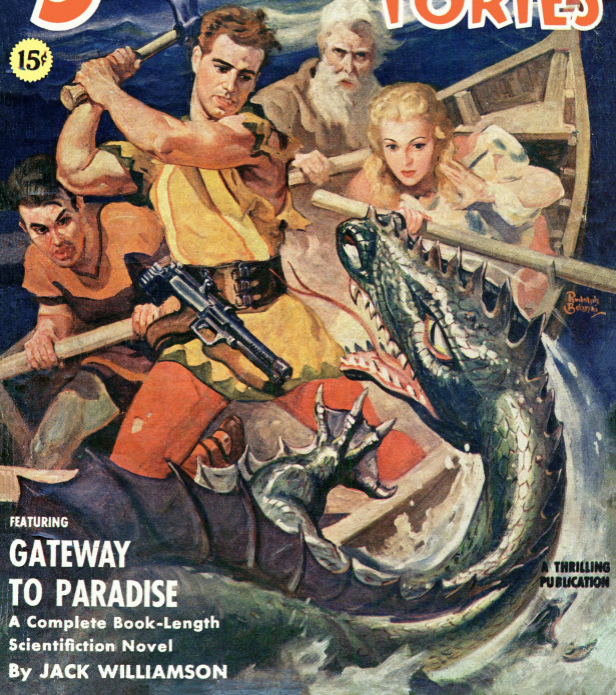


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# STARTLING STORIES

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FEATURING

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Scientifiction Novel

By JACK WILLIAMSON

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**A WEEK JOBS!**

**Skip This**  
**IF YOU'RE**  
**JUST A DREAMER**  
**-A WISHER**

*This opportunity is for men  
 who believe in themselves*



We all know the type of fellow who will "SKIP" reading this. He is pretty much of a FLOP. SURE, he's read all about the opportunities in RADIO—knows that the Government has ordered millions of dollars worth of RADIO equipment. He knows that even without those Government orders, RADIO would be having another RECORD YEAR. He even puts two and two together—and thinks "BOY, RADIO WOULD BE A GREAT BUSINESS TO GET INTO."

He knows, too, if he masters Radio and is drafted, that he stands a GOOD CHANCE TO GET A HIGHER RATING, maybe up to 6 times a private's pay with extra rank and prestige. SURE, he KNOWS all this. HE'S EVEN HEARD how others have gotten into RADIO by training at home in spare time. But he still sits, and sits, and thinks about it. Ten years from now, he still will not have exerted himself to prepare for better pay.

**What's Wrong  
 With Being a Dreamer?**

Nothing—if dreams of success are backed by the right action. But ask one who is a flop in life, and you'll get the sweetest lot of ALL—his any man wants to hear. The real trouble with him is that HE DOESN'T BELIEVE IN HIMSELF. He won't tell you that—BUT THAT'S IT. He DREAMS BIG DREAMS AND DOES LITTLE THINGS. He's not a physical coward but a MENTAL COWARD. He may dive into icy water to save a drowning kid—but HE IS SCARED STIFF to take the first step to get INTO RADIO as a means of making more money.

Are YOU one of these fellows? If you are—stop reading now. You are wasting your time. BUT IF YOU'RE NOT—if you BELIEVE IN YOURSELF—just want a little MORE ENCOURAGEMENT or I can supply the INFORMATION before you ACT—read on.

**What Radio Can Do  
 For You**

There's no formula for success in RADIO—except knowledge and ambition. If you've finished grade school, and are not afraid to do some spare time studying, I can supply the knowledge—if you'll supply the ambition. I'm not just saying this—I KNOW IT! I've supplied knowledge of RADIO to hun-

dreds of men during the past 25 years. BUT, you say, "Why should I select RADIO?" HERE'S WHY! The RADIO INDUSTRY IS GROWING AND GROWING! And when an industry GROWS—the people in it have EXTRA CHANCES TO GROW WITH IT! There are EXTRA OPPORTUNITIES FOR BEGINNERS TO GET IN AND TO GET AHEAD. TOO, RADIO is one of the few industries in which a beginner can

**Train at Home To Get  
 A Real Good Start**

That's pretty important, VERY IMPORTANT, IN FACT. For you can go right ahead with your present work, until you are ready to step into something BIGGER in RADIO. I train you AT HOME, give you all the RADIO training you need, give you PRACTICAL EXPERIENCE working with RADIO EQUIPMENT I supply—experimenting with it, testing it, learning from it. You learn a little at a time—and you can begin to use that knowledge to make extra money in spare time soon after you start training. Radio is already a fascinating hobby for thousands SO YOU CAN SEE THAT LEARNING RADIO IS pretty fascinating TOO!

