rest, larger than Smith himself. He was holding it against the stick and it was growing and growing when suddenly it tore loose and carried him high up into the air. Jabbering and shouting, hanging on with instinctive fear, his petticoats flying from about his neck, he was carried away and deposited on top of a house—a veritable bird!

He was the new world's first balloonist.

His powers and daring now fully realized by the entire clan, many gathered in front of the house to gaze up at him in awe. Toward sundown, they saw him waving frantically over the edge of the roof, and they all waved back respectfully.

Three days later, Brent sent Pat to find out why Smith was wasting time on top of the strange building. Pat found the little man unconscious from thirst. He had been unable to break through the roof door and gain freedom.

Oddly, there was little exploration. Intensely alert mentally, the clan became physically inactive. Wood for fires was near at hand. With one discovery of a large stock of canned meat, the clan had ample food. Water was in the park. Sand was used to clean cooking plates, and that was near at hand. It was warm and little clothing was needed. No strange clans appeared to disrupt the pleasant life. Occasional small tribes were captured.

Hirsch found a series of children's primers and was engrossed in the study of reading the dead bugs. Already, he knew Pat's animal was a D O G and that they cooked in P A N S. He could pronounce the same words from hearing them on the phonograph, but the connection between speaking and printing he

had not solved. His argument with Professor Hitt as to whether skirts should be worn about neck or waist grew to become a heated clan division. Each had a large following. Hirsch produced illustrations of skirts worn about waists. Hitt came back at him with photos of clerics with skirts hanging from necks and of men in capes and plaids.

Little Gus Shueller, off on one of his perennial scouting trips with Peter Ship, discovered a store full of clothes. Long ago, its automatic shutters had clanged shut as the city shivered and lost its memory. The humans inside had starved to death. Nobody outside had been able to gain entrance. Little Gus, with daring, went in through the coal chute.

For the first time, the entire clan was clothed. Hodges found many top hats, which he hoarded. His old one was little more than a rim. Hitt found two fur-lined foot-warmers, and staggered about wearing one upon each foot, kept on by a string running about his neck. Ryan and Mrs. Ship's man took a fancy to silk and lace underthings, which they wore over other clothes. Scappella invented cradles out of corsets. Thomas Furrell laid aside a supply of fur muffs, which he wore over arms and legs at night. Socks were worn for shoes as long as they lasted. Ug grew disgusted with clothes when he captured his foot in a boot and it refused to let go. Brent laid claim to all bath robes.

Cleanliness was reëstablished with new clothes. Old ones discarded were buried with the garbage. Trousers and skirts were worn indiscriminately by both sexes. Mrs. Cosgrave wore a coat or appeared in voluptuous nudity. Sherman made his first contribution, excepting his good nature and man power, to the clan. He discovered the use of scissors and safety razors. By order of Brent, the entire clan had the hair of their heads clipped short and all bodies shaven. And much vermin passed over the Great Divide.

The one ever-present fear—that the fires would go out—became a reality. A heavy rain put out the fire in the park. Only one fire was kept in the house these warm days, and the same night its keeper fell asleep and it died. Cold food, no heat when needed, damp houses, no light at night—tragedy lay in store!

An expedition to search for fire was being considered when little Gus appeared, waving a burning box in his hands. One of the professors had left a magnifying glass on a window ledge. The sun rays had concentrated, brought flame.

The sun was no longer so warm nor out so long. Brent had an instinctive premonition of winter. But he did not realize why he suddenly became very active. The mayor discovered hammers, nails and saws, and established their uses. Heavy planks were found and placed firmly in the windows of the first, second, and third floors. Windows above that were half boarded, allowing air, but keeping out much rain. Apartments had gathered great filth from the number of inhabitants. They were given another thorough cleaning. Apartment houses next door to Brent's were laid claim to. Most stank with rotted corpses and damp rot. Cleaned, the clan spread out into more spacious quarters.

A large family of cats came as a godsend. They were sent to the storerooms along with Peter Ship's cat to keep out rats. On top of one apartment house there was a large cave, nearly as large as Brent's, with a lake in it. Ug took this for himself. At first, he used the water for

swimming, drinking, and washing. After a time, he found it was not good to drink. There was also an animal like Hum's, but much prettier and with a nicer sound, and an other animal, very much like it, but with more teeth. When kicked, this one had a deep voice. Hum liked it and moved in with Ug.

Eee considered the long walk to their cave and the problem of wood. She decided a supply should be on hand, and Ug so ordered it. Hodges suggested pulling it up by rope. Scappella found the use of pulleys.

Civilization was being reborn.

XIV.

WINTER CAME UPON the clan without warning. Out in the Atlantic, the Gulf Stream suddenly switched its course far to the east. A southerly current, ice cold and carrying huge icebergs down the Atlantic coast, swept in between the warm southern current and the shores. One day was fairly warm. The night was cold, but the following morning warm. In the afternoon dark clouds raced across the sky, a bitter, desolate wind swept down, blanketing the city in a white, dazzling mantle of death. The blizzard lasted for days.

Brent saw the white dirt; saw later that the water had turned hard and cold again. He feared greatly for his clan. A small expedition on its way home with food was lost in the snow, frozen to death. Landscape and landmarks changed in a twinkling. Pat, a few blocks from the house, had difficulty finding his way back. Ug, before he could get back across the park, had a foot half frozen. One of Mrs. Cosgrave's triplets, playing near the window, was covered with drifting snow and died of cold. Hitt, exploring in the cave where the sun was hidden, found his way back only by following one of the pups of Pat's dog which had accompanied him. Haw, arriving late from downtown, had no difficulty finding his way, but his arm was pierced by a falling icicle. The mayor and Scappella were wanted everywhere to fix windows and block them from the storm.

Winter was hardest on the outside workers. Few had even the remains of shoes. Rags about the feet were tried, but they froze and chafed and had to be discarded. Feet were cut and frozen. Gangrene and blood poisoning laid low many of the best men. Wood grew harder to find. It had to be dried before it would burn. Often, logs and planks bearing twice their weight in ice had to be brought home. Sometimes, after long, dreary marches, shoulders aching from the weight of loads, wood turned out to be iron or material that would not burn.

The clan crowded closer together, families doubling up for warmth and comforting nearness. Houses were cold, even with huge fires burning. Pneumonia laid its devastating grip upon the clan, giving birth to misery and fear. Two roving bands of savages were reported, and an entire brick yard was transported to the roof of the house for ammunition. There were daily accidents as workers fell through crusted ice and snow into hidden holes, some never to reappear. Sickness and disease increased their toll; an apartment was set apart for the sick. It was chill and most of them died anyway. At night there was the hair-raising cry of scavenger packs. Mrs. Cosgrave hugged her two remaining babes close to her.

The clan grew bitter and morose. Men became surly. For the first time there was widespread jealousy

of women and fights over trivial affairs. Women now represented about all the wealth and happiness there was.

Food began to run out. Starvation faced the clan, and even with strictest rationing the supply ran lower. Eee found that the dark-brown stones with the pleasant smell could be cooked in water. They were too bitter to eat, but the water was good. It brought warmth. When the stones were cracked or mashed, it was even better. Coffee saved the clan.

Clothing and blankets barely went around, and when large expeditions after food went forth they needed all the covering they could get. One of Pat's huskies froze to death while carrying part of a large log. Another stuck solidly to a steel girder. He died while his comrades looked on. Every expedition left a trail of blood behind it. Hungry, one of the captives killed a cat and ate it. Cats were needed to protect food from rats. The iron discipline of necessity was enforced. The man was killed, his body thrown to the street. The scavenger dogs did not eat that body. There were signs that he had been cut to pieces with knives.

THE BEAUTIFUL GIRL, Hum, and little Gus did more to hold the strained emotions of the clan in check than anything else through that long, cold winter. Nightly, the clan gathered about the big fire in the great hall of Brent's cave. There Hum gave moments of cutting pathos and joy. Her animal made sounds striking taut cords in the human breast, quelling spirits of revolt and battle, giving the savage nature its first realization of something lurking deep within itself, something which said: "Wait, hold yourself, do not kill your friend or steal his food." Little Gus sang songs in the many languages he had learned from Scappella's animal. His voice was clear and mellow, and his martial music gave despondent beings new spirit and the will to go on.

Hum was regarded with eager eyes, her ability to drive away fear raising her importance in this bleak, cold, white world. Three times Ug, and twice Pat, had to answer her shrieks for help as she was being carried off by some admirer.

Ug himself desired her and one evening took her into his arms, his blood pounding hotly against his temples. She did not fight as she had with other men. Yet some finer instinct in Ug made him think better of his act. He looked at Hum, saw her look back, puzzled, then shake her head. Slowly, he put her down.

The urgent need for food and wood led the clan to explore surrounding buildings. Now that he thought of it, Brent was surprised that they had not investigated them before. Most of the caves they found stank with mold, damp, and rot. There were many skeletons and evil-looking rats glared at the intruders as they broke in. One of the men caught a rat. It bit him, and the next day he turned blue, died shrieking in agony.

Peter Ship discovered little spots of color and tubes of other colors. They smelt good, but did not taste well. But he found that when they were wetted, the colors came away and made marks. There were little sticks that made marks, too, and other sticks that had hair growing on their shining heads. And books of funny-looking men which he tried to pick off the pages; but they would not come. He found how to use the paints and paint brushes. Together

with Thomas Furrell, he made sketches and painted in the outlines of the men in the books. The sketches seemed funny to the clan, too. Particularly the one that looked like Pat. Beneath it were little bugs making the line O G R E. In future years he was to spell his name with those bugs.

There were also a great many bottles of brown water. One had a twisted knife in the cork. Scappella learned its use and sampled the contents of the bottle. It burned his throat, but gave him a pleasant sensation. It made him warm. He took the bottles to Brent, who tried them. Eventually, the entire clan was drinking. Hodges alone stopped after the first drink. He did not like the taste of whisky.

The clan had its first drunk.

Everybody except Hodges got plastered. Husky slaves forgot their fear under the stimulus of liquor. There was fighting on every hand. Pat, valiantly protecting his woman at the cost of five broken heads, went down with a broken jaw himself. There was confusion and civil war. Animal instincts, lust, hate held sway. Released emotions sprang forth, the long strain of the cruel winter snapping like an icicle.

Little Gus Shueller pulled the limp form of Eee into a closet and hid her. She had passed out. Mrs. Cosgrave attached herself with drunken voluptuousness to one of the slaves. Eventually she decided she did not like his rough ways and stabbed him with a knife that came to hand.

HODGES WATCHED the orgy grow in heat. He was astounded by the effect the liquor had on them. Brent alone seemed to have control of himself. He had not guzzled so heavily as the rest. Hodges found himself disgusted by the sight. It occurred to him that a continuation of such events would lead to the destruction of the clan.

Hitt had gained strength but was still no match for husky brutes. He was fighting with two slaves over his woman. She stood quietly by, apparently pleased to see beings fighting over her. Hodges broke a bottle over the head of one of Hitt's antagonists. Little Gus, returning from his mission, staggered slightly. He saw Hodges hit a man with a bottle. He liked Hodges. Also, he liked the idea of hitting people with bottles.

Picking up bottles as he went, he sneaked up behind fighting groups and duplicated the gesture. Men sank quietly to the floor. Hodges continued his warfare. He saw his own women being carried away and outdid himself to hit their captors. One he killed. The other carried a raw scar across his forehead for life. Ug battled gloriously with anybody. The floor about him was strewn with blood and bodies. He was having a marvelous time.

The women looked on, pleased with the excitement. Here was primeval lust and right of possession carried to the death!

Suddenly, in the flare of firelight, Ug saw two leering savages leading Hum away. She reeled drunkenly. He forgot the good time he was having. His head cleared of the pleasant fog. With a growl of savage rage, he leaped upon the two, dragging them to the floor, biting one's throat until it gushed warm, red blood, gouging out the other's eyes. Looking about, he saw a brute, larger than himself, attacking Brent. With a single movement, Ug hurled the attacker through a window.

Quickly now he gathered the leaders in a group. Some were so drunk

it took hard slaps to sober them. Ug slapped them instinctively, made signs that they must end the orgy. A mere handful, they faced the snarling packs of lower tribesmen. The fire cast ominous shadows on the walls.

Mr. Smith, looking immaculate amidst the bloody throng, appeared with swords, daggers, and his cuckoo clock. He was very tight and quite unperturbed about the struggle. Ug passed out the weapons. The leaders, quicker and cleverer, managed them well. For a few moments, the stronger slaves resisted. Many got swords themselves. But they used them clumsily. Suddenly, several turned and fled. The rest wavered, followed. The fight was over.

As punishment, the slaves were made to spend the night outside the buildings. They crowded into other caves, but they were damp and cold. Four died from exposure. The rest were thoroughly chastised. For good measure, all women were publicly whipped next morning. Morality, and hypocritical breaking of the moral code, had been established.

All men had displayed valor and could be proud of their actions. They were. Mr. Smith now considered himself on a par with Pat. He had killed one man and hit down many. Hodges was regarded as good for something besides ideas for the first time. Professor Hitt strutted before the women. In spite of the cold, he went without chest covering so as to exhibit his none-too-full biceps.

He caught cold and nearly died as a result.

The entire clan spent a week recuperating from bruises and sickness from the liquor. A slave was found attempting to hide a dirk. He was promptly executed by the now-quite-ferocious Professor Hitt. His body was thrown to the packs of wild dogs along with those killed in the fight.

Brent's first thought, after the affray, had been to throw away the remaining liquor. But it proved to have value. Several colds had been cured. The liquor was locked up and its use prohibited except with Brent's permission. Hodges suggested confiscation of anybody's women who was found drinking. This was a fearful penalty. The women suddenly became very righteous and far more careful not to be caught in occasional wanderings down the primrose path.

THE REST of the winter was of intense privation. There were skirmishes with roving bands. Women were taken captive if desirable.

Eee discovered the comforts of a warm bath in a tub. Snow was melted and heated over the fire. Smith discovered rings of dirt in a tub and enforced a tub-cleaning law. Peter Ship became Silas Brent's page boy, gradually acquiring the art of thought and introspection from the patriarch. He could draw and paint quite well now. Well enough, in fact, to write messages in hieroglyphics.

Little Gus, scouting around the outskirts of a food-hunting party, discovered a marvelous cave. Like the one where he had found the clothes, it was shielded from entrance by iron shutters. The wind had blown snow clear of the sidewalk beside it, and he gained entrance through the coal chute. Inside was a wealth of unknown objects. Little Gus discovered the use of a sled by tripping upon it. The use of skis, snowshoes, and toboggans followed. There were warm

clothes and knives. There were pieces of steel and wood with holes in the steel. But nobody could solve that mystery. Part of the clan moved into the building to protect it against marauders, as its full stock could not be carried away. One of the lower-floor shutters was knocked out with a battering-ram to give entrance and exit.

The discovery of the sleds was of immense significance, a means of transportation through heavy snow. Later, one of the professors was dispatched with a magnifying glass to build a fire for the defenders of the store. In looking for a place to build it, he discovered the furnace. The fire blew up the empty boiler, terrifying the party. But research was now the first law of the clan. Within the year, the professor had discovered the use of a furnace and the difference between hot-air and steam-heat systems. It cost him one arm.

The store contained portable phonographs and records. Brent distributed them among the most intelligent. In the queer boxes that talked and sang, he felt a great mystery would be solved. Bows and arrows were also found. Experimenting, Hodges shot Ug in the seat, to the vast amusement of the clan.

The tribe was dying off from unknown diseases, colds, stomach troubles, and warfare. Food grew harder and harder to find. Poisons killed many. Mustard and water was found to make people vomit and was kept constantly on hand. The importance of labels on boxes, cans, and bottles became more evident. There were spasmodic discoveries of liquor, and trouble resulted. A rule against drinking the contents of any bottle was established. Fights within the clan were definitely prohibited, except fist fights before the assembled tribe. This measure was forced by the size of other tribes seen about. Man power was valuable.

There was a find of flour and oatmeal. Mixed with water, the paste was cooked and became one of the main foods. A large quantity of corn and potatoes was also found. Meat disappeared from the diet.

Pat discovered numbers of emaciated people living in the library. They had small fires in the center of the floor and burned books and wood. Luckily, most of the books they had burned were fiction. He captured the groups, put some to death because of illness, took others to the house which had now become the citadel. Brent himself went to investigate the building where there were so many books.

Long, that day, he sat in contemplation of the queer objects with little bugs all over their insides. There must be some reason for so many. He decided books should be left unharmed. Sherman was installed in the library with a substantial guard to see that there was no further vandalism. With him went two of the professors to make a study of the mystery and attempt to unravel it.

Faced by daily death, starvation, attack, revolt, and freezing, Brent yet found his mind concerned more with the future than the present.

XV.

AS SUDDENLY as it had arrived, winter vanished.

Bringing freshness and hope and joy of living, spring bathed the tired souls and sore bodies of Brent's clan. Teaching brains to coördinate again had not been accomplished without a drain on the spirit. Like a schoolboy after cramming for

exams, the tribe felt dazed and mentally stuffy. Vermin, colds, disease, bad diet, privation, poisoning, the ravages of a hard winter had taken toll. Even with the captured and children, the clan numbered a bare three thousand.

Brent, accompanied by his council, made a tour of his caves and checked his possessions. His people were sick, inside and out. Their eyes had become dull and lusterless, their minds slept, their bodies were covered with sores, and their muscles sagged from malnutrition. Colds, rheumatism, stomach and mouth ills, dirt, and vermin held them in a mental and physical inertia from which they would spring with abrupt madness from time to time—then sink back into protective thoughtlessness. Clothes and covering were practically gone. Food, except for the brown stones that were boiled, and some oatmeal, had run out.

Brent could now calculate in multiples of ten. He had ten fingers and ten toes. He called the clan into the park, reorganizing it in tens. Ten people had one leader. The leader was chosen for his brains and ability to maintain order. There were ten of these groups, and they had one leader. Then there were ten of these, and they had a leader. There were three of the larger groups, Pat heading one, Ug another, Hitt a third. Each leader was given a name in hieroglyphics, Peter Ship and Thomas Furrell drawing them in duplicate so that leaders had one slip by which to know themselves when messages came. There was the council that numbered all the outstanding brains, and beneath that a regular meeting of all leaders established so that complaints and requests could be made.

Brent had worked out the idea of time. Winter, he had seen, was a regular occurrence. There was day and night; there were four seasons. Roughly, he knew the length of days and of seasons. Smith wanted an immediate spring cleaning. Brent considered the matter. Food was scarce, and the people basked in the sun. He decided that they needed a celebration first. Yet the caves were unhealthily filthy, his instinct told him. Well, let that wait.

In four large parties, the clan set forth to find food. They found many cans, but some turned out to be colored stuff, like Peter and Furrell used to make marks. They found much evidence that other large clans had been before them. They dared not venture too far from their citadel.

Enough food was found, however, and for a week the clan played about fires in the park. Brent learned that there was wood and material in near-by houses, and ordered all furniture in their own houses burned for fires. This cleaned the caves of much vermin and disease.

Day and night, fires burned brightly, and the spring festival brought joy. A few babies arrived. Men exchanged women and goods. The first games were held. Fighting for the sheer joy of combat, wrestling, throwing heavy rocks and logs, races, took place. Wagering was invented. Ryan, determined to reinstitute a harem, bet knives, blankets, rugs, mattresses, and other treasure his position had won for him, on his ability at wrestling. He won consistently, finally possessing twenty of the clan's most desirable women.

Ug waited until Ryan stopped challenging, then challenged Ryan. Not for a bet, but for glory. Ten times he threw him. Warriors, see-

ing how badly Ryan was defeated, expected him to be mad. Instead, he smiled at the end of the combat, shared a bit of pickled tongue with Ug. Sportsmanship had appeared. The difference between games and savage warfare was distinguished.

Hum had one of her animals brought to the park and played much music. Little Gus sang; others began to learn words and how to hum tunes. Two drums were discovered, and Gus quickly learned to play them, learned, too, that they sounded better when left beside the fire for a time.

AT THE END of the week, Brent called a halt to play. There was work to be done. The clan was healthier again. It must find more food, a great deal more, so that they would not go hungry again. A large supply of wood must be found. The large roving tribes must be traced and captured if possible. Otherwise they might attack small bands when off on work and expeditions.

Smith had first say on routine. All apartments were completely emptied and cleaned from floors to ceiling. Ladders were discovered and used. Barrels were found and placed upon carts, used to carry water for cleaning. Worn-out clothing supplied rags. Pat's huskies saw that work was done. Then came the day of the spring bath.

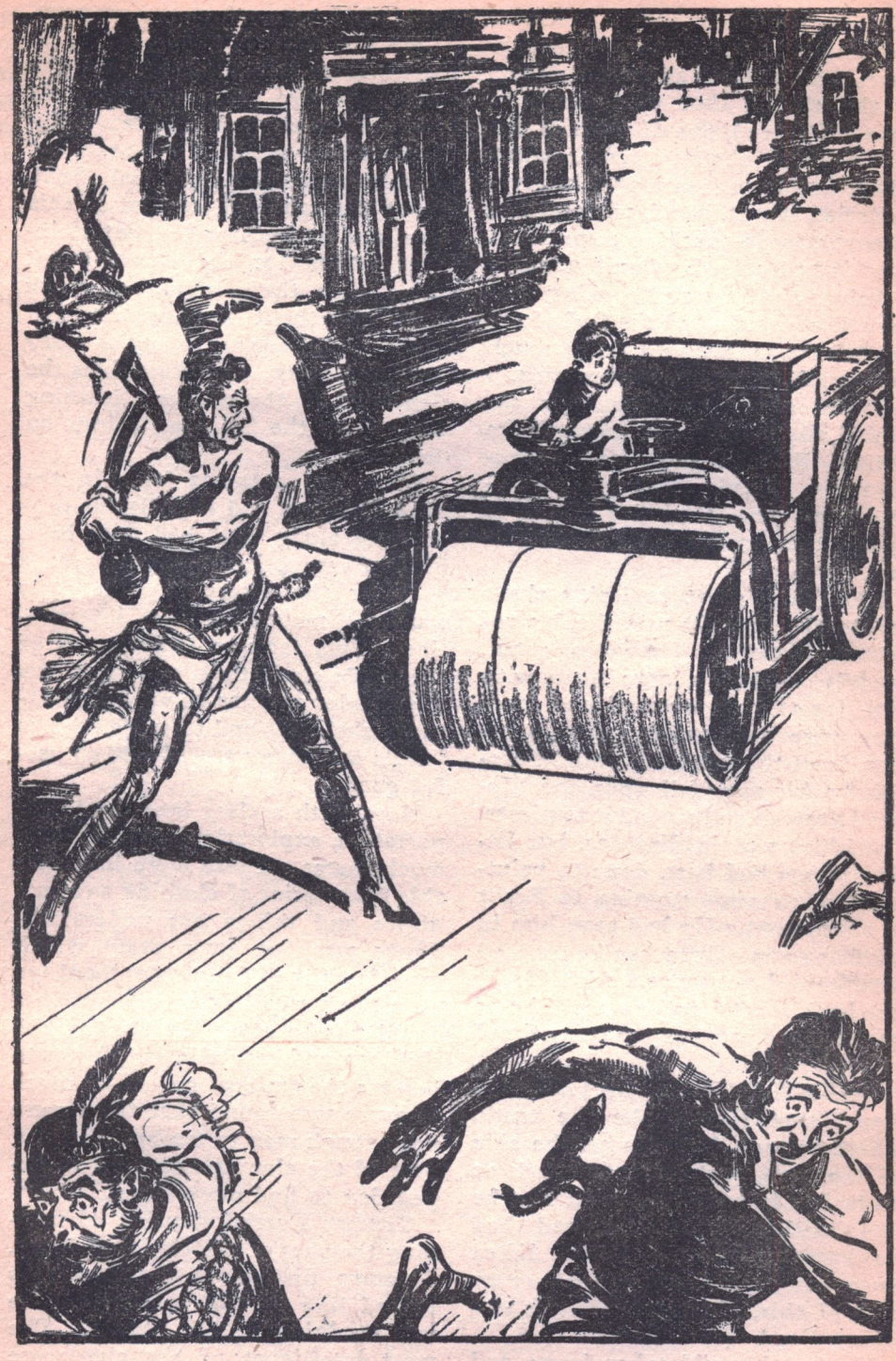
Ug swam clear across the lake. Bathing became a game and an accomplishment. Sherman gave instruction in the use of scissors and razors. The clan shaved. Pat's woman discovered that salt placed upon sores after bathing hurt, but healed sores. The women were made to wash all cloth from clothes to rugs. They rubbed with rocks, and the things were fresher and better afterward. The furs, however, suffered.

The idea of cleaning clothes with rocks gave Ug the thought of cleaning knives and swords the same way. All weapons were brought forth and rubbed until they glittered. It was found that smooth rocks made the swords sharper, but rough rocks spoiled their edges. After the cleaning, the clan felt healthier and better. Only two people were drowned, and they had been sick anyway.

Then began the exciting month of expeditions. All discoveries were brought before Brent. Food, wood, clothing, knives, and swords belonged to the clan as a whole. Brent, Pat, Ug, Ryan, Hitt, and the council took whatever they wanted. The rest of the treasure was then divided by the chief of the expedition and could be traded. Theft and the withholding of treasure was punished immediately with death. In three days, Pat killed seven men. The crime wave ended.

Much treasure was found near at hand. Eventually, Scappella and the mayor came into possession of most mechanical and building devices. There was the exciting discovery of jewelry. Immediately it had great value, although diamonds and rubies were often worth less than glass spangles. Brent brought forth his bag of precious rings and gave them as rewards. Hodges found a gigantic chandelier of cut crystal and had a terrific time with it, for he wore it around his neck. Small supplies of food were found. Wood was brought before the citadel and piled across the street. A Louis XIV bedroom suite burned brightly.

Little Gus and Peter Ship gave an exciting account of great caves underground, but no treasure or use-



Horror gripped them. The strange beast was running away with Pat's son!

ful thing could be found in them. Clothing was found in abundance. There was a dearth of shoes. Many of the things that spat sunshine were discovered, one of them in the hands of a skeleton who, when killed, had been inserting a battery. Batteries, it was found, when put in properly, made sunshine come forth after it had ceased. Great supplies of knives and axes and cooking pots were discovered—and the find of the great carts that would carry much and could be pulled by ten men.

Travel and expedition now extended all the way downtown to the library. Fifth Avenue was the regular route. Exploration parties seldom went more than two blocks to the east or west of the thoroughfare.

Brent had great curiosity about one large cave. It was the Metropolitan Museum. He investigated. Luckily, he had a large force with him, for as they entered one room they were attacked by strange beings from the opposite wall. Ferociously, his men fell upon the life-sized portrait and ripped it to pieces. The place was in disorder, but little damage had been done to paintings. Haw came running to Brent in amazement. He had seen him in another room! But when he touched him, he did not move. Also, Brent was in this room, so how could he be in the other room at the same time?

BRENT INVESTIGATED and found that Haw spoke the truth. There he was, high up on the side of the cave, looking very much as he looked in mirrors, except that he was clothed differently and had no beard. He had himself lifted down and looked long and felt every part of this, his other self. It was astounding!

He had himself taken home and established a guard at the museum. There was evidently nothing to be feared from the strangers on the walls. Some of them were only half there. Even the ones who were bigger than they were did not come out of their surroundings and fight. There was much of interest in this cave, and it became the entertainment center for the clan. Brent found that they could not work steadily without wearing out, and established every tenth day as a day free from work. On these days the clan went to the museum, learning much from the flat dead beings on the walls.

With two outposts both in the same direction and expeditions progressing along what had once been Fifth Avenue, it became necessary to clear the street so that carts could be moved without interruption. This took an entire week of the whole clan's time, and great was the wonder as piles of wreckage exposed skeletons and treasure such as jewels and many truckloads of useful goods.

Now, with a clear lane for transportation, exploration went forward much faster. There were innumerable discoveries of clothing and furniture and things not understood. There was the game store which gave forth such delights as monkeys on a stick, small furry animals that could not be eaten but thrilled the children, and bagatelle, which was to become the national game. So much treasure was found that there were not enough men to transport it, and part of the clan was sent on an expedition to find more slaves.

Thomas Furrell thought of mapping the part of the city they knew. Sherman discovered that the map looked like part of a large one he was studying at the library. The most intelligent of the clan were

shown the two maps and sent forth on a scouting party. They came back with evidence which led Brent to conclude that Sherman had the map of the whole world. It was a street map of Manhattan.

It grew very hot, and still only scanty supplies of food were found. Brent remembered that it had been hot once before and then had turned cold and they could not go far away. He worried about supplies of food for the coming winter. They had captured several hundred slaves, but mostly they were starved and ate much more than the others. It took weeks of feeding to make them useful. He knew that there was water on each side of the land and that there were large caves down by the water. Maybe food would be there.

Explorations were reorganized and concentrated on finding food. There was plenty of everything else, now. More drums were found and used as signals between the outposts and the citadel. Then bells were discovered. They could be heard farther. They became the communication system.

AT DAYLIGHT one morning a wild alarm signal rang forth from the library. The tribe girded on swords, took bows and arrows, with which some of the men had been experimenting, and swept pell-mell out of side streets and the citadel, down the avenue to the library.

A tremendous tribe, larger by far than its own, was attacking the building.

Sherman had barricaded doors and windows, and from an upper floor was throwing firebrands into the howling crowd below.

Ug, watching the scene from a distance with Pat, thought of a plan of attack. The mob besieging the library was unconscious of their arrival. They could sneak around behind it and catch it by surprise. In the meantime, it was necessary to get the mayor into the building to supervise the barricading, which was giving way.

Little Gus, who knew more of the city's underground than any of the others, supplied the information that there was a cave under the library. There might be an entrance through from there. One of the late captives, anxious to show his daring, volunteered to go through the enemy lines and bring back a firebrand.

His presence was unnoticed. In a few minutes he returned. Little Gus led the way, and the mayor, with a party of huskies, disappeared into what had formerly been the crosstown subway.

Pat organized his fighters into groups, gave instructions to each leader. The lust of battle rose in their breasts, and they gripped their weapons tightly as they looked at the superior numbers of the enemy, armed only with clubs and pieces of pipe. Pat sent messengers back for the animal with many arms that made terrible noises, and for the drums. Quickly, silently, the groups moved around through side streets, surrounded the attacking horde.

Pat's warriors numbered perhaps fifteen hundred. The enemy were twice that size. They were not so large, but they were fat and well fed and brave. Some of them paused in their attack upon the library from time to time to fight amongst themselves. Their leader superintended the action of a great heavy battering-ram slung in a tripod. Ug was astounded by this machine of war. Its force was many times greater than a ram in the hands of men. He wondered if they could overcome the superior enemy, saw some of his men cringing in terror.

Pat's signal came. With a wild cry of hate and blood lust, Ug rushed into the midst of the enemy. In his excitement for the battle, he threw away his swords, picked up a club.

The teaching and learning of a year of civilization fell away as he fought amongst the enemy, his face contorted with rage and savage ferocity. He was Ug, the mighty, the strong, the crafty, the man who had fought in fire and led his tribe wandering over great distances! Screaming and fighting, crushing the life from a man as he pushed onward, he headed toward the machine of war and the leader.

XVI.

LONG HOURS the battle raged. Pat's fighters proved their courage against the superior forces of the enemy. Their fighting blood more savage, his men were better hand-to-hand fighters. The arrows from their bows wrought havoc in the enemy ranks.

A motley fight it was—howling, bloodthirsty savages fighting on the very spot that short years before had been the veritable center of civilization, culture, industrial and scientific activity.

The swords and knives of Pat's tribe carried swift death into the enemy ranks. But each assault by the club-weaponed enemy brought dire destruction and fear into his own. The enemy fought systematically, by orders from leaders. Even when Ug's men were making inroads upon one flank, a group of the enemy continued to operate the battering machine, undistracted by the fighting at their back. Around the enemy leader formed a V-shaped wedge of fighters which moved about at his command, flying into the thick of Pat's unorganized ranks, its front rows filled from behind as soon as warriors dropped. The flying wedge was impregnable, killing and retreating before Pat or Ug could organize a counter-attack. It fought without the ferociousness of Pat's tribe. But it fought as a unit.

The crisis in the battle came. Pat's warriors wavered, turned, broke in flight, leaving him with only a handful of men in the midst of the enemy wedge. Ug, surrounded by a corner of the wedge, fighting with bare hands and a huge club atop a pile of dead and wounded, had forgotten leadership in the glory of primeval combat. Suddenly he saw his men fall back, saw Pat sorely pressed by the wedge. Ug's first reaction was rage that his own men had deserted. He started to Pat's aid, forgetful of all except his own strength and valor.

As he fought a path to Pat's side, something tugged within his head. Forces of civilization and learning battled native instinct. In the act of cracking an enemy's skull, he began to think. Not only his own life and Pat's were endangered, but the entire clan—the clan which Brent and Pat, and more lately himself, had struggled to teach and build and make strong! He had his first abstract thought. This was not merely the defeat of a few beings, of himself and his slaves. This was the defeat of something intangible, something tremendous, which they were struggling toward but could not yet realize.

Instinct told him to drive toward the enemy leader, to rend the opposing strong man joint from joint. Thought told him to wait, to organize his own forces. Not superior force alone was defeating his tribe. It was the order of that flying wedge. Changing his course, he

fought his way to the rear of his breaking ranks, found the men with drums and the one with the bagpipe, the gigantic bat that had once awed him into submissiveness. He ordered them to make noise.

With a throaty roar, he drove his warriors back into the fight. Ripping, hitting, clubbing, killing, he drove them into a solid pack, the hindmost forcing the retreating front ranks to press forward again. Suddenly he appeared at the head of his own wedge, clearing the enemy from before him as a threshing machine cuts grain, shaming his own men into battle.

The strange noises disconcerted the enemy. The opposing wedge could not withstand the massed assault of swords. It wavered, broke in upon itself, was forced upon the steps of the library. At a sign from the leader, they threw down clubs, stood panting, bloody, in ordered defeat.

Pat, staggering from loss of blood, made the leader kneel, placed his foot upon his neck. Turning to Ug, he presented him with the leader's club in recognition of the fact that Ug had won the battle.

He called forth to those inside the library. No answer came. Barricaded doors and windows remained shut. Puzzled, Pat had one window broken through. There was no sign of Sherman, the mayor, little Gus, or any of the party left in defense of the library. Mysteriously, they had vanished into space.

BRENT LOOKED upon the captives with approving eyes. Young, intelligent, they would be a boon to the clan. They had women and food and great knowledge. Their leader showed no further antagonism. Admitting defeat, he asked only that his tribe be allowed to live with the captors. He understood Brent's sign language readily. His people were used to orders and would behave, he promised. They knew many of the lessons of civilization.

Their experience and knowledge of the city was tremendous. They knew, for instance, that the city was an island entirely surrounded by water; that Ug's clan had walked across a ford in the Harlem River; that there was another clan near the city even larger than their combined forces; that across the Harlem from where Ug had come were unbelievably large numbers of people. And they knew where there were many caves of food. But some could not be broken into, even with the battering-ram.

Sending Ug home with the captives, Pat searched for the missing warriors. Long after, they came up from behind. Their torch had gone out and they had been lost in the subway. When they arrived at the citadel, they found the captured tribe already adapting itself to its new home and the few laws of Brent's clan. Hum was scrutinizing each of the male captives with the puzzled, questing look new men always brought to her face. She herself did not realize what she was looking for. But deep within her, love told her that some day would come the man.

The caves of food turned out to be freight cars on depot sidings. They were of steel, and there seemed no way of opening them. The supply of food the captives brought was soon gone. The clan faced starvation with the knowledge that there were many, many caves of food at hand.

Smith now made a wonderful discovery. He found long white sticks with pieces of cloth and metal in their ends. They smelt good, but

their taste was disagreeable. Not able to eat them, he stuck them in a hip pocket to give to Hitt. Stooping over the fire that night, the projecting cloth caught fire and sputtered. It frightened Smith. Instinctively, he threw the sticks from him. There was a blinding flash of light and a roar where they landed. Two men and a chest were blown into small pieces.

Hitt immediately saw the possibilities of the new discovery. Going to the cave where there were many white sticks, he spent days in experiment, finally learning the use and handling of explosives and miraculously escaping destruction. He had dynamite and fire carried to the caves where the food was. A charge, laid against a freight-car door, simply loosened it. He tried a bigger charge. It turned the car over. The third charge blew its side open.

They discovered endless wealth—carloads of food, materials, shoes, knives, and many things they did not know how to use. There was much bottled vegetable and fruit juice. The bottles would have remained untouched had not Ug noticed that some had labels similar to those on cans. The juices were tried warily, found good, brought health to the ailing.

Scappella found an entire car full of peculiar animals with round legs. They had three eyes in front and one in back, no heads, and arms twisted stiffly backward. Stepping on the side of one caused a loud explosion. The animal growled and shook. Terrified, Scappella jumped, his arm hitting some part of the animal. It barked, jumped forward, jerked him from his feet before he could let go. Madly it careened down a street, and finally threw him into a mud puddle.

He had found motor cycles.

Eventually he learned to use them, at a cost of many bruises. But in the end they all ran out of gas and he could get no further service from them.

Haw, and the new captured leader, known as "See," worked long to find the use of the round sticks with holes through their centers and the smaller ones made of the same material as knives. One day one exploded. But—mystery of mysteries—a large mirror at the other end of the room crashed! See pointed his gun instinctively and pulled the trigger again. A jar broke! And in the wall behind was a little round hole.

With great caution and sense of danger, they tried various things with the rifles until they learned how to load and fire them with some accuracy. They found ample ammunition in the sporting-goods stores. Eventually, they shot down the walls in See's apartment, and he had to move to another.

BRENT AND HIS council now made a trip throughout the section of the city far to the south of the citadel. They sat on deeply upholstered chairs set upon delivery carts and were pushed. A large group went in advance to find a way through the débris and clear a path for the carts.

Brent was astounded by the sights. It was his first trip to lower Manhattan. They came to the rotting mess of what had once been wet grain, and what Pat had thought was a loaf of bread. Smith pointed out the clutter and filth and flies and rats overrunning the lower end of the city, and Brent decided that the streets should be cleared in the interests of public safety. Smith found dozens of spotless street-cleaners' uniforms and adopted them

as his special garb. He wore the coats backward.

Pat showed Brent more gold than they could ever move. Most of it was in the cellar of a small building only partly fallen in. Brent realized the small value of gold when there was so much of it, and allowed the clan to take what it wanted to use for ornamentation.

There was one gigantic building that had withstood all the explosions and tidal waves. The council climbed its heights, luckily taking food and blankets, for they were forced to spend the night in the tower.

The sight which met their gaze filled them with awe. For the first time, they saw their land lying beneath them. They could even see and identify their citadel! Brent, fearful of roving bands, established an outpost to keep watch in the tower. They were given the biggest bell which could be found for signaling.

See now took to teaching Pat's huskies the use of firearms. The clan divided daily, small groups going to various duties in many sections of the city.

Suddenly, in mid-fall, the alarm bells beat forth a terrific warning of attack at the citadel. From all parts of town, the clan hurried to join in defense. A huge tribe, perhaps twenty times as large as theirs, had been spied coming in from the north! But it did not come within sight that night.

Next morning it was seen—a wild, unkempt, diseased horde that fought and ravished and burned as it passed along in disordered fashion. Its fighting men were armed with clubs and tools. It came south to the park and turned west toward the river. Apparently it had no scout system, for it seemed unaware of Brent's clan. It was savage, unorganized, sick. But its very size was staggering, terrifying.

Scouts were sent to spy upon the strange clan of barbarians, numbering many thousands. Brent called a war council. The enemy was strong. No such number of people could long live in the city without discovering them. His clan might barricade their citadel and wait for attack. They might divide into many small bands and harry the enemy stragglers. He wished that the giant searchlight, the "sun" which had terrified Ug's clan, was still working. But long since it had ceased to shine. There was no possibility that his small clan could defeat the enemy in open battle.

UG SUGGESTED a surprise attack. His people could attack that night. Unprepared, their backs to the river, the enemy would be taken at a disadvantage. See pointed out that strict order would have to prevail amongst Brent's men, otherwise many would kill each other in the confusion. Pat and Brent thought the surprise attack the best plan. Pat had his clan bind one arm with white material so that they were recognizable. He brought forth a small ship's bell with a piercing note and explained a system of signals. The plan of attack was explained to the clan in detail.

They would sneak silently across the park to the river, catch the enemy unaware. Some of the most trusted would be given guns and ammunition. The gun bearers would go first, fire into the enemy until their ammunition was gone, then drop their weapons and drop back. Those with bows and arrows would take their place. When the arrows were gone, those with swords and knives would rush the main body of

the enemy, engage in hand-to-hand warfare, but keep in a closely packed body. There were not enough swords to go around. The remainder of the fighters would be armed with clubs and close in on the flanks. A small group would be equipped with flashlights. They were to keep in one body and try to frighten the enemy with the rays of sun.

Behind the men would come the women with fire and unlit torches. As soon as the fight started, they were to light their torches, run screaming behind the lines of battle as if to make out that there were many more warriors waiting. The drummers and the man with the thing that shrieked like the wind would stay close to Pat, making all the noise possible.

See gave a few brief orders to his own tribe, which was gathered in ordered and hushed groups in the park before the citadel. He left for the great cave with Haw to gather more ammunition. This cave had once been one of the large armories. As yet, it had not been thoroughly investigated.

While looking for ammunition, See found a machine gun. He knew it was a gun by its feel and smell, but it was strange and he did not discover how to operate it. For an hour he poked about. Finally he found one with a cartridge belt in place, pulled the trigger. The flying handle broke a finger, but he discovered how it worked.

He found others mounted, ready to load. He had no time to go through the complicated study of how to put unmounted ones together. But he took the mounted ones and many belts of ammunition at hand. He noticed that the gun with sand bags over its legs shot well. He had bags of dirt prepared for the three guns he took.

THE EARLY autumn night threw its mantle of darkness over the city. Silently, with swiftly beating hearts, Brent's clan started across the city. By the river front they could see the fires of the enemy clan, hear the disorder of their rudimentary savage chatter. Brent had a last-minute idea. Let the gunners pick out the enemy leaders, try to kill them first. They must not fire until they were close.

For blocks, the clan crept forward, expecting every moment to hear alarm signals in the enemy camp, to be set upon by ambush. In the lead of the little army went three delivery carts, a machine gun mounted on each. Soon, they came to the very end of the streets opening upon the broad thoroughfare in which the enemy was encamped. Pat gave one sharp beat upon his bell. Suddenly, clattering awful sound into the quiet of night, the three machine guns in the hands of Pat, Ug, and See spat modern death into the ranks of a barbarous horde three thousand years behind them.