**Why Radio Pays Well**

Radio Technicians work with their minds as well as their hands. IT TAKES BOTH to repair and service a Radio Receiver; to operate a broadcast or commercial Radio station;

to install, operate and repair Police, Aviation, Experimental Radio and Television equipment. That's why RADIO offers fellows who have faith in themselves and who are willing to work and learn, a chance to MAKE MORE MONEY, to HOLD STEADY JOBS, TO GET AHEAD FAST! Many men I've trained own their own full time or spare time Radio repair businesses, too!

**Don't Mail This Coupon  
 . . . Unless . . .**

... unless you're ready to DO SOMETHING if I convince you that RADIO is a field of OPPORTUNITY FOR YOU! If you don't believe in yourself, haven't the STUFF IN YOU—forget it now! But if all you want is more evidence that RADIO DOES OFFER YOU OPPORTUNITIES—THAT I CAN TRAIN YOU AT HOME FOR THEM—then Mail the Coupon. I'll send you my BIG FREE BOOK, "Rich Rewards in Radio," which tells you about Radio's opportunities, those coming in Television, and HOW I TRAIN YOU AT HOME FOR THEM. It shows more than 100 letters from men I have trained—telling what they are doing, and earning. If THAT'S WHAT YOU WANT TO KNOW—MAIL THAT COUPON NOW—pasted on a penny postcard, or in an envelope.

Mr. J. E. SMITH, President,  
 Dept. 1009,  
 National Radio Institute, Washington, D. C.



Mr. J. E. SMITH, President, Dept. 1009,  
 National Radio Institute, Washington, D. C.

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 Name.....  
 Address.....  
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# STARTLING STORIES

Vol. 6, No. 1

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July, 1941

**A Complete Book-Length Scientifiction Novel**



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By **JACK WILLIAMSON**

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# DO THE DEAD RETURN?

A strange man in Los Angeles, known as "The Voice of Two Worlds," tells of astonishing experiences in far-off and mysterious Tibet, often called the land of miracles by the few travelers permitted to visit it. Here he lived among the lamas, mystic priests of the temple. "In your previous lifetime," a very old lama told him, "you lived here, a lama in this temple. You and I were boys together. I lived on, but you died in youth, and were reborn in England. I have been expecting your return."

The young Englishman was amazed as he looked around the temple where he was believed to have lived and died. It seemed uncannily familiar, he appeared to know every nook and corner of it, yet—at least in this lifetime—he had never been there before. And mysterious was the set of circumstances that had brought him. Could it be a case of reincarnation, that strange belief of the East that souls return to earth again and again, living many lifetimes?

Because of their belief that he had formerly been a lama in the temple, the lamas welcomed the young man with open arms and taught him rare mysteries and long-hidden practices, closely guarded for three thousand years by the sages, which have enabled many to perform amazing feats. He says that the system often leads to almost unbelievable improvement in power of mind, can be used to achieve brilliant business and professional success as well as great happiness. The young man himself later became a noted explorer and geographer, a successful publisher of maps



and atlases of the Far East, used throughout the world.

"There is in all men a sleeping giant of mindpower," he says. "When awakened, it can make man capable of surprising feats, from the prolonging of youth to success in many other worthy endeavors." The system is said by many to promote improvement in health; others tell of increased bodily strength, courage and poise.

"The time has come for this long-hidden system to be disclosed to the Western world," declares the author, and offers to send his amazing 9000 word treatise—which reveals many startling results—to sincere readers of this publication, free of cost or obligation. For your free copy, address the Institute of Mental-physics, 213 South Hobart Blvd., Dept. 160T, Los Angeles, Calif. Readers are urged to write promptly, as only a limited number of the free treatises have been printed.



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Cup Winner

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J. G. O'BRIEN saw my coupon. He clipped and mailed it. He got my free book and followed my instructions. He became a New Man. NOW read what he says:

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J. G. O'Brien.

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I don't care how old or young you are, or how ashamed of your present physical condition you may be. If you can simply raise your arm and flex it I can add SOLID MUSCLE to your biceps—yes, on each arm—in double-quick time! Only 15 minutes a day—right in your own home—is all the time I ask of you! And there's no cost if I fail.