Chaos reigned in the enemy camp. See's gun jammed. He jumped from his wagon, took charge of his own fighters, led them around blocks, to come upon the south flank of the enemy.

The enemy was not long in confusion and terror. What the spitting death was, they did not know. But, like a people who have gone through much and become inured to surprise, they quickly gathered around their leader—a savage lot, ferocious, hardened by the most barbarous living, too ignorant to feel great fear or to recognize defeat.

Pat gave another signal. The machine guns gave way to the rifles and pistols. Haw aimed carefully at the enemy leader. On his fifth shot, he killed him. The bullets seemed

more to annoy the enemy than scare them. In a mighty wave, they broke in a charge for Brent's clan.

There was no time for the arrows now. With an answering roar of blood lust, Pat and Ug led their warriors to the fray. The clans dashed together like two mighty waves—one, a tremendous long-combed surface wave; the other, smaller, but with the compact power of a ground swell. Too late, Pat and Ug realized their lust for battle had overcome their judgment. They should have retreated, spread the enemy, used up their shots and arrows before coming to mass fighting. Shrieks and groans of fear and hate cut the night like screams of thousands of drowning vultures.

The "sunshine" group of Brent's warriors wrought confusion in the enemy ranks for a few minutes. But the fire of battle was too strong. They were not capable of holding the enemy and throwing fear into their ranks. They began to fight, used their flashlights as weapons. Soon, the lights were broken.

One of the enemy, forced into a camp fire, caught fire, ran throughout the scene of battle, a flaming, screaming thing.

Behind Brent's lines, the women lit their firebrands, howled, and screamed ferociously. Surprisingly, the enemy were not terrified by the great numbers they suspected. They fought to get through the front lines, to meet the warriors lingering behind.

The tide of victory swung to the enemy. Many of them had axes and brought great havoc to Brent's ranks. Grim death, certain death, was written in their superior numbers. Like demons, Pat and Ug fought, giving courage to their men. The smell of sweat, the shadows of glistening bodies, the groans of the dying, the roars of the warriors, the screams of the women, mingled with the smoke of torches and fires, soared upward against the tall buildings, out over the dark, gurgling river.

Like thousands of arrows, See's flying wedge suddenly drove unexpectedly into the southern flank of the enemy, forcing it to retreat, causing chaos amidst the main body. But the enemy numbers were too large. Time, a matter of minutes or hours, and Brent's clan would be no more.

MRS. UG, brandishing a firebrand, looked and saw Ug, tall and dark and powerful, his body glistening with dripping blood in the smoky light, surrounded by his stoutest warriors, fighting savagely against numbers ten times his own. She saw certain defeat, for she could see the whole battle and how quickly their own ranks were thinning. Terrified for the life of her man, she ran into the battle, ducking and worming her way to his side. Hands reached out to tear at her; knives slashed against her side. An ax barely missed her head. Ug saw her coming, rushed to strike down a giant just as a heavy club was lifted over her head. Quickly, somehow, in the midst of the roar and confusion and fighting, she made him understand. Like an impregnable moving fortress, throwing off attack like water, he protected her and moved to the side of Hitt. With arms flaying in all directions and his grunts drowned by the shrieking and clash of steel, he made Hitt understand. Turning, they fought clear of the fight, ran with superhuman speed back to the citadel.

Soon they returned, breathless, pushing a cart piled high. They paused to look at the battle, saw that

their foes were thickest toward the river front where the frightened and hurt had gathered, saw their own ranks being torn into bits. Ug sent Hitt with a message to Pat, pushed his cart forward, stood in a cleared space brandishing a torch. Suddenly, something white and flaring and sizzling flew over the enemy, landed amidst the women and wounded on the river bank. It exploded, killing several. Another and another followed in rapid succession. Like stampeding cattle, they ran in fright into the midst of their own ranks, causing disorder and fear.

Pat's bell rang forth a sharp, clear command. His fighters rushed to the spot where he was standing. In turmoil and anger with their own noncombatants, the others were too occupied to follow. Screaming unintelligibly, their leaders attempted to rally the warriors and scare back the disrupting element.

In the center of the field, Ug suddenly appeared, pushing his cart. Working with machinelike precision, he lit fuse after fuse, sent sticks of dynamite hurtling into the enemy crowds. For a moment, the enemy hesitated, then with a wild cry rushed toward him in a huge wave. He threw dynamite as they neared, but each time the gaps in their ranks were filled as water covers the spot where a stone has landed. The horde converged upon him, each man shouting with hate and lust, hopeful of the glory of making the kill.

As they came upon him, he pushed his firebrand into the piled wagon, turned, and fled just as the enemy reached the spot where he had stood. Unmindful of the wagon, they pursued. There was an instant of sputtering. Then a mighty blast of light and a resounding roar rent the air. The ground shook; hundreds were thrown to their knees; there were screams and shrieks of horror. Parts of human bodies rained down from the air.

Pat gave his bell a tremendous beat, cracking it in two. With a shout of victory, his warriors swept against the demoralized enemy. Hacking, stabbing, killing, they forced them toward the river. Foot by foot, giving no time for quarter or for rallying, they pushed the frightened horde toward the cold current. On See's flank, there was a momentary rally. If the enemy broke through See in that quarter, it would turn the tide of battle. Ug's wife saw the danger. With a shrill cry, she gathered the women, led them in a rush to the hard-fought quarter. Brandishing flaming torches before them, they forced the enemy back.

In minutes, now, the battle was won. Up to the very brink of the river, Pat's warriors fought with intense cruelty, striking down warriors, women, and children without pause, forcing thousands to jump into the gurgling currents, where their cries ended in throaty gurgles. Not more than five thousand of the enemy remained.

A great fire was built, and Brent's clan spent the night watching the captives. The next morning their ranks were examined. A scurvy lot, with much disease and little intelligence. There was no pity in Brent's heart; he saw only danger to his own sadly thinned clan. The weak, the diseased, the maimed were sent to meet their fate in the gurgling waters of the river. A few hundred of the stoutest had saved themselves the night before and were routed out of hiding from farther down the river. All together, twenty-five hundred, including the

wounded warriors, were all the prisoners the clan took back.

It had been a brilliant victory. A victory of civilization over savagery. But the cost had been staggering. Sadness, not joy, held the hearts of Brent's clan.

XVII.

DURING THE EXECUTION of the diseased and useless, Hum came to the rescue of one captive. He was a slight man, more dead than alive, suffering from many sores, malnutrition, dirt, stomach trouble, and a cold. Filth and vermin covered his emaciated body. Yet he had fought hand to hand with the healthiest warriors of Brent's clan and carried several deep and honorable scars across his thin chest. His hair and beard were matted with filth; his body smelled unpleasantly from the running festers. But Hum felt something within her pull toward this being.

She tugged at Ug's arm. She wanted the useless being. Ug was puzzled, but gave the captive to her. Later, bathed and shaven, his wounds treated with salt, he presented a face that hinted of latent intelligence.

For several weeks, Hum regarded him closely, puzzled. Then her interest in him died. But he was on the road to health by then, learning the lessons of civilization rapidly. He became a student of Hitt's, and eventually showed great brain power and imagination.

For the most part, the captives were of an inferior breed. They learned slowly, had to be punished continually for breaking the laws of the clan. With few exceptions, they were used for the hard manual labor and duties of brute strength. Their greatest contribution to the clan was man power. Well-defined pride in itself took root in Brent's clan, causing greater introspection and regard for the laws and customs established. By contrast, Brent's people now regarded it their special privilege to live up to laws and give the most that was in them to the forwarding of civilization, learning, intelligence.

Brent considered the recent near-defeat. He had never dreamed that such a large clan existed. If one that large had come from the north, would other larger, perhaps more intelligent, ones come in the future? With his council, he made a tour of the upper end of the island.

They came to the Harlem River. Its bridges were down, but they had filled in with débris, making easily navigable fords. Brent ordered the fords destroyed. After a lengthy hunt for sufficient explosive—Hodges' idea—great stores of dynamite were found and the heavy steel bridgework broken up. With ropes and chains, with crowbars and levers, the entire clan labored for many days. At last, the river flowed free across the northern end of the island again. More than a hundred men had been crushed or drowned or blown to pieces during the work of clearing the river.

But Brent did not yet feel safe. He explored the entire coast of his island. Across in Brooklyn, he was told, figures could be seen on the shores. He could not see that far himself, but he set up camp in an open spot and ordered attempts at communication.

The next day, many had gathered on the opposite shores. From the tower of the high building came detailed reports of their activities. Binoculars had been found and their use recently discovered. The Brooklyn people were waving and making signs. They were many, and armed, but seemed friendly.

BRENT SAW wood float by. It occurred to him that a man might be able to ride a piece of wood across. It was too far to swim. Rowboats and oars had long since been discovered, but their use was unknown.

Hitt was the first to think of using the boats. He had seen pictures of their use in the library. Sherman had once seen a detailed picture of the use of oars. The boats were tried. Two sank from leaks, but the third floated. Eventually, a delegation headed by Hitt, with Ug the master at arms, set out for the opposite shore. It was a daring feat.

The rowers labored clumsily against the current. Once the little boat was carried swiftly against a strut of the old fallen bridge projecting from the river. It nearly capsized. Faces white and teeth set, the little party struggled onward to safety.

Hitt, most proficient with sign language, grunted and made signs at the large tribe they found awaiting them. There were many warriors, armed with weapons similar to their own, except that they had no guns. Ug fired a few shots as they neared the shore, which brought consternation to the faces of the strangers. Four men stepped forward to help them land. They had a good sign language, similar to Hitt's, and showed high intelligence. But they were barefoot and looked with envy upon the men possessing such luxuries as shoes. All were friendly. They had often watched Brent's clan across the river and admired them and the wonders of their city. The passage of the river was a great conquest, winning their respect.

Hitt learned that there were four large tribes in Brooklyn, all on friendly terms and with a well-established system of barter. There had been fights over food the previous winter. But enough people had been killed off to make the food last. During the summer they had found great stores of food in the warehouses near the docks. The food would last throughout the coming winter. A large number of one clan had been carried away upon the water, never to return. They had been investigating an ocean liner. Its cable snapped, and the boat drifted away before the explorers could get ashore. They had discovered the operation of a gasoline shovel and a large tank of gasoline. It was a marvelous mechanism which crawled and performed many useful bits of work. They had also found that it needed to be greased in places, and they had found grease and oil.

The leaders of the four tribes returned to Manhattan after a few days of hospitality. They were as intelligent as Brent's clan, but had not had the opportunities to develop their intelligence. They came with great fear and awe of the men who could make sticks bark and had shoes and could ride upon the turbulent waters.

For a week, they were shown the best Brent had to offer, inspected his domain, witnessed the many luxuries he had, were immensely impressed with his system of education and the progress made in deciphering the peculiar bugs in the books at the library. At night they compared experiences since the beginning of memory.

The fates of the tribes had been very similar. For a while, the Brooklyn tribes had lived in the long, narrow caves under the ground. But the air had become bad and the tunnels had slowly filled with water. They had moved into private homes. Once, one of their men had climbed into a strange-looking thing

and played with its teeth. It had looked and smelled like an engine, but it had proved to be a strange giant bird, for it suddenly made terrible noises and flew away, never to return.

Before Brent could suggest it, the four Brooklyn chiefs asked to be made part of his clan. They could establish communication by fire and bell easily enough, and bartering would be to the advantage of all. They would like to send some of their own people to live with Brent, and have some of Brent's teachers come to their homes. They made generous offers of goods that they would give in exchange for his protection and law and governing.

Schools of navigation were set up on both sides of the river, and the tribes vied with one another to produce the best oarsmen and find the best boats.

It grew cold now, and the river grew angry. Several times, boats left one shore to be overturned or carried out into the harbor. It became impossible to navigate the river. Many of Brent's clan had gone to Brooklyn, and many of the Brooklyn tribe were left in New York for the winter. Signal fires were kept burning. On good days, the two tribes could communicate by bells.

Suddenly, another winter came. It grew bitter cold, and the tribes retired to the warmth of their houses. Coated with ice and snow, struts of the great fallen bridge stuck up through the river, a white warning that the waters were no longer passable.

THE WINTER passed without great incident. Brent's clan took pride in teaching the newcomers; they took great pride in learning. The winter was colder than the last, but it was spent in greater comfort. Ample wood was found; depots had many freight cars of food which could be opened with dynamite. Small tribes and groups of people appeared from the depths and secret hiding places of the city. Awkward and frightened, they gestured their desire to join the rich, powerful, well-fed clan. They brought simple treasures in homage. One man appeared with four women, more than twenty cats, fifteen well-trained dogs. The immense value of the dogs and cats won him the rights of a free man and a substantial place in the community. He told a great tale of the underground caverns of the city, where he had lived most of the time. They were partially filled with water, but, except for places which could easily be cleared, they were level and unblocked, as were many streets. Some had fallen in, but one subway stretched all the way from Brent's tower outpost downtown up past his house, and there was not much débris. The caverns were overrun with rats, but they might be useful in case of attack.

Everybody worked that winter, laziness being punishable by death. There was much to be done to make habitations livable. There was much exploring that could be done, in spite of the snow and ice.

Brent had great maps of the city with discoveries of value marked upon them. His own map showed the great store of dynamite, a cave full of knives and tools, the caves of food, another cave with a great deal of material stored therein, his various outposts, supplies of wood, and other places. He explained the map to the newcomer, had him draw a line where the subway ran.

Scappella found a great store of putty and glass and learned how to

cut glass and insert windowpanes. All the windows in the citadel were replaced. In many houses, furnaces now gave heat, although inexperience with heating systems caused many explosions and one fire.

See found a business for himself. Bartering had become so widespread that a common bartering place was needed. With Brent's permission, he took over a large store where he exchanged goods of all nature for their owners, charging a percentage on the transaction. So great was the commerce that he needed assistants and employed help. This was the first time in the new history that wages were paid. Vincent Singe, who once had cornered gold in the world market, suddenly showed latent ability. He opened another trading mart. Both were successful. Competition was keen. Singe got a slight edge on business when he found many sleds and offered transportation of purchases to those trading at his store. But he was grasping and not such a fair dealer as See, who retained the better-class patronage.

The mayor, with four helpers, went into the business of repairing and building. Fixing chimneys and doors and blocking up windows kept him busy. Hitt discovered cement. But it was the mayor who gloried in working with it, who refined the process of mixing, discovered that sand and stones were needed to make it hold and that different mixtures got different results. Eee learned that red paint had been found, bargained for several cans, and spent a happy month painting one of her rooms red with a piece of broom. Singe, planning craftily for the future, saw that razor blades grew dull, that some day the supply might give out. He bought in new blades and stored them against a day of higher values. Brent did not like him and gave the monopoly to trade in swords, knives, and scissors to See. Swords could be purchased and owned only by those recognized as qualified fighting men.

A JAIL was established for lawbreakers. But Pat soon saw that, for the most part, the same people broke laws steadily. He decided that jails were too much trouble and instituted decapitation instead. It was far more effective. The tribe sat in on all trials, expressing its opinion of guilt by raising arms straight up or holding them forward.

The huskies who constituted the army and police force took up residence near the armory, which was given them as headquarters. Hitt, experimenting with a trench mortar which was found, blew part of the roof away. It was mended by the mayor, one of the first pieces of major construction work.

Blackboards and chalk made learning much easier. Lessons were given at the library in reading, and great knowledge was gained from the pictures in books and old files of newspapers. The understood numbers of spelled words reached the staggering total of six hundred! Yet nobody could yet count that far. Scappella, at the price of a broken leg, learned how to operate, stop, start, and guide an automobile. It jogged along slowly, for its tires were flat. A youth from Brooklyn suggested filling it with gas from a tank he saw similar to the one in Brooklyn.

Peter Ship, when he was not working on messages of Brent's or the maps, spent time at the museum studying the pictures. He was learning to handle color fairly well. Hum had taken three girls and a boy under her wing, teaching them

to play the piano. She learned to improvise her own songs, the first creative act of the new life.

Babies arrived with great regularity, and three women became proficient in bringing them into the world.

One tragedy marred the winter. One of the professors heading an exploration party found a hospital and discovered cans of ether. The fumes overcame the party. They were found dead days later, and the building forbidden the rest of the clan.

The use of needles and thread was learned. This was a most important discovery, winning Mrs. Cosgrave a place in the limelight again. Fashion plates were found in a bookstore. The women set to making clothes from whatever material was available. Thin rugs, drapes, bath curtains, and colored prints went up in value. But the styles were disastrous to Brent's people, for they were the styles of the cumbersome '90s and interfered with the activities of a hard-working community. Brent was forced to pass the first style legislation, prohibiting any garment which interfered with movements of the body.

Spring came, bringing both joy and fear to Brent's clan. Smith superintended the spring cleaning. Free of the winter's filth, bodies felt better, blood flowed faster, and hearts were naturally light. But the clan faced starvation. Rapidly, the last food in the city was running low. No warehouses remained uninvestigated, no freight cars unopened. Brent was confronted by the gloomy fact that food was gone. Nothing edible was left!

There were elevators with immense stores of raw grain. But nobody could learn how to use it. The river was high and turbulent. It could not be crossed to gain aid from Brooklyn.

Suddenly, unexpectedly, a delegation arrived from Brooklyn in a large, seaworthy, deep-water boat. It was manned by twelve men, two to an oar.

The Brooklyn men had exciting news. One of their younger members, anxious to show his daring and hardiness, had set forth for unknown places before the close of winter. Far down Long Island he had traveled, and seen many people. They lived in very small tribes and were savage and ran at his approach. But one being had been friendly. He had discovered the use of a hand mill and how to pick grain, which grew uncultivated. The meal, when mixed with water, was edible. When cooked, it was the same thing they had discovered in bags and boxes!

This was the first time any of Brent's people had thought of connecting growing things and the things they found. Brent had the Brooklyn men taken to the giant grain elevators; he came back highly excited. The grain he had just seen was what the man on Long Island ground up! Hurriedly, Brent sent an expedition to visit the Long Island farmer. Peter Ship was taken to sketch the machine. It was a long journey, taking three weeks. The Brooklyn tribes spared as much food as possible, but when the expedition returned, Brent's clan was living on rations stricter than the first winter of terrible starvation.

Peter's sketches were exhibited to the clan. They were crude, but graphic. Suddenly, little Gus came forward. He knew a building where there was a giant machine something like the sketch. It was many times larger, but maybe it was the same. Undoubtedly it was the right one.

Bags of raw grain and flour were in the same building. But it was a huge thing, and there was no way of making it work.

All the brains of Brent's clan concentrated on how to make the mill go. Finally, Hitt, Hodges, and Scappella worked out a method. It took a great deal of man power, and was slow. There were serious accidents. But the grain was ground and came out on the floor below—meal. Later in the summer an automobile was hooked up to the machine to supply power. Thereafter, only the chiefs and the council could use autos, gasoline being too precious to waste. The clan had had its lesson and knew that things could give out.

COMMERCE NOW flowed. Haw established a regular boat line to Brooklyn with a subsidy from Brent and transportation charges. Long Island was combed and conquered, the small tribes being absorbed into Brent's clan. The island yielded up potatoes and corn and animals which could be killed for meat. But they proved to have a better value alive, for they gave milk. And milk was good and highly prized.

The two trading marts and Haw's boat business grew into prosperous enterprises. There was the first conflict between government and individual rights. Vincent Singe acquired two cows and set them to grazing in the park. Mrs. Cosgrave's children liked the milk and Ryan took it. Singe claimed an outrageous price. Brent made it known that he had given Ryan permission to take the milk. Singe worked up considerable feeling over the matter. There was a rift within the clan. It was suggested to Brent that he might straighten matters by claiming that the cows were grazing on his land. He thought this over, almost took that course. Then it occurred to him that it was a deception, that it was not straight thinking. He grew angry at Singe. What right did he think he had to challenge his wishes? Who had thought and governed and led the clan through the terror and hardships and mysteries of the past years? Did Singe forget he had once been a slave?

Brent called the entire clan together. Wrathful, he scored his point. He was lenient. But let them not forget that everything they owned or used belonged to *him!* He gave Singe's two cows to Ryan as assertion of his authority. Singe grew angry in turn, drew his sword, gathered his followers around him. Without further ado, Pat, Ug, and See led their huskies against Singe, settling for all time any dispute between government and individual. Right or wrong, the government had the authority and power. That Singe was not killed and his business confiscated was only a whim of Brent's. He felt that Singe represented the most dangerous traits which would arise with civilization. He wanted him to continue so that he could watch and study him.

The summer came, and life flowed smoothly. But Brent looked into the future. Cultivation had not been thought of. He had reports of potatoes and grain growing on Long Island, but they would not be sufficient to feed the city forever. He looked at the heights of the Palisades across the Hudson. He was told that people, many people, could be seen there. Perhaps there was much food. Perhaps they had useful learning. He called a council, and it was decided to send an expedition. It would be a large force, and it would conquer whatever

tribes and lands it found. But, first, let friendly gestures be made. Let battle be avoided.

Preparations for the journey were made. Brent retired alone for several days of thought. He felt that he was growing old, that a younger man should take his place. Ug and See were his logical successors. But Pat was the hero of the tribe. See was most energetic, had greater imagination than Ug. But he was not so great a leader. Nor did he have Eee for a woman. And Eee had brains, which would mean much to the welfare of the clan. He must build Ug into a more popular hero. Too, if Ug headed the expedition, he would broaden and be able to lead better.

In the middle of the summer, Brent gave sign that Ug would lead the expedition. Pat looked at Ug with friendly envy. The stoutest warriors of the clan were picked to accompany him. Hitt was taken as adviser. The best weapons, four machine guns, and much dynamite were loaded onto wagons with food and heavy covering. Warriors put their women into the keeping of friends during their absence. Eee wept at the departure. Together with Hum, she went back under Brent's protection.

AMIDST GREAT excitement, the final preparations were pushed forward. Much gold, many knives, a great variety of material, strings of beads, and paint and mattresses were taken for barter. The assembled fleets of all five tribes were brought around to the Hudson. At the last minute, a new supply of coffee was found in Brooklyn. It would take too long to work a boat back to that side of the island. Yet Brent wished to send coffee with Ug. A boat was taken out of the Hudson and hauled across the island by Brent's private car. Loaded to the gunwales, it brought the coffee to the island. Brent took only one fifth of the load, giving the rest to Ug.

Ug departed at dawn one morning, leaving hours before schedule so as to avoid the confusion of departure with the excited clan bidding good-by. Haw shone as a great navigator that day, transporting all the expedition and its goods and wagons without loss of a bag of flour or a man.

For three years the clan waited in vain for Ug's reappearance. He was missed, and life did not seem the same without him. Brent ordered the city cleared of débris, and the time was spent in demolishing falling structures, strengthening the ones in which they lived, clearing the roadways, rearranging stores, and discarding broken and useless objects. In a flash of inspiration, Pat ordered all débris carried to the lower end of the island and thrown off the Battery. Thus, the island was extended. Great progress was made in reading and drawing and mechanical research. Large supplies of gasoline were found, trucks used to cart and haul, the use of the donkey engine discovered.

Mostly, the clan lived on grain and potatoes and strange vegetables from Long Island. Speech was progressing, although sign language still seemed most expressive. There were no raids from enemy tribes. A few smaller tribes were captured as they wandered into the city from the north. Life progressed in a more orderly manner, leisure came to be known and games enjoyed; decoration within the home made its appearance. There were furs and materials and clothes for all. Shoes alone were rare. Many instruments

were found and played. Scappella's phonograph broke down, but he repaired it with great labor from pieces found in electric machines. Sometimes he could make cars run after they had broken. If not, they were dumped at the foot of the island and new ones found. Nobody had thought of pumping up tires, although there had been many blowouts.

ON THE COLDEST night in the fourth winter, the clan was awakened by the wild beating of alarms. In fear, men rushed to gird on weapons. But, behold, the bells beat in joy, not warning!

Across the Hudson, on the heights of the Palisades, burned the seven fires Ug was to give as signal. Frantically, the clan worked to get boats across the island, for commerce with the unfriendly tribes on the Hudson shore had not been established. Boats raced through the treacherous currents. Haw, with his great knowledge of river navigation, supervised the transportation.

As the late winter sun rose over the horizon, Ug and his first contingent stepped upon the island, greeted by mighty cheers. He returned a conquering hero. But, except for a few moments of great joy in greeting Brent and his woman and Pat and friends, he toiled through the day directing his army. Great chunks of ice floated dangerously in the river; there were two accidents early in the day. The job of transportation was not any too easy.

Then, just before sunset, Ug drew up his army and his prisoners and spoils before the citadel, that all might see. And great was his pride and glory. His men were barefoot, and their limbs numb with cold. But they had with them a strange drink that brought warmth and good cheer. They had great amounts of meat carried by forty thousand slaves! They had unknown vegetables and fruits and strange animals that pulled carts, and thousands and thousands of desirable young women and strong young men.

Not all the strangers were slaves. Many were friendly clan chieftains, awed by the power and might of Ug's tribe. They had come to pay homage and arrange for their clans to be linked with Brent's. Most of them were farmers, and three had discovered the planting and cultivation of produce.

Ug had been through many cities. But the city tribes had proved surly and savage and not very well fed or intelligent. He had killed them or worked them to death. It was in the country that he had found his most useful captives and friends, although there had been two cities where he had made valuable finds of very advanced tribes. One, a friendly tribe, had discovered the use of kerosene and lamps and knew much of chemicals. They knew the very difference between gasoline and kerosene; knew that gasoline was dangerous to have near fire.

His captives and allies were awed by the sights of the metropolis and the richness of the people. They were impressed by the learning of Brent's clan, although some were dumfounded that he had insufficient food and no beasts of burden. Scappella ran a truck before the group. Great was their wonder. But the truck crashed through the snow and stuck in a ravine.

Amidst the weeks of rejoicing that followed, Brent talked with the visiting chiefs, showed them his wealth and how his people were taught. He was surprised to notice the importance many of them attached to nails

and hammers. He had warehouses full of those! They remained for a long time, studying his method of government, noting the pride his clan took in living up to their laws and learning.

At last, spring came. The visiting chiefs hurried to their own people. They would like to take teachers with them and send their own people to the city for education. They desired to become part of Brent's clan, promised food and loyalty in exchange for luxuries from the city, for education and assurance of protection when needed.

They left in early spring, taking many of Brent's people with them. The savage tribes across the Hudson made raids on the small parties. Pat, Ug, and See led their warriors against the Jersey clans, overtaking and annihilating thousands in the course of a two-month campaign. They saw that it would be necessary to set up a series of forts to connect them with their outlying clans. For three years, they fortified the roadways, leaving strong outposts in the hands of reliable leaders. The army became a profession of glory and adventure. In every branch of work, loyalty, honesty, and a desire for learning were the fundamental motivating forces.

COMMERCE and friendliness flowed in all Brent's nation. Food coming in from the country, luxuries going out from the city. Transportation became a leading industry, and great grew the men in that field and the field of barter. Paradoxically, Brent had money printed, acceptable in exchange throughout the nation, long before his people knew how to make the paper it was printed upon. Scappella, with Hitt and Hodges and the heating experts, studied the railroad trains on the Jersey shore, eventually learning to fire and operate an engine. With great joy and trepidation, they started forth in the direction of Buffalo with a trainload of huskies to clear the tracks. Months after, they returned afoot. They landed up near Boston, terrifying a rural clan into complete flight.

Brent again felt the need of a younger man to lead his clan. Ug had grown with his experiences, had become less rash and acquired great breadth of vision and planning and foresight. Yet Pat remained the real idol of the people.

In the third summer after Ug's return, Brent called a meeting of all the near-by tribes, asked them who they would like for a leader. There was great excitement and much talking. Ug was the man. But Pat was loved—there was hesitation. Pat himself settled the point by walking over and raising Ug's hand. A mighty roar of satisfaction and appreciation of the sacrifice rose from the people. More than ever, Pat was loved and respected. Ug flashed him a quick look of understanding and thanks. Brent smiled, presented Ug with his most valuable possession—a silver bugle.

Shortly after, little Gus left for a visit to the farthest distant tribe. It was a great experience, going to visit a tribe that lived near a city of sunshine and sweet fruits, far, far away, two months if one walked long and fast; two months of tremendous experience, of great muddy rivers, of hot, blazing plains, of mountains taller by far than the buildings of his city, a great woods and strange animals. The party left with a wagon train of luxuries, groaning, creaking wagons pulled by horses and oxen. Its barefoot members talked mostly by sign language, but carried automatic rifles and trav-

eled over concrete roads as smooth as the tires of their wagons. Some of the people had come originally from the distant clan and boasted a great deal of the weather in their part of the country. They talked, too, of the stories of a tremendous ground-shake which had toppled buildings and killed off more than a third of their clan. On the road they passed many wagons of incoming produce and herds of cattle being driven to the city for slaughter. Gus did his first business, bartering a chunk of worthless gold, no larger than his fist, for a large bag of valuable salt.

XVIII.

TEN YEARS, fraught with activity and adventure, passed swiftly by. Little Gus was now a grown man, wiry and hard with outdoor life and military campaigns; wise with bartering and dealing with new tribes and chieftains.

Brent's domain now extended throughout all the North American continent. There were still savage tribes not under his rule. But they were few. The use and mining of coal had been discovered. There was no more slavery; but at the age of twenty every man was to give three years of service to the clan. Work in mines was rotated in three-month shifts, due to its unhealthiness and danger. Railroad trains ran over unconnected stretches of track. Complicated switches and spur lines had not yet been clearly figured out. Steamships ran up and down the coasts. Oddly, although the Panama Canal had been crossed by land, no ship had run through its length. The fortification systems had been extended in every direction. The army was the police force of the land, under rigid control, with highest integrity and honor. Capital punishment was meted out for most crimes and for insanity and hopeless illness.

Great tales of the changes within New York came to Gus, but he could not vision their reality. He was sent for by Ug. Brent was nearing death, and desired to see him.

Across the long, hard-surfaced highway, Gus traveled east. He was mounted on a horse and wore leather leggings and moccasins. He headed a train carrying meat and grain and nuts and dyes and strange, beautiful woods. He noted that the roads should be repaired. He passed through many cities and towns where his fame had gone before him, and he was fêted as a hero. He came upon one uprising, joined in subduing the rebels. Defeated, they told their story. Singe owed them money, had refused to pay. They had sent word to Ug many times, but never had an answer. Gus knew that they merited death. Yet their complaint seemed just, if true. He took the leader of the defeated tribe to explain his own case.

Truly, the changes to his own city were great. He came upon the banks of the Hudson in early fall, looked across to see a city splotched with squares of color. A pontoon bridge allowed him to ride across. Every other block along the river front was a park, filled with green grass, ablaze with flowers. The city itself had been thoroughly cleaned, all falling structures demolished, the streets cleared, and the city dotted with parks. Trees grew along streets that had not known a tree for forty years. Autos ran beneath their shade, and happy, healthy people looked from windows before which were window boxes of bright-hued flowers. The autos ran slowly, upon tires of solid webs of rope, for rubber tires had long since rotted.

Ug met him with great ceremony. He was proud of Gus, proud of his military achievements in the Far West and his loyalty. He listened to the story of the rebel chieftain. He had never received a message! He would trace the trouble, punish the culprits with death. In the meantime, let the chief keep his secret and enjoy the city. There were many restaurants where he could eat at no cost. They were kept by the government. He would be given rooms, and whatever he desired would be supplied by Ug.

BUT IT WAS the learning of the people that most surprised Gus. They had learned to make many articles, had learned hand weaving, and could now read a great deal. Although their spoken vocabulary was still limited to less than a thousand words, they had discovered the use of the dictionary and encyclopedia. Hitt was working on a history of civilization prior to the great catastrophe.

They knew something of the history of Petersen and Goddard, for they had deciphered the daily papers of that time. They knew that electricity could run engines. But they could not fathom the mystery of what electricity was. They had many new laws, but each year all laws were revised in keeping with their progress.

They were now trying to work out a system of education so that every child would be educated half in the country, half in the city. At the end of that time he would work for three years for the government, then be allowed to choose his own calling. He might work on for the government or live on the land, or the government would help him to start in business. However, Ug thought it advisable that the theoretical status of slavery remain so that a valuable man might at any time be called for service to his chief. The system of tribute was showing defects. Shortly, a system of percentage taxation would be inaugurated.

Gus was overcome with the progress and with Ug's friendly attitude. He was taken to Brent and given a great dinner at which he saw many old familiar faces and many new ones. He learned to his amazement that he was credited with the quiet peacefulness of his own section of the country and the orderly way in which its government was run. He gathered that he was to be placed in a high position, near to Ug. Brent was old; he was nearing death. He wanted to see the grown boy who once had shown such useful curiosity in the city, and later had helped to settle the Far West.

Brent himself took Gus about the city, showed him the many changes and explained their cause. The students had learned that long ago, in the previous civilization, the country had been filled with wealth, but people had starved for want of work. Brent wished to see nothing like that ever happen to his people. The essentials of living should be supplied to all. He looked into the future, foresaw the day when electricity would again be found and the land hum to fast transportation, commerce, and history. There would be troubles, but Gus must remember that all authority was vested in the chieftain. It would not do to divide the responsibility. Already, the clan had had its lesson in allowing laws to become obsolete. They must be revised annually, in step with the times. Those breaking laws maliciously and purposely must be punished. The race must be kept strong, healthy, happy, prosperous,

and no man's selfishness allowed to interfere with the people's rights.

Brent spoke of Singe and grimaced. He made Gus know that Singe was to be the first example of the dangers of civilization. Gus spoke about the flowers and parks. Brent smiled. It had been his idea, his last gesture to his people. And they had been happier with green and trees and flowers.

WITH THE FIRST fall of snow and strangling of transportation, Singe came into the limelight. He was rich, had waxed powerful through his wealth. Long before, he had hoarded away mattresses. Of late, they had become the most-prized luxury to the country people. He had bargained shrewdly and, as a result, cornered meat. He now charged such prohibitive prices that none but the wealthy could afford to buy. He was hailed before Ug, refused to reduce his prices, claimed he had earned the right to charge what he wished, had been of tremendous aid to the progress of commerce. He had many supporters, particularly among the traders.

Ug heard him to the end; then, with great simplicity, told him that all food belonged to the government and therefore to the people when necessary. It was now necessary. If he would reduce his prices to where the people could buy, well and good. If not, the government would do so for him.

Singe looked about and saw he had many friends among the throng. Blinded by his wealth, he thought he could challenge Ug. He made that clear in no uncertain terms. Ug made a gesture to Pat. With lightning speed, Pat stepped over, beheading Singe where he stood. The other traders murmured, paled as Pat looked coldly in their direction.

Brent smiled tiredly. He had seen a great and fundamental law established, a law that no man for personal gain may cause the people to suffer. The next day he called all the clan together, told them to heed the leadership of Ug and those who came after, warned Ug not to insist on holding power too long, patted Hum and Eee and Pat and Mrs. Cosgrave and See in a friendly way. Then he died—a much-loved, wise old man who had led his people back to civilization, who had atoned for past lack of judgment in a different life.

Deep sadness marked his passing, and his few simple laws of life and civilization had a new force. For in his death the people realized the greatness of their first chieftain, who years before had given his power to a younger man, yet who continued to think and guide wisely the destinies of his people.

THE FOLLOWING summer, a great bird appeared in the sky. Ug's clan knew what it was. There were many such birds over in Brooklyn and in Jersey, but experiment with them was forbidden. They wondered if it was the man who years before had gotten into one and flown away.

The bird circled long over the city, finally swooped down and landed in the park. Two beings stepped forth. They were highly excited and somewhat amused. Simply, they made it clear that they were Goddard and Petersen, who, long years before, had left the city by plane. The people were surprised. They knew something of these two.

Led before Ug, the two brought great news. They had a very complicated speech, could convey ideas to one another rapidly. They ex-

plained that they could teach others to speak likewise. They brought forth a strange mechanism, had the room darkened and a white stretch of wall at one end cleared. They showed talking movies!

Great was their learning. They knew electricity and how to make it. They knew of a great many things in detail which Ug's people knew only vaguely. And greatest of all, they brought films and books explaining many great mysteries in simplest form. Civilization, a civilization of power and steam, of culture and complicated chemicals, was about to return.

They were given a great banquet. Excitement ran high. The man who said he was Goddard looked about with shining eyes, searching the faces of the women, for he had read in his diary of his great love for a girl named Marion who brought dreams from the keys of a piano.

At the finish of the banquet, Hum had her favorite piano brought in. Sitting far away, she played as she had never played before. Years of pent-up love, of pathos and happiness, ripped and swelled and cascaded from her finger tips.

At the end, a deep hush hung over the gathering. Softly she walked toward the two strangers, a strange light showing from her eyes, no longer any puzzlement or hesitation. The two men rose. Goddard breathed quickly. Here, almost beyond hope, he had found the girl!

She came forward as mist floats across the moors. Came forward into the arms—of Petersen!

He trembled as their bodies touched. What mattered philosophy or civilization? What mattered it how or why this had happened? Suddenly, a great loneliness of years lifted from his shoulders. Embraced, he knew that nothing in the world mattered as much to him as this—knew that somehow, inexplicably, this was what he had waited, longed and hoped for since the first day of memory! Knew that he had once been Goddard!

Not that it mattered. Life, he felt, was just beginning.

The Time Impostor

Out of the future they came to save the man they honored

by NAT SCHACHNER

THE ROTUND chaplain, black-gowned, closed his book softly and intoned: "May God have mercy on your soul!"

The warden nodded to him, professionally calm. There was a watch in his hand. "Everything ready?" he inquired of the impassively waiting guard.

"Everything, sir."

The warden gazed at the inexorable dial of his watch. "Thirty seconds yet," he said softly.

No one stirred. There was silence in the death chamber, a silence in which Derek Williams, reporter for the New York *Globe*, could hear the pounding in his veins. He had not thought it would be so hard, this first assignment of his to witness an execution.

The still, black-shrouded figure strapped to the chair was Mike Spinnot—the most powerful, sinister figure that had arisen in the United States for many a year. Ruthless, dominating, he had organized crime into a national organization, with secret squadrons of machine gunners, rifle men, armored cars. The government itself seemed helpless against his reign of terror.

Then came a great President, honest, vigorous, forthright. He met the challenge with a swift demand for State action. Failing that, he threatened martial law. The governor of the State clamped down on a rotten, politically complacent, city. The national guard marched against the crime lord, yanked him from behind his gunners, crushed the local organization with ruthless efficiency in a welter of blood.

And so Derek was waiting, as he had never waited before, for thirty small seconds to pass.

His eyes took in the silent black figure, enthroned apart, already not of this Earth. The black mask, the metal cap, the slit trousers revealing the bare, shaven leg, the deadly electrodes, struck a discordant unhuman note.

"Time!"

The warden snapped shut his old-fashioned watch; nodded imperceptibly to the waiting electrician. That worthy reached for the switch.

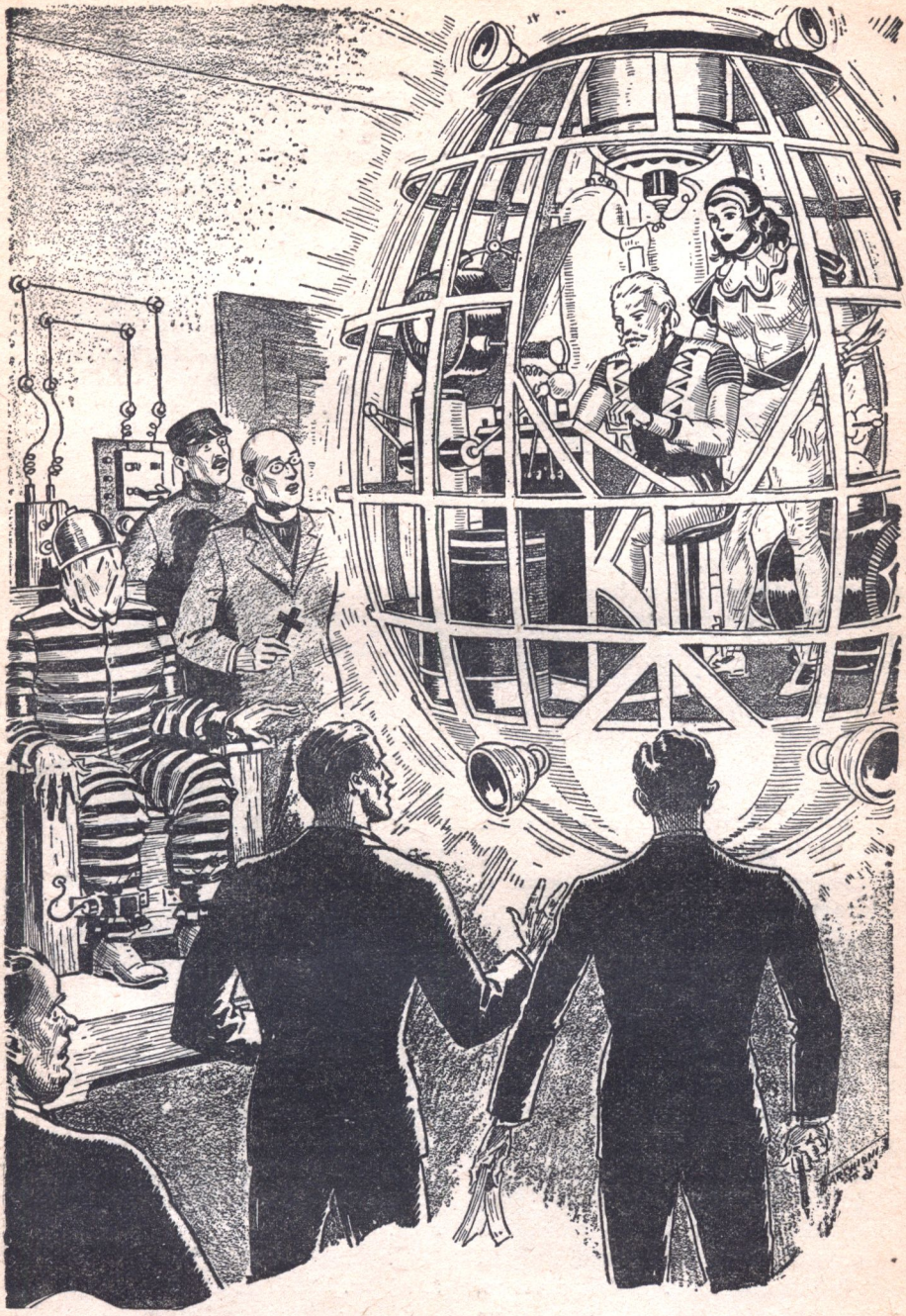
"Damn you all and blast you all to hell!"