I can broaden your shoulders, strengthen your back, develop your whole muscular system INSIDE and OUTSIDE; I can add inches to your chest, give you a vise-like grip, make those legs of yours lithe and powerful. I can shoot new strength into your old backbone, exercise those inner organs, help you cram your body so full of pep, vigor and red-blooded vitality that you won't feel there's even "standing room" left for weakness and that lazy feeling! Before I get through with you I'll have your whole frame "measured" to a nice, new, beautiful suit of muscle!

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Now another change is taking place. An old established industry—an integral and important part of the nation's structure—in which millions of dollars change hands every year—is in thousands of cases being replaced by a truly amazing, simple invention which does the work better—more reliably—AND AT A COST OFTEN AS LOW AS 25% OF WHAT IS ORDINARILY PAID! It has not required very long for men who have taken over the rights to this valuable invention to do a remarkable business, and show earnings which in three times are almost unheard of for the average man.

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Make no mistake—this is no novelty—no flimsy creation which the inventor hopes to put on the market. You probably have seen nothing like it yet—perhaps never dreamed of the existence of such a device—yet it has already been used by corporations of consulting prominence—by dealers of great corporations—by their branches, by doctors, newspapers, publishers—schools—hospitals, etc., etc., and by thousands of small business men. You don't have to convince a man that he should use an electric bulb to light his office instead of a gas lamp. Nor do you have to sell the same business man the idea that some day he may need something like this invention. The need is already there—the money is usually being spent right at that very moment—and the desirability of saving the present part of this expense is obvious immediately.

Some of the Savings  
You Can Show

The walls here at an office and put down before your present a letter from a sales organization showing that they did work in their own office for \$11 which formerly could have cost them over \$20. A building supply corporation pays our man \$70, whereas the bill could have been for \$1,000! An automobile dealer pays our representative \$15, whereas the expense could have been over \$1,000. A department store has expense of \$20.00, possible one if done outside the business being well over \$2,000. And so on. We could not possibly list all cases here. There are just a few of the many actual cases which we place in your hands to work with. Practically every line of business and every section of the country is represented by these field reports which hammer some dealing, convincing money-saving opportunities which hardly any business man can fail to understand.

## EARNINGS

One man in California earned over \$1,600 per month for three months—close to \$5,000 in 90 days' time. Another writes from Delaware—"Since I have been operating (just a little less than a month of actual selling) and not the full day at that, because I have been getting organized and had to spend at least half the day in the office; counting what I have sold outright and on trial, I have made just a little in excess of one thousand dollars profit for one month." A man working small city in N. Y., State made \$10,805 in 9 months. Texas man nets over \$300 in less than a week's time. Space does not permit mentioning here more than these few random cases. However, they are sufficient to indicate that the worthwhile future in this business is coupled with immediate earnings for the right kind of man. One man with us has already made over a thousand sales on which his earnings ran from \$5 to \$50 per sale and more. A great deal of this business was repeat business. Yet he had never done anything like this before coming with us. That is the kind of opportunity this business offers. The fact that this business has attracted to it such business men as former bankers, executives of businesses—men who demand only the highest type of opportunity and income—gives a fairly good picture of the kind of business this is. Our door is open, however, to the young man looking for the right field in which to make his start and develop his future.

Profits Typical of  
the Young, Growing Industry

Going into this business is not like selling something often in every grocery, drug or department store. For instance, when you take a \$7.50 unit, \$3.43 can be your share. On \$1,200 worth of business, your share can be \$1,167.00. The very least you get as your part of every dollar's worth of business you do is 67 cents—on ten dollars' worth \$6.70, on a hundred dollars' worth \$67.00—in other words two thirds of every order you get for us. Not only on the first order—but on repeat orders—and you have the opportunity of earning an even larger percentage.

This Business Has  
Nothing to Do With  
House to House Canvassing

Now do you have to knock anything about high-pressure selling. "Selling" is unnecessary in the ordinary sense of the word. Instead of hammering away at the customer and trying to "force" a sale, you make a dignified, business-like call, leave the installation—whatever else the customer says he will accept—at our risk, let the customer sell himself after the device is in and working. This does away with the need for pressure on the customer—it eliminates the handicap of trying to get the money before the customer has really convinced himself 100%. You simply tell what you offer, showing proof of success in that customer's particular line of business. Then leave the invention—without a dollar down. It starts working at once. In a few short days, the installation should actually produce enough cash money to pay for the deal, with profits above that investment coming in at the same time. You then call back, collect your money. Nothing is so convincing as our offer to let results speak for themselves without risk to the customer! While others fail to get even a hearing, our men are making sales amounting into the hundreds. They have received the attention of the largest firms in the country, and sold to the smallest businesses by the thousands.