Mike Spinnot, stubbornly silent throughout, was shrieking now, out of control, cursing obscenely at the swift approach of death.

The knife edges descended, approaching the copper flanges that meant contact. Derek could not remove his fascinated eyes from the inevitable copper. Even the raving blasphemies of the condemned man sounded thin against that awful vision.

Nearer! Nearer! In a split second the juice would be hurling itself

Illustrated by M. Marchioni



And then, in a cloud of flaming light, whining, buzzing, the egg-shaped cage sprang into view!

through Mike Spinnot. Ah, there it was!

But even as Derek wordlessly anticipated the contact, saw the quick quiver of the voltmeter needle over its wide arc, felt rather than saw the first straining surge of the strapped body against its shackles, there came a queer, high, humming vibration, like the buzzing of a million bees.

The strange sound grew in strength, clothed itself in a faint luminescence that seemed to coalesce before his very eyes into a whirling ovoid of flaming light. It was patently slowing down from an unimaginably terrific speed. Its noise filled the chamber.

The men in the death chamber froze into strained immobility at the sudden apparition. No one spoke, nor could they have been heard against the high penetrating whine that seemed the wind of the ovoid's motion. Then it came to a sudden whirling stop.

An egg-shaped cage sprang into view, a barred cage through which could be seen banks of curious dials and green-glowing instruments. Something moved within, something that resolved itself to the dazzled spectators in the death chamber as a man. And directly behind him—another being—a girl.

DEREK SHOOK his head to clear the fog away; he was sure that he was weltering in some nightmare. But the vision refused to disappear. The man and girl were flesh and blood, yet there was something strange about them, something that stamped them ineradicably as not of the same race as the dumfounded group in the chamber. Their clothes, for example, luminous pea-green garments, glowing with an inner iridescence, were kilted and caught up at the waist with bands of curious red metal.

A section of the cage slid smoothly open, and the man stepped out. He was tall, commanding; his brow thrust forward under a toss of silvery hair. But it was his eyes that held Derek. They were the eyes of an enthusiast, a fanatic.

Then the girl came out from behind him, and Derek gasped. She was slim and straight as an arrow; not tall, but the proud carriage of her head gave an effect of height. Her purple-flecked eyes looked out on the assemblage with an eager curiosity, while the color heightened through her olive-tinted skin.

It was the man, his eyes aflame, somehow menacing, who broke the hushed silence of the death chamber. He had taken a step forward, was completely out of the cage.

"What have you done with Michael Spinney?" His voice was vibrant, eager; the English was correct, yet curiously slurred.

There came no answer. No one of them had recovered yet from the shock of this strange intrusion.

The face of the man purpled with rage. He lifted a threatening hand. Mechanically, Derek observed tiny metal glints at the ends of the outstretched fingers.

"Answer, you men of an ancient time!" he roared. "Answer or it will be the worse for you!"

The warden came out of his stupor. "Who are you," he demanded, "and how did you get in here?"

The man was about to answer, when the girl tugged gently at his arm.

He turned to her with swift anxiety. "What is it, Merle?"

"Look, Thoron," she said softly, her voice like the tinkling of tiny bells. "Look yonder."

Her rounded bare arm pointed to the yet strapped-in murderer, miraculously reprieved; motionless, masked through all these untoward happenings. Heaven knows what thoughts were passing through the mind of Mike Spinnot behind that mask!

Thoron's eyes burst into exultant flame. "We've come in time to save our noble ancestor."

Heedless of aught else, he ran with great sobbing cries to the side of the crime king; knelt before the shrouded figure, and—yes—kissed the feet of Mike Spinnot, murderer, criminal extraordinary.

The man called Thoron rose again and with swift, deft fingers unstrapped Mike from the fatal chair.

The professional instinct of the warden came to the fore with a rush. Everything that had happened was forgotten, everything except the startling fact that a rescue of a condemned criminal was being attempted before his very eyes.

"Stop!" His voice was harsh with command. "Stop, or I shoot!"

The blue nose of an automatic gleamed in his hand. The two guards had drawn their weapons also and covered the amazing stranger.

But Thoron did not seem to hear him.

The warden's face grew black. "Seize him!" he barked.

The guards sprang forward. The man turned slightly at the noise of their attack, thrust out a careless hand. The guards reeled back as from an invisible impact; startled oaths ripped from them.

The veins swelled in the warden's neck. Very deliberately he raised his gun, squeezed the trigger.

The automatic spat in a single sharp explosion.

Nothing happened!

There was the light of utter incredulity in the warden's eyes as his gun barked again and again. The guards leveled their weapons and squeezed triggers. The chamber reverberated with almost continuous bursts of fire.

THORON paid no more heed to the hail of bullets than if they were a number of harmless flies. Mike Spinnot stood up from the chair, staggering a bit from the impact of the momentary current that had passed through him. Then a measure of strength seemed to flow through his body, and he ripped off the metal cap and mask in almost a single savage movement.

For a moment he stood there, his black shiny eyes, still filled with the vision of death, darting apprehensively over the mute assemblage. His brutal features were drawn and corpselike. He was trembling; an uncontrollable spasm moved over him in ripples.

Thoron rested a kindly hand on his shoulder. Mike spun around with a hoarse cry at the impact.

"Do not fear, O Michael!" soothed the stranger. "You are free. Long years have I worked to this end. You will leave this age that mocked and scorned you; that martyred you like a common murderer. You will come with me to my own time where you shall be greatly honored and revered."

The girl darted forward and took up his hairy hands, hands that had wallowed in blood, and kissed them reverently, tenderly.

"Welcome, most glorious ancestor!" she whispered. "Your youngest descendant greets you."

Derek suffered a sudden nausea at the sight of the girl's obeisance. Again he strove to thrust himself forward, but the charmed invisible

circle with which the three were surrounded held taut against his utmost efforts.

"Don't touch him!" Derek cried out desperately. "You are making a terrible mistake. That man is a condemned murderer; a criminal and public enemy of the worst type."

The girl drew herself up proudly; her eyes flashed indignation. "Of course the emissaries of the tyrant would accuse him of that," she cried. "That is how you fooled the people when he tried to rescue them from the slavery into which they had sunk."

Derek fell back. He felt his mind going.

"Again I say you are making a mistake," he repeated. "I don't know who you are or where you come from, nor how you managed to get into this room. But if you think this man"—he pointed an accusing finger at Mike—"is anything but a rat and a menace to society, you have been badly misinformed."

The girl looked at Derek, a bit puzzled and shaken. There had been an authentic ring of sincerity to his voice. Mike's face, that had been slowly changing to a certain savage exultation, went pasty white. He shifted a bit closer to his newfound protector.

"Don't let them take me," he said. "I was framed; that's the truth. They're murdering me for something I never did."

"Do not fear, O ancestor," Thoron assured him, "these hirelings cannot harm you. Come!" He beckoned to Mike and the girl. "It is time for us to depart."

He escorted Mike very respectfully into the interior of the cage, seated himself at the controls. The girl followed with a quick sidelong glance at Derek.

Thoron was already manipulating his levers. The door of the cage was closing slowly. In a minute it would be too late to do anything. They would be gone.

Derek did not pause to think things out. With every muscle tensed, he leaped forward, bracing himself for his crash against the impalpable wall. Every ounce of wiry strength was in that leap.

But to his surprise there was nothing to bar the surge of his rush. Braced as he was for resistance, he fell through the half-open door in a tumbling sprawl. His head crashed heavily against the metal base of the instrument board. Before he could recover his reeling senses he heard the click of the door behind him. He was shut within the cage, a prisoner.

Already the floor was heaving up at him as he lay, half stunned. In a groping gaze he descried dimly the spinning walls of the death chamber; flattened distorted faces that whirled in grinning arcs about him. Then came little flashes of flame that sprang toward him and whined thinly. That must be the guards shooting at them, he thought drowsily. He was fast losing consciousness. All the world seemed to be spinning dizzily around.

THE ODOR of something pungent brought Derek jerking back from waves of reeling blackness. He opened his eyes weakly. The girl was kneeling beside him, her eyes deep pools of pity. She was spraying his forehead with an odorous liquid that bit deep into his consciousness.

She gave a little cry of delight when she saw the first flutter of his eyelids. "He's alive, Thoron, he's alive," she said joyously.

But Thoron was not listening.

His regard was fixed firmly on banks of glowing tubes, that winked out and flared up again at the touch of his long mobile fingers on a row of shining buttons. Mike Spinnot was standing next to him, legs bowed to the steady sway of the floor, bewildered, yes—but with the dawning of a cunning look on his thick-set features. His heavy brows were knit, as if he was trying to adjust himself mentally to the strange surroundings into which he had been catapulted.

Slowly Derek tottered to his feet and steadied himself against the bars of the cage. The girl watched him anxiously.

The cage was rotating and undulating in long heaves; slowly, it seemed, yet outside the open bars was only a gray blur, shot through with hurtling black streaks.

Derek took a deep breath and called softly, daringly: "Merle."

The girl smiled faintly. "What is it, man of long-ago?"

"Just that, Merle," he puzzled. "I am Derek Williams, alive and reasonably alert, yet you and your father—I believe Thoron is your father?" She nodded. "Yet you and your father both have referred to me and those others in the chamber as people of an earlier time, as if we were—dead."

She nodded gravely, a bit wistfully, he thought, and answered: "You are!"

The affirmation crushed him. The adventure had partaken right along of every element of unreality, but this was really laying it on a bit thick. He must be the victim of a gigantic hoax. He, Derek Williams, dead! Not if he knew it!

The girl was smiling now. She glanced backward and noticed her father and Mike in absorbed converse. Thoron was talking, explaining, and Mike was listening with a furtive expression, as if he were face to face with a lunatic. Then she brought her gaze back frankly on Derek.

"I really shouldn't tell you, because you are the avowed enemy of Michael Spinney, but you do not look as though you are all bad. It possibly wasn't your fault that you hounded him; just that you were deluded by the tyrant."

Derek opened his mouth to deny this puzzling reiterated imputation; but thought better of it.

"I am not of your time and age," Merle continued. "By now you must have realized that."

Derek felt his head shaking stupidly. Some dim piercings of light had come to him already, but he had not dared face the issue thus openly.

"We come from a time that is over six thousand years in the future from what you consider to be your present," she went on quietly. "To us you are all people of the long-forgotten past, men and women who have lived their lives and are now—dead." There was a sudden catch to her voice, a faltering on that last fateful word.

Derek grinned cheerfully. "I'm not yet dead, thank you, but go on."

"We have the history of your time, this early, dim year of 1932, and the stirring events that took place then are narrated with tolerable clearness."

Derek smiled wryly. "If only you knew how dull things really are—or were. It's rather confusing to use tenses; I don't know now whether I'm past, present, or future. But let me hear what these stirring events are that I've been missing."

She looked at him suspiciously, but his face was grave, attentive.

"You seek to mislead me," she

stated firmly, "but you cannot; our record is authentic. You know as well as I that in 1932 the Earth was groaning under a tyranny more brutal, more horrible, than any in all recorded history. One man was in the saddle. Surrounded by bestial soldiery, he rode roughshod over the rights of man. All were slaves to do his bidding, and no one dared to raise his voice in protest."

To Derek it sounded as if she were repeating by rote some well-taught tale.

"But one arose who dared to brave the tyrant's vengeance. A hero he was, a great man with a dauntless soul in that far-off early day. Up and down the land he went, preaching revolt, calling upon the stupefied peoples to cast off their chains. But they were drugged, brutish slaves, and they did not heed him. At length the soldiers of the tyrant searched him out, and he was dragged to jail, there to be executed like any common felon."

She halted, manifestly overcome by the pathos of her own narration.

Derek gazed at her loveliness wonderingly. "A very pretty tale," he admitted. "And who was this mighty hero?"

Again she favored him with a glance filled with suspicion. "Michael Spinney!" She pointed with a splendid gesture to the crime king, still held in speech by Thoron. "The man you call Mike Spinnot."

Derek grinned cheerfully. He must humor her. "And the name of the tyrant?"

"Horver! Herbert Horver!"

He looked at her in amazed stupefaction. Surely he had not heard aright.

"What did you say that name was?" he asked hoarsely.

"Horver," she repeated impatiently. "Surely you know as well as I." The girl's face was clear and candid; she was not pulling his leg.

LITTLE THINGS began to click together in orderly array in Derek's brain. A faint light was dawning on him, yet so fantastic was the hypothesis, so ridiculous in the extreme, that he was tempted to dismiss it immediately.

"You said you had a history of our time. Only one?"

"Yes; it is all that has survived. You see," she explained, "about the year 2050 the world went to war—the last war of mankind. It ended in catastrophe—the human race almost succeeded in wiping itself out. Every city, every community of any size, was buried in its own ruins. The few survivors reverted to primitive conditions; it was hundreds of years before civilization reasserted itself.

"Every book, every document of your time, and most of those of prior ages, were lost, destroyed, except for this one history that managed to escape the general disaster. It was found by archæologists digging in the submerged ruins of a great city not many miles from here, securely embedded in a rusted steel box. Fortunately it gives a rather complete history of that age."

The faint light in Derek's brain exploded into brilliant flame. "The name of this veracious history?" he begged breathlessly.

"'Fronting the Tyrant.' The author was evidently a prominent contemporary historian—the preface so states—his name is Rosenzweig."

Derek sucked his breath in sharply. He knew the book, also its author, a penniless journalist friend of his who had noted with disgust the flood of books glorifying the American criminal. He wrote a book to end all crime books—a bur-

lesque, written in the soberest style—a history, in fact!

Mike Spinnot became Michael Spinney, a sort of modern Robin Hood, tilting against the depression in the person of an archtyrant—Horver.

The book went over big, but not as a burlesque. Ironically, the people seized upon it as a fictionized cry of protest and read it in good faith, to the great discomfiture of the author, but to the speedy enrichment of his pocket. It had a tremendous sale.

And now—the greatest irony of all—this one book of all extant volumes was to survive through the ages! To cap the climax, the book which had been written early in 1932, had ended with the execution of its hero, Michael Spinney, in the latter part of 1933 in the manner and for the reason the girl had given Derek. The newspapers had played up heavily the strange coincidence at Mike's trial and subsequent sentencing.

"And so," Derek managed to gasp out, "you came back to rescue him. Why you and your father?"

"Because," her eyes met his proudly, "we are his lineal descendants. We are Spinneys."

For the moment Derek was crushed. Then he reflected. "This is as true as the rest of it. Mike's name is not Spinney, of course."

His gray eyes mused over her.

"This machine, is it in common use in your time?"

"Oh, no; father invented it. You see," she explained, "father is a profound student of history. The story of his great ancestor has always held a fascination for him. Even in our day we are honored as descendants of the hero. He brooded over it, waxed indignant over the untimely end of Michael Spinney. Then one day he shut himself up, refused to talk, to disclose what he was doing.

"For two years he labored. This is the result. He had invented a time-traveling machine to take him back to the year 1933. The principle is surprisingly simple; it depends upon bringing the vibration of the molecules in cage and occupants to a speed approaching that of light. When that is done, time for the traveler slows down to minutes, while continuing for the universe at what is called normal speed."

Derek nodded. "We knew that. It explains traveling into the future. But how about returning to the past?"

Merle hesitated. "Father explained that, too," she said doubtfully, "but I'm not sure I understood. It has something to do with negative speeds, involving the square root of minus one. But it works. Thoron decided to rescue Michael the Great, bring him back to life. I went with him. We have succeeded."

Derek stared at the lovely flushed face of the girl. There was no doubt she was telling the truth—as she conceived it. His brain was turning mental somersaults. The future coming back to the present—the present going forth into the future!

"We have reached home," Thoron said joyfully, his face concentrated on the gleaming dials. He pressed buttons, pulled a little switch. Derek felt a sudden shifting of weight, as if he were getting heavier. The gray blur outside disintegrated into hurtling fragments. The machine was slowing down, coming to a halt from its tremendous journey through time.

The flying streaks gave way to a spinning wall, branches that moved swiftly, and a great yellow moon

that circled in wheeling arcs. Slower and slower, and then a slight jar. The machine had come to complete rest.

Thoron slid open the door. "Come, O Michael," he urged respectfully; "we are in our own time again. Here you will be safe from the tyrant of your own day, and the world will do you fitting honor."

THEY WERE in a garden, but such a garden as was undreamed of in the year 1933. A wall of translucent red inclosed a bit of paradise. Fantastic trees overarched gracefully, strange blooms filled the night air with perfumed sweetness, fountains threw colored waters high into the air, waters sang and fluted in cadenced harmonies.

Derek watched the crime lord's reactions. That worthy's face was a study. Fear and dim comprehension succeeded each other in turn. He had treated Thoron's story as the ravings of an escaped madman. The rescue, the whole amazing interlude, had not yet penetrated his senses.

Now for the first time he began to believe. Derek saw a gleam light up Mike Spinnot's features.

Mike said: "Sure, Thoron, you're a good guy, and on the level. What'm I supposed to do here?"

"I have arranged for everything," Thoron answered promptly. "You shall remain as my guest. The council will welcome you to its deliberations. Festivities, ceremonies, will take place in your honor."

Mike's roving eye caressed Merle's shapely form. The girl flushed under the insolent gaze.

"Swell looker, that dame!" Mike winked at Derek. "Maybe I'll take her back with me to good old New York. I see possibilities."

Derek flamed at the unmistakable tenor of Mike's discourse. He took a quick step forward, shook a warning finger under Mike's nose.

"Listen, Spinnot!" His voice vibrated with cold fury. "You got away with murder in our time, and now you're trying the same stunt here. These people are not onto you yet, but they're going to be. In the meantime you lay off the girl, you hear me?"

His body was tense, alert.

Murder was writ large on Mike's face then, murder and sudden death. His hand went under his armpit, to come away empty. There was no room for a shoulder holster in the garb of a felon.

"You keep your trap shut!" he snarled. "I'm the big boss around here, and if you want to keep on living——"

Derek's fist shot out like lightning. It caught Mike off balance, lifted him clear off the ground. He went down in a twisted sprawl yards away. Merle screamed.

Derek turned to see her eyes wide with terrified warning; to see Thoron raging at him with hand outstretched. Little blue lights glinted from under the finger nails. Derek threw up his hand instinctively, but it did not save him. A dull roaring filled his ears; a million red-hot needles pierced his body, and his last consciousness was of falling heavily to the ground.

DEREK weltered out of a heaving sea. A dull pain suffused his being; a strong paralysis fettered his limbs. He groaned and opened his eyes.

"You poor boy!" The voice was warm with pity. "How you have been tortured."

Derek turned his head and gazed into Merle's limpid eyes. Her rounded arms were supporting him. He was in a small, high-ceiled chamber, glowing with invisible illumi-

nation—a girl's boudoir, simply yet luxuriously furnished.

Derek brushed a weak hand over his brow. For a moment everything was strange to him. His wounded body, the girl bending to him. Then it came back to him with a rush.

"How did I get here?"

"Father and Michael wished to kill you as you lay under the paralysis. I prevailed on Thoron to obtain the council's permission for your execution. While they were away attending the meeting, I caused you to be removed secretly to my chamber."

"Thank you!" he said simply. "But why did you save my life? I am only a tool of the tyrant, and Mike Spinnot is your heroic ancestor."

Merle flushed; she felt the sarcasm. "I am beginning to believe that you were telling the truth," she answered slowly. "This Michael Spinney does not act or talk like a great man. There were several things I caught——" She checked herself and burst out passionately: "Why does history lie like that—make heroes out of knaves, and real men die unknown, unheard-of?" She looked meaningly at Derek.

It was his turn to blush. He hid his confusion with a laugh. "I see history has not changed much in six thousand years. In our time we have the same complaint. But," he continued, "if you are now convinced that Mike Spinnot is, or was, justly sentenced to death, why don't you tell your father and have the man dealt with as he deserves?"

The girl was oddly embarrassed. "I've tried," she told him hesitatingly, "but it does no good. Thoron, my father, has almost all his life been absorbed in the theme of the greatness of his ancestor. It has become a passion to him, his very reason for existence. His mind is closed to all evidence; he refuses to see the manifest absurdity of the legend. Why, when I argued with him, he flew into a rage, threatened to cast me off as a disgrace to the Spinneys. And in the fanaticism, he has convinced the council, too, of the truth of his story."

Derek arose, still a bit shaky, wounds smarting painfully, but in full command of his faculties. "The only thing to do now," he said decisively, "is for me to think of some plan to show up Mike in his true colors."

She shook her head despairingly. "You don't know the members of the council. Once they definitely commit themselves to a course, nothing can make them admit that they are wrong."

"That sounds familiar, too." Derek smiled faintly. "Then I'll have to hide for a while and try for the machine."

"It is under heavy guard," she said hopelessly. "And as for hiding, I don't know where. Even now the guards of the council are searching for you. They have orders to kill at sight. No place is immune from their search; not even this chamber of mine. Their invisible search-beams can see through the thickest wall as if it were glass."

"Not a cheerful prospect for yours truly!" Derek grinned. "What would happen if I were caught here—I mean, as far as you are concerned?"

"That does not matter."

"I must know," he insisted.

"I should be put to death. Even my father would insist upon that penalty."

Derek considered a moment. "They won't find me here then," he

said grimly. "I'm leaving right now."

"Where to?"

"Anywhere."

Merle shook her head decisively. Suddenly her eyes widened with alarm.

Derek spun around to follow her gaze. Set high on the wall was what appeared to be a burnished mirror. In it was seen the figure of a man swinging a metal tube in front of him. No light emanated from its orifice, yet the man's eyes were eagerly following its arc, as if searching for something. Then his eyes seemed to meet Derek's gaze in the mirror. His mouth opened in a soundless shout, and he dashed forward.

Involuntarily Derek whirled to meet the attack and found himself staring at a blank wall.

Merle tugged violently at his arm. "Quick, we must run for it now! He saw you with the search-beam."

"But how did I see him, too?" Derek wondered.

"That mirror on the wall is a search-mirror also. Come!"

She half pushed him straight for the opposite wall. An oblong patch opened miraculously in it at her approach. A long, twisting corridor extended ahead. The wall closed behind him, just in time to shut off the quick lunge of the guard.

FOR WHAT seemed hours they hurried through interminable passageways and rooms; impenetrable walls opened before them and closed as swiftly behind. The noise of pursuit died away in the distance, but Merle would allow no slackening.

Another little door opened before them. Derek learned afterward that all these slides were actuated by photo-electric eyes. Then presence of Merle's body at a certain angle cut off an invisible light ray and started the mechanism in motion.

The girl thrust him in quickly, closed the slide behind them. They were in a little cubicle, bare-walled.

Merle was whispering now. "Do not make the slightest noise," she warned. "Directly on the other side of that wall is the council chamber. They are meeting shortly to honor Michael Spinney. The guards won't dream of searching for you here. You are safe for a while."

Derek looked at her unsmilingly. "And you?"

She looked at him strangely, was about to speak, when suddenly she stiffened.

"What has happened?" Derek asked in alarm.

She waved to him for silence; her face strained forward as if she were hearing unseen voices. Then very swiftly she ripped a tiny metal ornament off the shoulder of her garment. Derek had not noticed it before.

She placed it on Derek's shoulder. "Listen!"

Faint in Derek's ears came a sibilant whisper, then as contact steadied, out of the air droned a voice.

"Merle Spinney, Merle Spinney. Your father Thoron is seeking you. He believes that you have met with foul play at the hands of the stranger from an ancient time. He has escaped and cannot be found. Answer if you can through the telerad or snap on the visualization. Do you hear, Merle Spinney?"

Derek snatched off the tiny bead, and faced Merle. "They are calling you. You won't go."

"I must!" she cried desperately, as she adjusted the telerad again on her shoulder. "You will surely be found if I stay with you. The search will be unrelenting. If I go back, I may throw them off the trail."

"They will harm you. It's a trap. They know you helped me."

"Perhaps not."

"That's impossible and you know it," he accused her flatly. "You're only going back to sacrifice yourself for me."

"No, no!" she panted. "Let me go; it is for both our sakes." She tried to duck around him.

Derek put himself squarely in front of her.

"If I must die, it certainly won't be at your expense," he stated grimly.

The girl shuddered and tried to get past him again.

"No, you don't," he said. "I told you I won't allow it." His arm reached out and grasped her gently but firmly by the shoulder.

She shuddered again, more violently. Her own arm extended, as if to support herself against his shoulder.

"Please forgive me!" she half sobbed. "But it is for your own good."

Her fingers straightened out. A warm shock quivered through Derek. He tried to move but could not. Merle darted past his helpless immobility with a little cry. The door slid silently open and closed behind her fleeing figure.

She was gone.

Derek stared at the blank wall. She was risking her life—for him. He had no illusions about the telerad call. It was a lure. The council knew by now quite definitely of her part in his escape. And Mike Spinnot, too!

The fetters of paralysis were slowly leaving him. Merle had used only a weak ray. Agonized, Derek waited for his limbs to recover their use. The seconds passed like eternities.

At long last his legs, his arms responded. The influence of the ray was gone.

He threw himself at the wall through which he had seen Merle vanish. A smooth unbroken surface met his frantic questing hands. He drew back to hurl himself despairingly upon it. Possibly he could jar the mechanism loose. As he shifted his position, there was a little whir, and the blessed slide opened. He had stepped unwittingly in the way of the ever vigilant photo-electric eye. He catapulted through, out into the pale dawn of morning.

For a moment he stopped dead. Before him stretched a magnificent vista of radiating boulevards, flanked by cloud-piercing structures, each set in its own parkland. The high spires glinted with delicate colorings in the first rays of the sun. Above glided noiselessly long, streamlined vehicles, swift on their appointed courses.

But his eyes were not for these, nor for the marvelous strangeness of the scene. Only Merle mattered now. Then he saw her, a running figure, far off.

He darted after her, heedless of possible discovery. He saw her stop short, twist something on her shoulder, pause for a moment, then off she was again.

"She's communicating with them," Derek said savagely, "the brave little—fool!"

It was a nightmare of a chase; up one boulevard, down another. Never once did she look back; always she hurried ahead, intent on her errand of sacrifice. Derek gained on her, but not enough. He groaned, knowing that she would reach her destination before he could catch up. Never once did he think of his own danger in thus openly traversing the public highways. Luckily it was

early yet. Hardly any one was stirring. Once or twice he met with a man of the future, who turned and stared curiously after the racing savage-looking figure. Once he heard a shout behind him, but he did not pause in his headlong pace.

IN THE distance a high translucent wall reared itself. Derek recognized it. He saw Merle hesitate a moment; then brace herself as if for some ordeal. She disappeared through, and the wall gleamed blandly as before. So intent was Derek on marking the exact spot where she had entered that he collided violently with a man who had just emerged from an intersecting thoroughfare.

"Sorry!" Derek muttered automatically, and tried to disengage himself from the reeling figure. Then he stiffened suddenly. Recognition was mutual. A hoarse cry broke from the other: "The minion of the tyrant."

It was Thoron. His hand shot up to the familiar position, his fine old features twisted in fanatic rage.

Derek ducked as a blue flame sizzled harmlessly over his head. "You damned fool!" he gritted, and let him have it squarely on the chin. Thoron went down heavily.

"You asked for it," Derek panted as he ran on.

The wall loomed high in front. Behind him were gathering shouts. He shot a hasty glance backward.

There were men running toward him. Thoron was on his feet again, shaking a trembling fist.

Derek jumped for the little hollow where he had seen Merle stand. There was a little spurt, a streak of fire, and a round hole appeared in the wall, a little to one side. Another sizzle, and another hole appeared as if by magic. They were raying him. He swore violently, as the slide stubbornly refused to open. The wall had the appearance of a riddled fort by now. A ray scorched the hair on his head; there was a stab of heat at his side. Luckily it was a glancing thrust. But they were getting the range. The next beam would catch him square.

He shifted his position desperately. "Open sesame!" he shouted, as if the ancient incantation could help. Surprisingly, it did, or maybe it was the shift of his body to the right spot. The slide was open, revealing an oblong of garden.

There was a great shout behind him as he dived through. But the door had gone noiselessly shut again, and for the moment he was safe.

He cast about in the vast tree-clouded garden like a bloodhound on the trail. Where was Merle? She had disappeared. He raced through forestlike glades, calling her name, reckless of being overheard by others.

A thin scream came to him—it was Merle's voice, lifted in tearing fright and agony. To Derek it seemed to come in the direction of a particularly dense clump. He went crashing through it like a bolt from the blue. Behind there was a sudden swelling of sound. The men of the future had penetrated the wall, were in fierce pursuit. But this did not matter—not now. Derek's whole being was immersed in that last faint shriek of Merle's. What was happening to her?

He broke through at last, into the spacious, fountain-splashed sward where he had first come into this land of the future. There he saw something that made the heated blood boil in his veins.

The time-traveling machine lay like a monstrous egg on the close-

cropped grass. Merle was struggling weakly in the powerful arms of Mike Spinnot. He was dragging her, one hairy hand over her mouth to silence her cries, into the interior of the machine. There was a thick oily grin on his ill-favored face.

Derek acted swiftly. The distance between them was about a hundred yards. He swung over in a wide circle so as to be behind the struggling pair. Mike was already tugging the girl's half-conscious body through the entrance to the cage when Derek let out a final burst of speed, throwing over all attempt at concealment. Once they were safely within, it would be too late.

WITH A final heave, Spinnot thrust the girl bodily into the machine, turned to pull the switch that closed the door. Then for the first time he saw Derek, bearing down upon the cage like a thunderbolt.

The startled crime king let out a yell and fumbled the switch. He recovered quickly and jammed it down. But that fumbled second had been enough. Derek had dived through, thrust Merle out of the cage onto the soft thick grass, in one swift clean movement. Then the slide shot home—behind him.

Mike's hand came up with a quick jerk, but the momentum of Derek's forward thrust carried him clutching against Spinnot's legs. Spinnot tottered, sagged against the instrument panel, and crashed heavily upon Derek's prone body.

The next instant the machine leaped into roaring, rocking life. Through the already swirling bars, Derek caught a glimpse of a horde of furious faces outside, in the foremost of which he recognized the fanatic gleam of Thoron's. He was shouting something unintelligible in the high whine the cage was developing. A spatter of blue flashes twisted harmlessly around the circling bars, then a swift blur, and the machine spun dizzily off into time.

Both men were on their feet almost simultaneously.

Mike's face was a mask of hate, his lips drawn back from his teeth in an animal snarl. "Damn you!" he roared. "I'll cut your heart out for this."

He lashed out. Derek ducked and bored in with a rapid one-two to the stomach that brought a grunt of pain from Spinnot. Mike reached out with his long arms and caught the reporter in a fierce bone-crushing hold. Derek squirmed to get loose, but all his squirmings seemed only to tighten the grip. He felt his ribs cracking under the strain of that bearlike hug. Mike's hot mouth breathed on his face, whistling with the effort.

Then the machine rocked heavily; there was a thump, as if it had met with some obstruction in its wild careening through time. Both were thrown heavily. Derek broke loose and tottered to his feet.

Back and forth they fought, bruised, battered, panting, swinging dizzily to the whining motion of the cage. Derek felt himself going. It could not last much longer. Stepping back suddenly, and putting every last ounce of his remaining strength behind the blow, he shot clean for the point of the chin.

Mike's eyes went glassy; he swayed drunkenly, and collapsed in a limp sprawling heap. Derek tottered in a daze, then the brutal punishment he had taken claimed his aching body. He, too, went down, sprawling over the motionless crime lord. His last weltering thought was that the machine seemed to be slackening in its tremendous motion.

DEREK came up for air to find the prison physician bending gravely over him. In the background were figures, familiar ones—the warden, the chaplain, the guards, his brother reporters, just as if the whole adventure had been merely a dream. Yes; and there was Mike Spinnot, masked, black-gowned, enthroned in the death chair, metal cap in place, the slit trousers revealing the bare, shaven leg, the deadly electrodes clamped into position.

"What happened?" he asked in a weak voice.

The warden told him "When you barged into that strange machine, the door closed, and the next instant it was gone, a whirling flash of light. We hardly had time to turn our guns on the disappearing cage when it appeared again, slowing down to a halt. We found you dead to the world on top of Spinnot, and the girl and the old man gone."

Derek shook his head dazedly. "But we've been gone over a day!" he protested.

The warden shook his head pityingly. "Not longer than it takes to say *Jack Robinson,*" he said. "It was the clout on your head as you hit the cage and bowled Mike over that's giving you ideas."

Derek thought of all he had been through and opened his mouth to protest. Then he changed his mind. They would not believe him.

"Everything ready?" inquired the warden of the impassively waiting guard.

"Everything, sir."

He pulled out his huge old-fashioned watch, snapped open the case.

"Thirty seconds to go," he stated calmly, professionally.

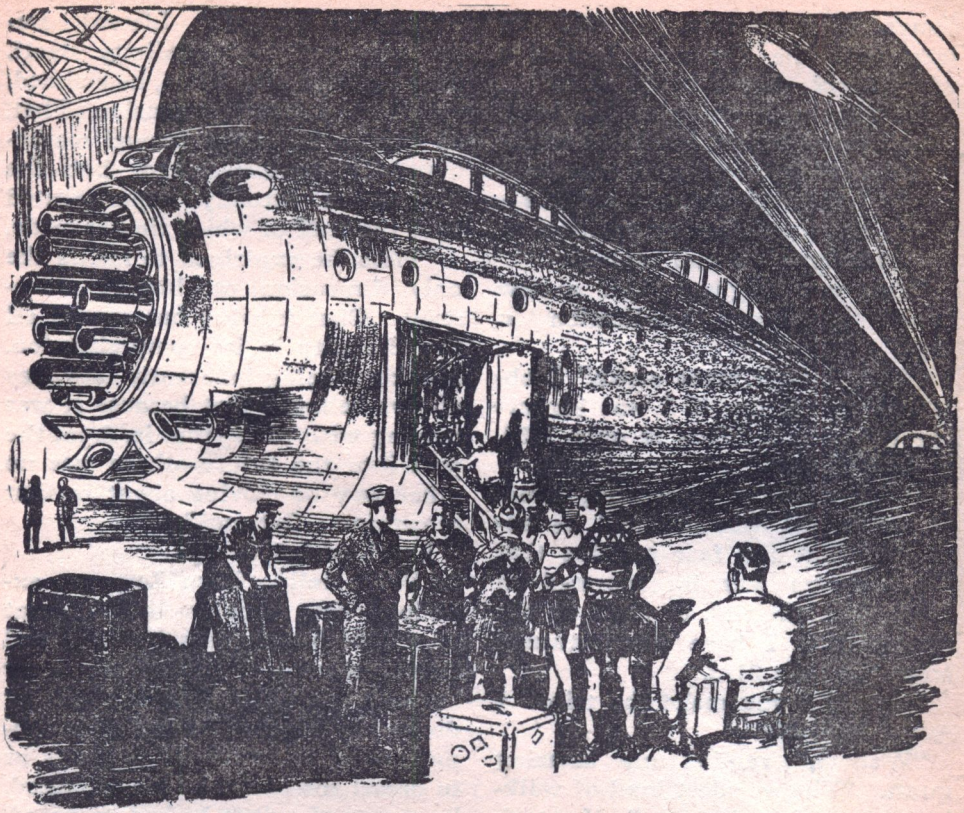
A heavy breathing silence fell suddenly upon the chamber. Mike Spinnot was about to pay the extreme penalty of the law for his crimes.

Derek lay quietly, his eyes averted from the death chair. Merle Spinney was not born yet, would not be for thousands of years. His eyes turned to the resting ovoid. They lighted up with a strange gleam.

Then he caught his breath.

Spinnot—Spinney—— Time often changed names more than that——

Once the current was turned on, Merle Spinney might never be born!



The Retreat from Utopia

Man tampers with time and sees!

by WALLACE WEST

"IT'S A ROTTEN night," I commented as I led my visitor, who had just introduced himself as John Smith, of the *Vacuum*, down the dark hallway and into my apartment, where a grate fire served partially to dispel the gloom and cold. "This storm has disrupted everything. All the wires down—the El blocked. Public utilities give worse service every day——" I continued to grumble as I pushed a comfortable chair before the blaze. "Have a seat."

"You twentieth-century folks don't know how lucky you are," Smith replied as he removed a dripping raincoat and relaxed into the depths of my rocker. "If you had to contend with problems of the twenty-second century for a while, you'd have reason to complain."

"Yes, I suppose so," I answered, poking the fire into greater bril-

liance. "By the way, you said you were with the *Vacuum*. Is that a new paper? Never heard of it."

He chuckled, wriggled his long, lithe figure—which, I noticed as the logs blazed up, was clad only in a bright jersey, trunks, and sandals—into a more satisfactory position on its tenth vertebræ and replied:

"Yes, you might call it a new paper. It began publication in 2150."

"That doesn't make sense," I objected, wondering if I was harboring a lunatic. "This is only 1934, so how the——"

Smith waved a deprecating hand. "I suppose I was abrupt," he admitted, "but the fact remains that the *Vacuum was* incorporated in 2150. I might add, to clear up the matter, that I have just returned from the year 2175."

"How did you make the trip?" I asked foolishly.

"Walked," replied my amazing guest. "The weirdest kind of walking you can imagine, too." He stuck out one sandal sole for my inspection. The leather was cut almost through in a score of places, as though its wearer had been tramping over broken lava.

"But——"

"Just a moment! I'll try to explain," he interrupted. "I am, as I told you at first, a reporter for the Greater New York *Vacuum*. A few weeks ago one Monsieur P. Lupescu, of the French Royal Academy, announced to the press that he had perfected a practical method of exploring the time dimension.

"The *Vacuum*, always desirous of serving its dear public, and in view of the fact that it hadn't had a scoop in ten years, sent me to Paris by the first rocket liner, with instructions to get the story—and here I am."

"But——"

"But me no buts! Listen! Lupescu's plan was simplicity itself, once I grasped it. Time, he claimed, was the real fourth dimension. That, of course, had been proved mathematically centuries ago, but the Frenchman actually experimented with the stuff of which time is made.

"Time, he explained to me, is the only dimension capable of movement. That is what has caused all the difficulty in its comprehension. Mankind, being inherently lazy, has always believed that because it was moving with time—that is, from the past into the future—there was no other way of moving about in that dimension. Get me?"

I nodded helplessly.

"Very well! Then Lupescu explained that time is like a great river which meanders in loops and curves toward a destiny we know nothing of. All life is drifting down the river—like a log—without power to retard its progress or to breast the current. He proposed, by means of a drug he had prepared, to 'free' the time sense and thereby enable men to crawl out on the bank of the river, so to speak, and visit both the past and the future. He claimed that persons could travel to and fro in the fourth dimension, just as they now do in the other three. Simple, wasn't it?"

I offered Smith a cigarette.

"Thanks," he said, lighting it awkwardly and coughing as he inhaled. "Well, to cut things short, by following the professor's directions in the use of his drug, I soon got the hang of the trick. I returned to New York and tried a few short trips—two or three years into the past and the future. But to-day the editor got to yelling for a real story, so here I am. I called at the *Sun Telegram* office when I arrived, found out you were one of their

best feature writers, and am now paying you a social call. Your servant!"

"Thanks for the compliment." I grinned. "You're a raving lunatic, of course, but you have a good line. Proceed!"

MY VISITOR reached for a copy of the *Sun Telegram* which lay on the table and was thumbing through its pages with a tolerant smile on his lips. "This looks pretty sick beside our electro-visual plates," he said, "but it's made up on the right principles. Murder, sex, disaster, and bathing beauties on the front page, and reams of succulent advertisements inside. Boy, I'm glad to see a good, bloody murder on the front page again, even if it did happen two-hundred-odd years ago! It's fine to see it!"

This was going to be good.

"Will you have a drink?" I inquired.

He glanced around furtively and whispered: "Sure! Have you got one?"

"Of course! We've repealed prohibition, you know."

"Oh, I'd forgotten about that." He upended a bottle of Scotch, and I watched a good half pint disappear without interfering.

"Boy, that hits the spot after that walk of mine!" I fancied he shivered slightly. "Real liquor, too."

"Why did they name your paper the *Vacuum?*" I asked. "Such candor, even in journalistic circles, is not——"

"It used to be called the New York *Express,* but when vacuum-tube transportation made the express train obsolete, it kept abreast of the times by changing its name. As for the fact that there's no news in it nowadays, that's another story——"

"Now, about your trip here," I hinted.

"Let's not go into detail," he said quietly. "I got here and, worse luck, I'll shortly have to return with my assignment. Suffice to say that the twenty-second century lies around a big bend in the time river from what you call the present. In reality, the two times are only a few"—he hesitated—"a few miles apart."

"Your booze must be pretty terrible up there if you compliment this blended stuff." I tried another tack as I poured him a small drink.

"Our booze is practically nonexistent." His voice was bitter.

"You don't mean that they readopted the Eighteenth Amendment?"

"Yes. And this time they really enforced it!"

I proffered another cigarette and waited.

"Thanks! Cigarettes are taboo in my time, too, you know." He hoisted his lean brown shanks to the edge of the fender and watched the smoke curl upward for a long minute. "I said a while ago that the twentieth century is lucky and doesn't know it," he resumed at last. "Now I'll tell you why.

"Along about the year 2160, I think it was, one of the greatest reform waves of all history swept the earth. Not even the Puritan reformation can show anything to compare with the fervor which gripped the human race.

"Women's skirts, which had reached the vanishing point, suddenly swept the ground. Television screens were deserted. Churches were jammed. Persistent rumors of the approaching end of the world may have contributed to the hysteria. I don't know.

"I was a kid in high school at

that time, and I well remember the day when my mother came home in a long, black poplin dress, with her pretty bobbed hair pulled back in a tight knot, and announced that she had seen the error of her ways. My father soon followed her example, and, in my youthful desire to imitate, I, too, went around for a time in a little hard hat and flowing tie, announcing to all who would listen that I intended to lead a better life.

"Courts were idle from lack of litigations, night clubs were closed, actors starved in hall bedrooms or committed suicide. The people reverted almost *en masse* to the morals of New England at the time of the Salem witchcraft persecutions and seemed to enjoy being as miserable as possible."

The wind, which had been mourning fitfully during our conversation, lifted its voice in an eery whoop at this moment. Smith shivered ever so slightly and stopped. I poked the fire. At length he resumed:

"Perhaps it was that old witch-burning fervor which was responsible for what next ensued. There was a rebellious element which fought this new Puritanism. A few bootleggers insisted on peddling their wares. Some members of the younger generation persisted in going swimming without bathing suits and racing their planes through the traffic lanes. Crimes were still committed. Strikes broke out when the reformers insisted that workers' wages should be reduced in order to force them to live 'according to their station.'