No Money Need Be Risked

In trying this business out, you can measure the possibilities and not be out a dollar. If you are looking for a business that is not overworked—a business that is just coming into its own—on the upgrade, instead of the downgrade—a business that offers the buyer relief from a business, but unavoidable expense—a business that has a prospect practically in every office, store, or factory line in which you can set foot—regardless of size—that is a security but does not have any price cutting to contend with as other necessities do—that because you control the sales in exclusive territory in your own business—that pays you on some individual sales that many men make in a week and sometimes in a month's time—if such a business looks as if it is worth investigating, get in touch with us at once for the rights in your territory—don't delay—because the chances are that if you do wait, someone else will have written to us in the meantime—and if it turns out that you were the better man—we'd both be sorry. So for convenience, use the coupon below—but send it right away—or wire if you wish. But do it now. Address

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\* Actual pupils' names on request. Pictures by Professional Models.

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What a difference it would make if you could say "Yes". Think of the good times and popularity in store if you could only play the piano or some other musical instrument—the guitar, violin, scordion, saxophone or whichever one happens to be your favorite.

Well, you CAN. You can learn to play any musical instrument you please. You can do it by a method that's **EASIER AND QUICKER** than you perhaps ever thought possible. It takes only a few minutes a day at home, at your own convenience. You save the expense of a private teacher, so the cost is trifling.

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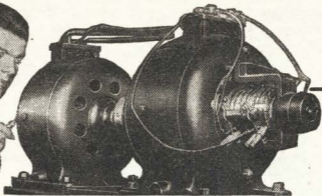
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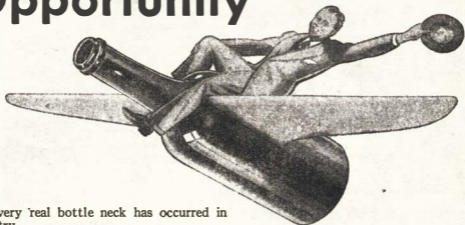
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# GATEWAY



## CHAPTER I

### *Wall Around America*

**B**ARRY SHANE first saw the Ring on the summer before he was nine. It was like a gigantic glass bowl turned upside-down over America.

Barry had come alone on the monorail to visit his grandfather. It was a thrilling thing to have his own compartment in the big teardrop that skimmed so fast and silently along the high, thin rail.

Grandfather Barry lived in a little, blue plastoid cottage on the shore of California Corporation, not a mile from where the Ring cut in from the

sea. He was a lean, spry, cheerful man, with a bright Ring Guard medal on his breast.

"Can I go to the Ring?" Barry demanded at once.

The invisible wall had fascinated the youngster from his first glimpse of it at the monorail station. Inside it, his grandfather's spotted cow was grazing in the green meadow. The sea below the cliffs was alive with danc-

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**AMERICA BECOMES THE LAST OASIS IN A**

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# TO PARADISE

By JACK WILLIAMSON

Author of "Fortress of Utopia," "The Infinite Enemy," etc.

Shane pretended unconsciousness as the crew of the AVENGER emerged (chap. IX)



ing waves. But on the other side of the wall, the hills were brown and dead. Outside, there was no sea.

"Better keep inside the fence," warned the old man in a cracked, kindly voice. "There are things Outside a little boy shouldn't see. Besides, you'll get in trouble with the Guard."

"Why, Grampa?" Barry wanted to know.

"The Guard has to protect the

Ring," the lean old Guardsman explained. "If anything happened to it, you see, all our air might explode into the vacuum Outside. That would kill everybody in America. Once a man named Brock was experimenting with a machine to cut a door in the vibration wall. Something went wrong. The hole must have been larger than he intended, because the air started rushing out in a terrible wind. Dr. Brock,

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**DESERT WORLD THAT RIVALS THE PLANET MARS!**

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## A Fiery Robber Star From Outer Space

along with several hundred other people, was swept Outside to die."

"Oh, Mother told me!" cried Barry. "You stopped Brock's machine. That's how you got your medal."

The old Guardsman smiled and nodded.