"As a result, some one struck upon the idea of deporting all criminal and irreconcilable types. Prison sentences had been proved wasteful and useless by our sociologists, so the only thing that could be done, reform leaders argued, would be to deport all undesirables to some lonely island and there isolate them.

"The idea spread like prairie fire. The League of Nations voted to exercise right of eminent domain over the island of Borneo, the only undeveloped portion of the globe, and make of it a prison camp.

RESPONSE to the plan was instantaneous. Law-enforcement officials did their duty as never before. Prisoners in State and Federal penal institutions of the whole world were first deported. Then followed a clean-up such as had never been dreamed of. Criminals, undesirables, irreconcilables, radicals, in fact all those who did not conform to the new standard of morality, were swept into a police dragnet which covered the earth, and shipped to Borneo, from which a cordon of allied warships prevented their escape.

"How the poor devils ever lived through it is a mystery, but it is a known fact that the population of the island was increased from two million natives to ten million renegades and that very few of the latter died from privation. Perhaps the fact that so-called recalcitrant types are more able to take care of themselves in an emergency than the average citizen explains why a holocaust was avoided."

Smith nodded for another drink and then continued:

"To return to my personal history. During the five years in which these changes had taken place, I grew up, finished college, and obtained a position as cub reporter on the *Vacuum*. This had always been my ambition, and the realization that I now occupied an exalted pedestal may have served to shake me down into a more normal attitude toward life.

"Be that as it may, I recall that, in spite of our protestation of faith in the new system, the *Vacuum's* reportorial staff managed to make life endurable during those long days when we sat about waiting for news."

"Waiting for news?" I interrupted skeptically. "That's not newspaper talk."

He chuckled. "You forget, my dear star reporter, that all of the sources of news had been shipped to Borneo. There were no more murders, nor more divorces, no more luscious sex scandals, gang wars, nor million-dollar mail robberies. In fact, our main stories began to concern themselves almost entirely with suicides, which were becoming alarmingly prevalent.

"Try to grasp this," he cried, suddenly animated. "No more gambling on the stock market, no more crime novels, strikes, nor tong flare-ups, no more threats of a 'European crisis,' no—more—anything!"

He sat twirling his empty glass, then, noting my horrified expression as I tried to imagine what such a situation would do to a newspaper, he chuckled somberly and resumed:

"But the strangest part of the whole thing, my dear fellow, was that the whole world began to slow down. Some leaven necessary to keep the lump healthy had been removed. Science, which had hoped to make progress undisturbed by wars or rumors of wars, produced nothing; literature collapsed into Pollyannaism when it had nothing to feed upon but domestic and social felicity; business men lost their keenness when they no longer had to use sharp practices—and the depression which set in makes your present one look like a boom.

"So, you see, there was reason why we reporters sat about the *Vacuum* news room and pitched pennies, indulged in a surreptitious game of poker, or manufactured sugar alcohol to while away the unbroken hours."

The wind, which had been steadily increasing, rattled the windows and sent a long volley of heavy raindrops against the glass. "What a night for a return trip to the future!" Smith muttered, shivering again. He arose, tossed several logs into the fire, and remained standing with his back to the flames, his strong aquiline features outlined against the glow.

At last he shrugged and returned to his story:

"Tom Fielding, editor of the *Vacuum*—and a more wide-awake chap I've never known—was the first to realize where that lethargy was leading. In spite of opposition from the American Reform Association, and, in fact, almost all of his readers, Fielding began a desperate editorial attack upon the reformation.

"In a series of appeals which occupied our first visual section for an entire year he proved that the only salvation for the world lay in bringing back our rebellious citizens. He compared them to worms 'which are loathsome in themselves, but without which the earth would be a barren ball of mud.'

"Despite the fact that the *Vacuum* lost half its circulation and advertising, the campaign began to bear fruit. First one newspaper and then another followed suit. Men and women who had merely conformed to the new order to save their skins joined in the attack, and at last, after a two years' campaign, the League of Nations council voted to withdraw the quarantine which had surrounded Borneo for seven years and return its inhabitants to their

homes. That was in 2173, two years ago."

"Wasn't it a gigantic task sorting those ten millions back into their respective homes?" I ventured.

"Was it? Say, brother, that's where the fun started. They refused to come back! In fact, they're still there. The situation has become so serious that the State department has appealed to Fielding to make a personal visit to the island to induce its hard-boiled citizens to return. He's flying out to Borneo to-morrow, and I'm going along—provided I ever get back."

"Wait a minute!" I was suddenly trembling with excitement. If this man was not mad, the *Sun Telegram* was headed for the greatest scoop in history. "How about taking me with you—up to 2175?" I shouted.

"Think you could stomach the trip? It's no pleasure jaunt."

"If you did it, I guess I can."

"All right, then." He jumped to his feet. "Have you a pair of high shoes? You'll need 'em badly. If you have two pairs I could use one handily." Looking down as he spoke, I noticed that Smith's legs, up to the knees, were torn and scratched, as though by vicious thorns—or the claws of little animals.

I rummaged in the closet and succeeded in finding two sets of dusty hiking boots.

"Fine!" he said. "Now, have you got a long knife or a stout stick? Two would be better."

"Would those do?" I asked, pointing to the mantelpiece, above which hung a pair of rusty cavalry sabers which I once had salvaged from a pawnshop.

"Splendid!" He dragged on his raincoat. "Ready?"

"Guess so," I replied somewhat foolishly. "Now what do we do?"

He took a complicated measuring cup from one pocket, a package of fine white powder from another, carefully poured two doses into our whisky glasses and filled them up with liquor.

"Tastes better this way," he explained, swallowing his with a wry face.

I followed his example. The concoction didn't seem so bad. But nothing happened. I looked at my visitor with growing doubt.

"Takes some time for it to become effective." He smiled. "We'd better get out into the street. Even there we run a chance of rematerializing in the middle of an automobile with very unpleasant results. Can't help that. Come on!"

Slipping his arm through mine, he strolled down the corridor and through the street door.

FROM THE door our path changed in an incomprehensibly crazy manner. It suddenly seemed as if the street were merely a billboard painting from which we were moving away at a rapid pace. The outlines of the buildings dwindled, shifted, and became hazy. Almost before I realized it we were standing in the open country.

But what country? It was like no place I ever had seen. Dull-gray light pervaded the place, but the visibility was extremely low. The effect was similar to that produced by a heavy fog, except that there was no dampness in the air.

"Rum hole, eh?" said Smith. "Gets worse as we go on."

Something clammy brushed my face at that moment. It felt like one of those gossamer threads which pull across one's face at night when walking through the woods. But this was much stronger and had the resiliency of a rubber band.

Other tentacles clung to my hands and clothing. My flesh crawled, and my struggles served only to entangle me more tightly.

"Easy there!" called my guide, slashing about him with his sword and finally managing to free me from the sticky mesh. "They're spider webs. Horrid things, but if you watch carefully you can dodge them."

"But—but what kind of spiders make webs like these?"

"Don't know. Haven't seen 'em, thank Heaven. Brrr! I ran into them, too." Smith scrubbed his face vigorously. "Come on! We go up this hill."

Our way now led through a field of briers which gripped our feet with fiendish perversity. Again and again we stumbled, while slithering, rattling noises under the thicket made me tremble to think what would happen if I fell.

We had just finished plowing through the thorns when a shout of warning from my companion caused me to crouch and throw up my weapon. The blade struck some leathery substance. A mournful wail broke the dusty silence. I caught a glimpse of a vast, batlike creature flapping off through the haze.

"Close call!" panted Smith. "Hurry! Up the hill before these things descend on us in a body." He started running up a long slope which was covered with loose boulders.

Here the going became almost impossible. Again and again I fell, cutting my hands on the jagged stones and cursing my foolhardiness for ever having embarked on such an insane adventure.

At last we reached the crest and plunged downward at the same breakneck speed. My breath tore through my lungs, and my knees threatened to buckle at every step. Just before the agony became unendurable, however, I beheld, looming out of the mist ahead, a fairy city of towering buildings, gracefully arched aërial roadways, and flashing, varicolored lights.

"Hang on, brother!" Smith was at my elbow. "Something's following us again, but I think we can make it."

Surely enough, I heard lumbering footsteps of some creature making the boulders rattle farther up the slope.

The scene before us, which at first had looked exactly like a painted back drop in a theater, wavered and shifted oddly as we drew nearer. Then I felt my feet once more upon the smooth pavement of a city street. The view jerked into three dimensions. Smith gripped my arm just in time to keep me from being run down by a peculiar, tear-shaped automobile.

"You can take it easy now." He laughed shakily. "Come on up to the office. There's a subway entrance around the corner."

I gathered my wits together and tried to concentrate on my new surroundings. On both sides of the wide avenue upon which we stood, vast white, windowless structures like Gargantuan building blocks towered to a glass roof thousands of feet above. Crisscrossing above us at many levels were hundreds of silvery bridges. Yet the place was but dimly lighted and traffic seemed much less dense than I had expected.

"It's the depression." Smith shrugged at my question. "Business is paralyzed."

He led me into a kiosk and through a maze of tunnels until we reached a platform where a long

aluminum cylinder lay waiting in its shining groove. We stepped inside. There was a cough of compressed air. The vehicle shot away with a speed which forced us back into our seats.

TEN MINUTES later we entered the office of the *Vacuum*. A young and pretty girl dressed sedately in black was drowsing over the television switchboard. An office boy was asleep with his feet propped on the edge of an unoccupied desk. Three reporters were playing dominoes under a droplight.

"Doesn't look much like your *Sun Telegram*, does it?" Smith sighed. "Come over and meet the boys."

The trio surveyed me with skeptical interest when I was introduced as Clayton Randolph of the year 1934, then prepared to return to their game.

"What's new?" inquired my friend.

"Same old stuff," answered the fattest of the three youths. "Taxes increased. Unemployment insurance again urged on Congress. Five hundred suicides in the United States to-day——"

"Is the boss in?"

"Yeh. Waitin' for you."

Fielding bounced out of his chair with a shout of delight when we entered his oak-paneled office. He was a short, almost bald man of about thirty-eight and was dressed in the shorts and jersey which seemed to be the fashionable male attire.

"Well, well! So you made it." He rubbed his hands together delightedly when Smith had given him a short sketch of his adventures. "And those swords!" He had caught sight of the weapons to which we still clung. "Looks as if you had been fighting pirates back there. Glad to meet you, Randolph. You should get a swell story out of this, too. Now, Johnny, record your yarn for the broadcasters and I'll have our best artist animate it for the morning editions. Then go to the doctor and get yourself patched up. We're off for Borneo at eight a. m. sharp."

"I beg your pardon, sir," I interrupted. "But would it be possible for me to go with you—as a representative of the *Sun Telegram?*"

"Don't see why not, even if that paper hasn't been published for two hundred years. I'll make another reservation on the rocket."

After the doctor had taped up our bruises and cuts, John Smith and I snatched a few hours' sleep on one of the copy desks in the office. At seven thirty Fielding shook us awake, and soon we were being whisked to the airport.

There we were ensconced in the Malay States Express, a gleaming cigar-shaped, wingless ship around the stern of which clustered a nest of rocket tubes. Our quarters were even more luxurious than those provided by an Atlantic liner of the twentieth century. We had hardly finished inspecting them when "All aboard!" was shouted. Soon the ports slid shut. There was a slight lurch but no sound as the rockets were turned on and the plane shot upward.

"We travel in the stratosphere at about five hundred miles an hour," Fielding explained as the landscape shrank beneath us. "Plenty of time for a poker game after breakfast—or was that indoor sport invented after your time?"

Late that afternoon, after an uneventful journey, we coasted down to the little-used airfield at Banjermassin, where the deportees had their headquarters. As the ship

roared away—the rockets made a deafening noise when one wasn't protected within the sound-proof hull—the three of us looked with some misgivings at our surroundings, but this soon gave way to astonishment.

Instead of the tumble-down shacks which we had expected would house the inhabitants of Borneo, rows and rows of well-built residences and stores met our eyes. Everybody seemed prosperous and happy and went about their business like the best of citizens.

We were welcomed by the mayor of the town, one Jimmie Cafroni, who had once, I learned, been the terror of Chicago's gangland. Cafroni was a big, dark man with a big, round paunch and an expansive, tight-lipped smile.

"To hell wit' you!" he said politely when Fielding broached the subject of our mission. "Us guys has got ever'thing we want here. Plenty t' eat and no cops snoopin' around corners with gats in both hands. The skirts are a damn fine bunch, and the climate's better than Michigan Boulevard."

At this point he spat copiously on a green scorpion which was crawling across the dusty floor of his office.

Then he concluded gently:

"You'd better run along and peddle yer papers. The fact is that all of those dangerous radicals and hardened criminals who were sent here seven years ago have developed into pretty decent folks once they were left in peace and found something to do with themselves besides stand in bread lines. We wouldn't be a bit of good to you back home now."

But this obstacle didn't daunt the little editor. His face pink with earnestness, he resorted to bribes, cajolery, threats, and, when these proved futile, an appeal to the patriotism of the ex-gangster. He pictured the woeful state of civilization, described how it was dying of ennui, and begged and implored Cafroni to come back and help save the world from its boredom.

He had a golden tongue, had Fielding, but, though Cafroni hung his head in shame, he was adamant.

"We don't go. Not even for the wealth of Injia," he growled again and again without daring to meet our accusing eyes.

Fielding was at a loss. He turned to Smith, who for once had nothing to offer, then glanced at me helplessly. And suddenly I remembered how a somewhat similar situation had been solved once when I was working for the Chicago *Call* during the early days of gangland. I leaned forward and whispered. The editor nodded.

"See here, Mr. Cafroni," he said, after pouring himself another drink of palm wine. "Tell you what we'll do. If you come back to Chicago, the lid will be off so far as you're concerned, providing you don't shoot any innocent bystanders. We'll agree not to repeal prohibition any more; there'll be a mansion in Golden Hill all furnished for you by the time you get back, and when you die I promise you the biggest funeral any gangster ever had. How about it?"

That settled it. Cafroni's little black eyes shone. He was for us from that moment and won his lieutenants over and through them the rest of the island's inhabitants.

THE THREE of us stayed in Borneo until the last of those poor devils were embarked for their homelands. I watched them go with a lump in my throat. Such chivalry,

such altruism, such unhesitating patriotism! I felt proud of them.

Those outcasts left the only place where they had ever been happy, the only place where many of them had ever been without fear of a bullet in the back or the click of handcuffs on their wrists—left that and went back to a world which had cast them out and which now begged them to return to save it from decay.

The fun began when the renegade population was once more installed in its old haunts. For weeks the poor devils didn't know how to act. They skulked through dark alleys like frightened cats, or, if they belonged to a higher stratum of society, sat through entire banquets without making one radical statement. It would have been laughable had it not been pitiful. Have you ever returned to a place you knew well as a boy and found it all changed and strange? So it was with them.

The *Vacuum,* on which I had taken a temporary assignment in order to watch developments, took full advantage of the situation. Gently, as though they had been toy ships on a wind-swept pool, it set afloat rumors of wars, murders, revolts, and other daring challenges to things as they are, or mocking lyrics of things as they should be. That started it.

The population began to awake from its seven-year lethargy. Conversation brightened. A new and intelligent play blossomed like a flower on the desert of the Broadway stage. A scientist proposed a trip to Mars. Things began looking up, indeed.

All this time the news-room force waited with bated breath for the first big story to break. We didn't care much whether it was a war, a flood, or a murder. The visual plates were all set up, ready to be flashed. The electricians waited at their transmitters twenty-four hours each day.

Then—it happened:

JIMMY CAFRONI SHOT BY RIVAL GANGSTER
BULLETS FLY AS BOOTLEG PLANES CLASH ABOVE STREETS OF CHICAGO
FORTY LIVES LOST
DISTRICT ATTORNEY DEAD, SHOT AS INNOCENT BYSTANDER
POLICE BREAK UP HUGE LIQUOR RING

Over the whole world the headlines flashed to be followed by actual scenes of the fray while it was still in progress. Things came back to normal with a jolt. I had hoped the story would break in New York, but one can't have everything—and Cafroni's funeral procession was fifty-two blocks long and cost the *Vacuum* a cool million. And they paid it gladly.

When it was all over I decided that it was time for me to be getting back to my own time. Things in 2175 were—bigger. No doubt about that! But otherwise I found little difference. Besides, there was a girl——

I explained the situation to Smith. He nodded sympathetically.

"Know just how you feel, old man. I'm too busy to go with you, but I'll drop around and see you again one of these years. Come on, I'll help you push off. Remember, now! Go over the hill, through the brambles and the spider webs. Otherwise you're likely to walk into the middle of the Hudson River or the Atlantic Ocean."

My last sight of my strange friend was as an animated figure waving to me from the streets of a phantom city. Then he was gone, and I was

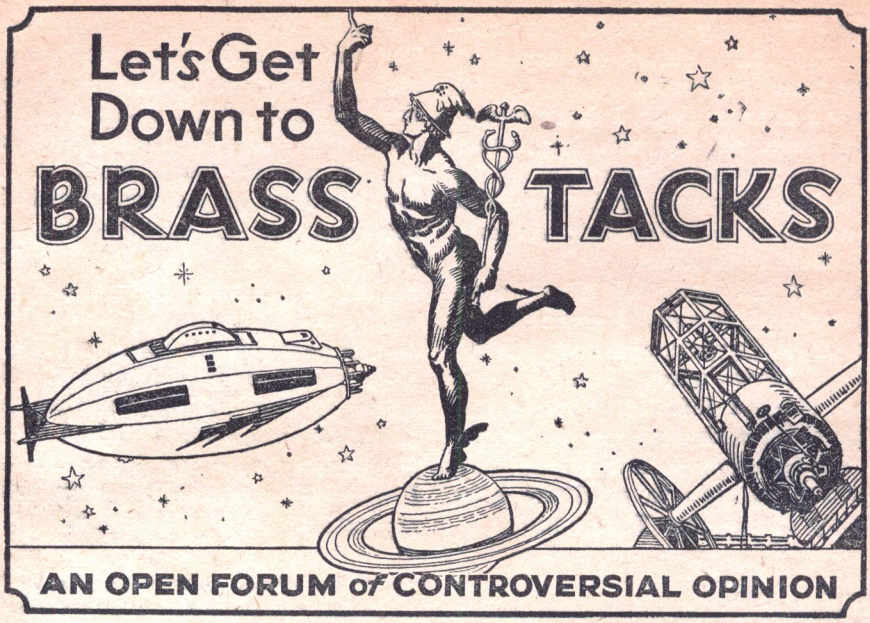
battling my way through that awful land of "things-as-they-are" where time is naught.

How I ever made it, I don't know. I lost most of my clothing, came within an ace of being strangled in those gluey strands, and staggered out on good old Flatbush Avenue more dead than alive.

Feeling like one of those emigrants from Borneo, I opened the door of my apartment and peered inside. How many months had passed since I left it? Would the landlord have thrown my furniture into the street or sold it at auction? Would I be able to read my own obituary in the *Sun Telegram?*

Inside, everything was just as I had left it. The fire blazed brightly, and smoke still curled lazily near the ceiling. Had I been dreaming, after all? My bruised shanks and aching lungs gave the lie to this. By accident or design, Smith had returned me to exactly the same time at which he and I had walked out of the door so long ago.

The editor wouldn't use my story on the news page. Said I must have been taking dope. Since I had lost most of my proofs in that mad scramble over the hill, I had to take it. If it weren't for Alice, I'd wish I were back on the *Vacuum,* where my talents are appreciated.



More Will Be Printed

Dear Editor:

As a former reader of science-fiction who has discontinued the reading of so-called "science-fiction magazines" because of their lack of interest and lack of originality in the stories, I was very much surprised to see the novelette *Colossus* which appeared in your January number, while glancing through the magazine at the news stand. The introductory paragraph from Eddington's book caught my eye. It was that which induced me to buy the magazine and to read one of the most interesting and well-written science-fiction stories I have ever read.

The story has unusual merit in the theme and the descriptive narration. With the exception of a couple of minor scientific errors which I would not attempt to describe, the story has unusual scientific fact and persistency, which, together with original theory, makes for one grand story. Even to the end, I am held in a certain captivation by the mystery that enshrouds the inevitable meaning of the author.

This was one of the few stories that I read in one sitting, utterly free from the boredom which comes with the common run of stories. Yes, even with all of the other stories in your magazine written by those "professional authors" who turn out stories by the dozen. "Donald Wandrei" may be a nom-de-plume of one of them, but if it is, I am sure that this story was an accident, because I do not think them capable of such a story.

This letter was born of a feeling for a certain story, that I wish to convey to the publishers so that more like it may be printed.—William Palmer, 4226 Henderson Street, Chicago, Illinois.

Colossus—All Tosh!

Dear Editor:

I was certainly glad to see that Astounding Stories has returned to the news stand. A few months ago when I saw A. S. once more in its accustomed place, it was like meeting a long-lost friend.

However, I have a couple of criticisms to make. For one thing, the cover is much too thin and flimsy. It tears and crinkles if you as much as look at it. How about using heavier paper for the outside of the magazine?

The so-called "thought-variant" stories that are printed each month are certainly astounding enough. Personally, I can see nothing whatsoever to a story like *Colossus*. All tosh! Still, I suppose it gave a lot of people real food for thought. But as I said before, it was entirely too fantastic to suit me.

You've really built up a fine list of

authors, though. Jack Williamson, Harl Vincent, Stanton Coblentz, and Nat Schachner rank up there with the best of them.

Here's wishing you the best o' luck with your magazine.—Robert Tufts, 61 Rathbun Avenue, White Plains, N. Y.

Colossus—Greatest Yet!

Dear Editor:

I have just finished *Colossus* in the January number of Astounding Stories. That story has caused me to write this letter. It is great, wonderful, a marvel of imagination. There is something more than fascinating in that idea, the idea of the search through immensity for the end of things. It is, I think, an idea of that sort which will finally help to win the Goals of Man. For if every one could get a picture of immensity, of the idea of space beyond space, and beyond that more space of Gargantuan dimensions—I believe that man would also realize his futility enough to act in a less futile manner.

Colossus is a story of stories. Print others like it—that give one something of a grasp of the things that be.

Astounding Stories is starting again with a great surge in the direction of perfection. What difference does it make what sort of paper you use if the magazine will hold together? What difference does it make who writes your stories so long as they hold us to them? For years I have read science-fiction, watching it climb so that the outstanding works of one time were the common level of the next, while greater stories stood out to make new levels for the whole to reach. And now I am satisfied with what science-fiction is coming to be; and too, I know that it will climb to even greater heights. We don't need stories so full of science that we have to use handbooks to read them; what we want are works which will cause us to wonder, and wish for more knowledge, and search for it. Science-fiction can do much beside give us a few moments of enjoyment while we read; it possibly will help us all to gain new heights; but if not that, at least it will turn our eyes so that we search above us for those heights. And the ultimate result will be practically the same. *Infinitum, morituri te salutant.*—D. R. Daniels, Inacio, Colorado.

"Ahead Full Blast!"

Dear Editor:

I went about that day in exceptionally high spirits. This struck me as curious and funny and in turn made me mad at myself. What was to-day? Just like any other day—the middle of the week. I shook my head angrily and growled at my seeming craziness—then suddenly I remembered! I rushed to the calendar, and sure enough, to-day was the third Wednesday of the month!

Four all-time records were shattered in my haste to reach the news stand. I anxiously looked around, and there it was, the January issue of Astounding Stories.

With eager fingers I turned the page and read with joy the contents page. The simple statement that the cover was the artistic product of Howard V. Brown shattered all my hopes and proved that Wesso was still loose. Again I felt a joyous exhilaration which one experiences when he expects something exceedingly good to happen. Look at the line of authors:

Straight down from top to bottom they read: Wandrei, Schachner, Diffin, Coblentz, Gurwit, Williamson, and Hilliard. S. Gordon Gurwit being the only newcomer into the ranks of S. T. F. writers. If I said that Astounding Stories is progressing in leaps and bounds, it would be an insult. Astounding Stories is forging ahead with rockets going full blast! Nothing can stop it!

Now—the first story. As I finish *Redmask of the Outlands*, smiles cover my face as I sigh: "What-a-man Schachner." I have read about every story he has written, and he has written plenty, and there is not one bad tale in the entire crop.

Coblentz's story was a masterpiece of literature, Colbentz at his best.

And *Colossus* was colossal!

After reading every story in the issue I arrived at the conclusion that every one was very good, some even better than that.

I think I am right in saying that your rivals will soon look upon you as a formidable enemy. The new management has worked wonders, though all credit mustn't go to the management. We must consider the diminutive author who only writes the story!

Well, I will close this lengthy letter by saying that I would like correspondence with a S. T. F. fan or fans.—Raymond

Peel Mariella, 5873 Woodcrest Avenue, Philadelphia, Pennsylvania.

Full-baked Serials Only

Dear Editor:

It seems to be a habit with readers of science-fiction magazines to say that "every issue is better than the last." I had not been able to say this until I bought the January number of Astounding. It was truly astounding!

I never expected to read a magazine devoted to science-fiction that was good all the way through. The January number did just that. In order of merit let me name *Redmask of the Outlands, Colossus, The Flame from Mars, Confession of Dr. De Kalb, Land of the Lost, Breath of the Comet* and *World Flight*. The queer thing about this summary is that of the short stories one has a hard time placing them in correct order—they seem to have the same merit. I can't say that *World Flight* was the worst story, but I can say that it was the least best, principally because, although well written, it has a well-worn plot.

Donald Wandrei seems to be setting himself up early as a ranking author of the new Astounding. Nat Schachner is also there, with two novelettes and a short story. *Fire Imps of Vesuvius*, however, was not worth the reading. But *Ancestral Voices* and *Redmask of the Outlands* made up that deficit two or three hundred per cent. Truly *Redmask* is one of the most novel conceptions of the future world ever printed, although the analogy is taken from the feudal strongholds of the Middle Ages and the city-states of ancient Greece. And *Ancestral Voices* was written with the master's touch. I know I'll read it several times more.

Anent serials, I hope you don't work Diffin overtime on this point. In the old Astounding he and Ray Cummings had more novel-length serials than any other authors—and they palled on me intensely. Have shorts and novelettes by him if you will, but serials at great intervals only. Give other good authors a chance—and when I say good authors I mean good. Our serials should be written and published as if they were going to the public in book form; please, no half-baked, overemotionalized, under-sciened, medium-written serials for us!—Paul Cahendon, 322 West 4th Street, Cincinnati, Ohio.

Calling Mr. Schachner!

Dear Editor:

The first Astounding Stories I have ever read was the December issue, and I want to congratulate you on the interesting stories that fill its pages. I am only fifteen years of age but am quite capable of throwing a few brickbats, as you will perceive if you continue to peruse this epistle.

First of all, *Ancestral Voices* by Mr. Schachner was a corking good story. However, I have an important criticism to make, and which I believe is justly founded. Mr. Schachner says that the time-traveler does kill his ancestor and then disappears. He then states that he never existed. If such is the case, then he did not build the time machine or go into the past, because he could not have built the machine as he did not exist! Will you please enlighten me on that point?

Also, whatever induces you to print such stories as *The Demon of the Flower* and *Last Sacrifice* and call it science-fiction? I do not intend to cast any aspersions on the authors, but those stories were simply lousy!

Thirdly, why not have full-page illustrations and not those kind you have now that look as the Earth would when compared with the Sun in size?

And lastly, why not publish more readers' letters?

Well, I have run out of brickbats and just want to say that *Colossus* by Donald Wandrei was superb.—Charles Sankovich, Box 252, Fort Bragg, California.

"Really Progressive"

Dear Editor:

The January number was the best that Astounding Stories has had so far in its four years of life. The magazine isn't perfect yet—some poor stories do crop up—but it at least compares exceedingly well with the other science-fiction magazines. And from recent trends, each issue seems to be five or six times better than the preceding.

I'm glad Street & Smith have got the magazine. This new management seems

to be really progressive. For instance, they've bowed to the readers' wishes, and we now have some good inside illustrators. They're not as good as some others, true, but an improvement over Sewell. Brown's cover was vivid, but Paul Orban did by far the best inside work. For one thing he was able to get some humanlike expressions on faces. I hope to see more of his work, much more.

I was pleased to see two longer type stories appearing, such as *Colossus* and *Redmask of the Outlands*. These two were great stories and tied for first place, with Coblentz's subtle satirical story coming next.

Land of the Lost was more or less a throwback to the stereotyped formulæ of the old (and let us hope gone) Astounding—formulæ of wild adventure stories, with unexplainable rays and beams most of the time, fierce, mad villains planning to destroy the world and of course the wonderful hero and his heroine.

By the way, couldn't "Brass Tacks" be enlarged? This sort of department is always one of the most interesting spots in a magazine. And why not have the editor comment on the printed letters?—Louis Robert Adessa, 18710 Wyoming Avenue, Hollis, New York.

Answers Wanted

Dear Editor:

Since it seems to me that the following questions, in which I am intensely interested, are within the realms of science, I would like the editor or the readers to give an affirmative or negative answer to them and to back their answers with proof. The questions are:

Do you think that handwriting reveals a person's character?

Do you think that a handwriting analysis reveals these characteristics?

By characteristics I mean a person's ability to use his intelligence, his physical ability and temperament. My dictionary defines character as: "The quality or qualities distinguishing any person; distinctive features, peculiarities." In other words, characteristics which make the difference between the President and a street cleaner; white-collar worker and common laborer; doctor and lawyer; author and engineer.—Steven Fogaris, 204 Fourth Street, Passaic, New Jersey.

Real *Science-fiction*

Dear Editor:

Astounding Stories is back into full swing again. All science-fiction, and excellent stuff, too. It is steadily improving with each new issue; I expect 1934 to be a great year for our magazine.

Colossus by Donald Wandrei is not only the best story in the January issue, but is also the author's best to date. I have read stories based on the same idea, but written differently. Usually our heroes, by means of pills, rays, etc., increase in size until they find themselves on the atom of which the Earth is a part. The heroine is captured by villains of the "giant atom" who are in turn foiled by the hero who then returns to Earth with the heroine. Donald Wandrei, however, has turned out something new, original, different. *Colossus* is a *real* science-fiction tale. It has a novel ending.

The concluding part of *Land of the Lost* by Charles W. Diffin is the better of the two. I would like a sequel.

Redmask of the Outlands by Nat Schachner was very interesting. I have always liked this author's work. Isn't the artist who illustrated the story a little behind times in the clothing of some of the characters?

The Flame from Mars, a new and different story of the meteor crater, I enjoyed exceedingly well. Let's have more and more by Jack Williamson.

Glad to see Stanton Coblentz in Astounding. I hope to read more and longer stories by him. *World Flight* and *Breath of the Comet* were both very enjoyable.

The cover by Brown is very good as are the drawings by M. Marchioni. Brown had better stick to cover work.

I am in hopes that you will continue serials (book-length ones), have more novelettes (at least one 20,000-word or longer in each issue), and give a list of the stories (more than two) to appear in the following issue.—Jack Darrow, 4224 North Sawyer Avenue, Chicago, Illinois.

How About Born of the Sun?

Dear Editor:

The magazine is surely improving fast. The January issue is a vast improvement over the other three issues. You have one thought-provoking story in Donald Wandrei's *Colossus*—truly one of the best stories I have ever read. It's every-

thing that the name implies. It cannot receive too much praise. The cover is plenty good, too. Marchioni seems to be the best artist you have had yet.

Are you going to carry on the "Hawk Carse" series? I hope you do, as every one seemed to enjoy the stories very much.

World Flight and *The Confession of Dr. De Kalb* were nice short stories. I hope to see a story by Jack Williamson in every issue as he is one of my favorite authors. I hope this letter makes the readers' corner.—Olon F. Wiggins, 2603 Curtis Street, Denver, Colorado.

Once in a While——

Dear Editor:

A month ago I was surprised to see that Astounding Stories had traded hands, and now is in the Street & Smith log. The old Astounding was my favorite magazine.

I got the January issue to acquaint myself with your effort. The nearer you stick to the old Astounding the better. Let Wesso do the covers and illustrations. Brown doesn't do bad work. Wesso is much better fitted than Brown, because of the characteristic scientific type stuff Wesso has, that fits the magazine. I see that you are getting some authors from some of the other good scientific magazines. Good idea. A story by Burroughs once in a while is welcome.

Your weird stories are all right once in a while. Variety is the spice of life. But stick to the standards that the old magazine had.

I'm sure you are making a success of it. Each issue has seemed to improve. Keep up the fine work.—T. Stephani, 1145 North Illinois Street, Indianapolis, Indiana.

"I Just Plain Liked It!"

Dear Editor:

As a faithful reader of the *old* Astounding, I wish to extend a rather belated welcome to its reappearance under the Street & Smith banner. My pocketbook, however, isn't so belated with its interest. I have the last four numbers on my lap as I write.

Colossus—you certainly *did* do well to feature this story! Whew! *What* a tale—height and depth and space and mystery and eternity! *Sequel*, please! Wandrei certainly does intend one. This is no ending at all. You'll agree to that! He's beaten all his previous work in this story, and some of it was hard to even equal again.

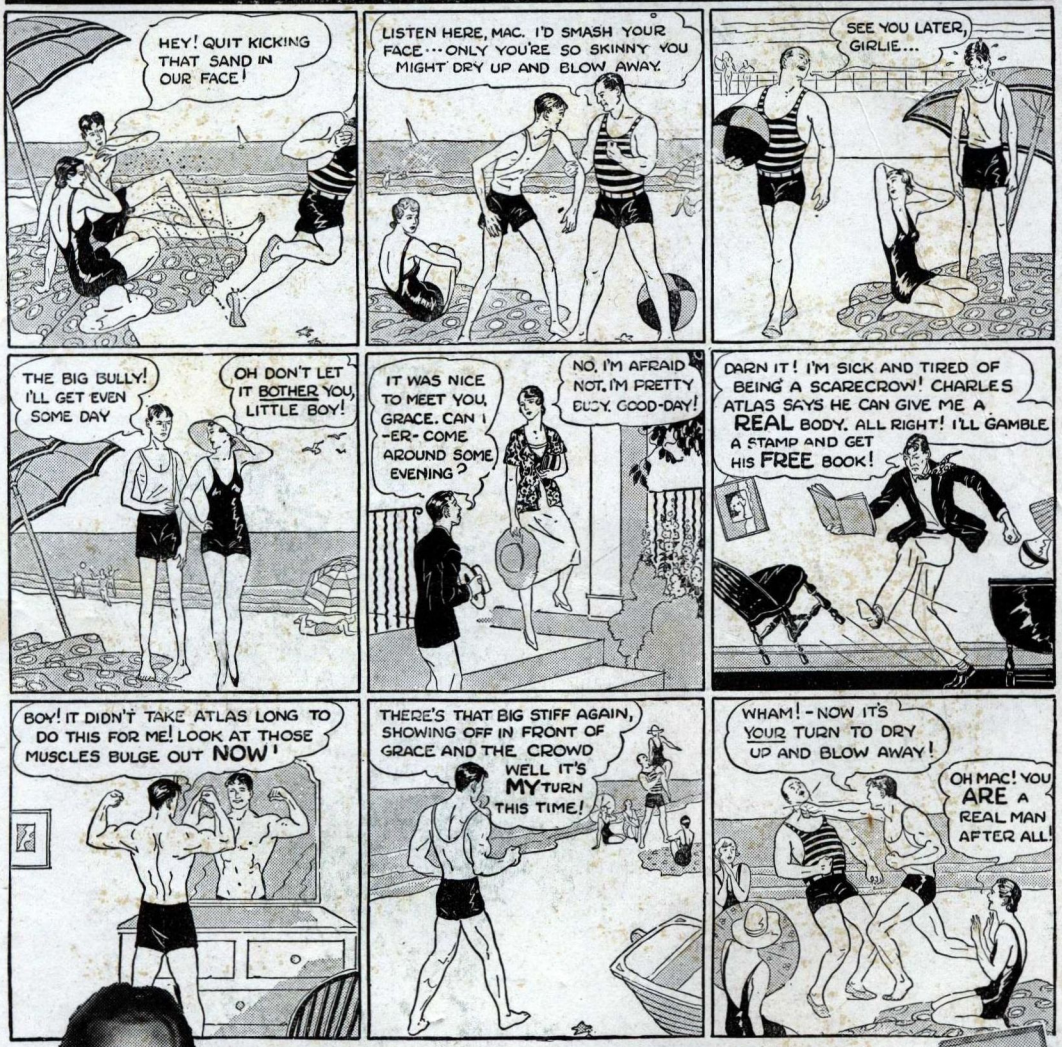
Your last two cover pictures are extra good. Why won't you give your artist a little publicity? Or are you afraid some one else might grab him? He has a sort of richness of color sense. These last two seem to me better than any either new or old Astounding put out. They make you want to read and see what it was all about. Oh, I see in the table of contents that one Howard V. Brown painted the cover. No relation of my own, I'm sorry to say. I'd like to claim a talented relative; but I couldn't draw a rooster!

Every story in the last issue is O. K. *Redmask* is by far the best story of Schachner's I've read so far. Diffin's good. This one is rather improbable, but he has such good atmosphere that he can convince a reader anything happened. Coblentz's story is clever, original. I found it very amusing in spots. It works out unexpectedly and sounds very plausible, the way he wrote it. *World Flight* has the charm of the unexpected. I don't know about other readers, but I couldn't guess ten lines ahead on this one—all the way through—though it's perfectly logically developed and has a fine ending. *The Flame from Mars* I just plain liked—love story or no love story. This, too, kept turning out as one *didn't* expect it to. And *Breath of the Comet* is excellent, too, and a good, unexpected, plausible ending.

Also, I like your assorted short fillers. I took your tip to buy Top-Notch for the Jacobi story therein. It was easily worth the price of the whole magazine. I don't care much about men's adventure stories but these two you mentioned in Astounding I was glad to buy and read. Notify us of such types as they appear.

With much interest in your *next* number.—Eva T. Brown, 620 South Fort Thomas Avenue, Fort Thomas, Kentucky.

THE INSULT THAT MADE A MAN OUT OF "MAC"



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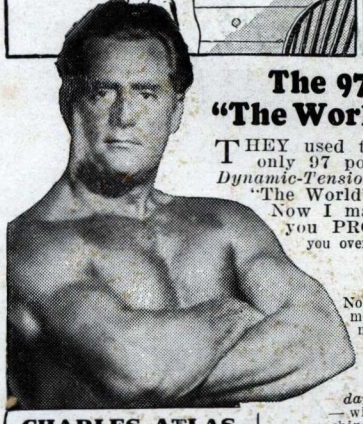

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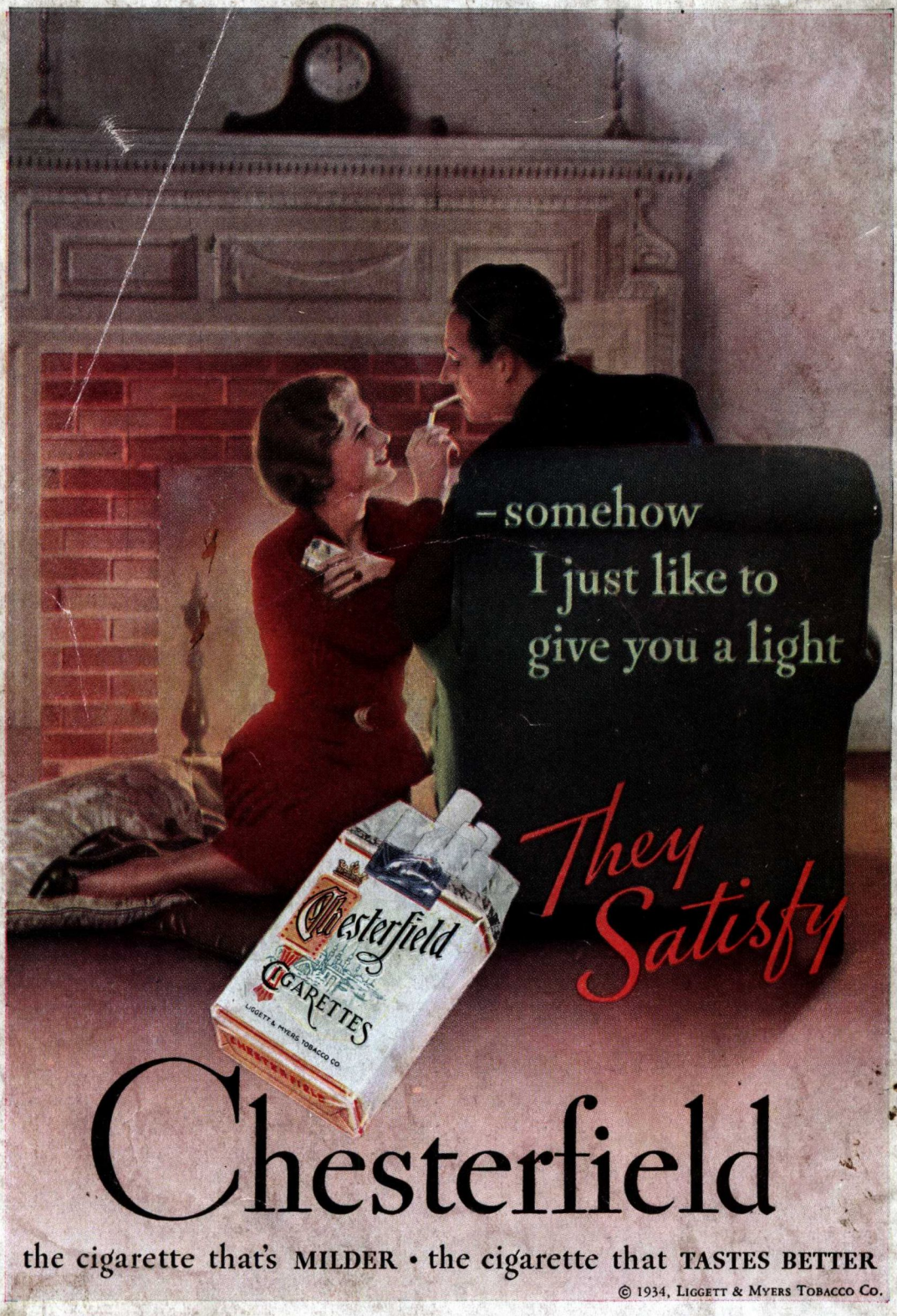
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