"I managed to crash my patrol plane into the machine. That stopped the interfering radiation and the hole in the Ring closed itself." He sighed. "That was fifty years ago."

Barry's face glowed with eager determination.

"When I grow up," he declared, "I'm going to be a Guardsman."

"Your father will have something to say about that." Grandfather Barry's kind eyes looked sad. "He'll want you to be a director of Chicago Corporation and president of Uranatomic Central, like himself. I'd want to see you become a Guard, Barry. Maybe your mother would. But Patterson Shane will never let you give up his millions for anything so foolish as the Guard."

**B**ARRY puzzled over that statement. It didn't make sense to his young mind.

"Can anybody go Outside?" he asked. "Ever?"

"Brock wasn't the first to try, or the last. They've all been killed. The disasters they caused killed several thousand others, but they seem to keep trying, in spite of the Guard. Perhaps some day a safe way out will be found, a way that will cause no harm."

"I want to go Outside," Barry stated. "I'll find a way."

Next day, playing with his kite, he went toward the strange wall, for the forbidden mystery of it drew him like a magnet. Fifty yards within that great, invisible curve, the fields stopped. On a tall wire fence hung signs that read:

KEEP OUT  
Order of the Ring Guard

Beyond the fence was a dusty road, still within the Ring. Waiting on the hill, he watched a silent electric patrol car come to the end of the road

above the cliffs and turn back. When it was out of sight, he slipped under the fence and ran across the road.

Beyond the road was a strip of weeds. The weeds were ended by the Ring. He crouched in them, close to the barrier, staring at it.

The Ring was clearer than glass, absolutely invisible. There wasn't even a speck of dust on it. It felt harder and more slippery than any glass, and neither hot nor cold. It turned the point of his pocket-knife, though he could see that it had no thickness.

Horrible things lay close Outside. They were brown and dry and dead, sprawled on the bleached, dead grass. Packs and bundles lay beside them—cooking things and tattered blankets. He recognized the skeletons of men and women, babies and donkeys. One brown, mummied hand clutched a torn newspaper.

With his face pressed against that hard, invisible wall, Barry tried to spell out a headline. *La Stella Negra*. It must be Spanish. These people must have come up out of Mexico to seek the Ring's shelter, only they had been too late.

Suddenly he felt ill. He looked away toward the Pacific. Inside the Ring, blue water glistened in the Sun. Far away he could see the white, tiny sails of fishing boats. But Outside, beyond the cliffs and the sea-worn beach, were only a strange and terrible desert, dark, treeless hills and tawny plains of baked, dark-fissured sea mud.

The sky was queerly black Outside, because there was no air to make a proper sky. Every shadow was harsh and cold and solid. The dead lands slanted down and down forever into the dry, mysterious chasm where the vanished ocean once had flowed.

What was at the bottom of that forbidden pit? One day, Barry Shane promised himself, he would find out.

**I**T startled him to discover his grandfather standing beyond the fence behind him. Grinning sheepishly, he got up out of the weeds and



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## Pirates Away All the Seas of Earth!

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went back across the road. He looked anxiously into the old man's face.

"Are you angry with me, Grampa?" he asked.

The seamed face looked almost stern.

"You didn't meant any harm, but the Guard has to keep people away from the Ring. The life of America depends on it." The old Guardsman smiled suddenly. "I was a boy once, so I know how you feel. But you bet-

shelter from the changeless death that held everything Outside, the veteran told him the Ring's amazing story.

"It happened nearly two hundred years ago, back in nineteen forty-four. Before that there was air everywhere. The seas were filled with water and men could live on all the continents. Even America was different then. There was more wind and the tides rose many feet instead of inches. Sometimes there were great storms



BARRY SHANE

ter get back on this side of the fence before a patrol comes along."

Barry slipped under the fence and gratefully took the thin, gnarled hand.

"Tell me, Grampa, what was it like, really—I mean before there was a Ring? And what happened then? Mother and my teachers told me a little, but I never saw the Ring. It's hard to think how things could be so different."

As they stood there on the green hill, looking through the wonderful transparent wall that was their only

and in the winter cold waves came down from the polar regions. But there was more rain and the population was twice our sixty-eight millions.

"Victor Barry had invented the new science of ultra-electronics. In nineteen forty-two he built his ultradyne-drive space ship. Vic Barry was my great-great-great-grandfather." The wrinkled face beamed proudly. "And you were named for him."

"Mother told me that," agreed Barry Shane.

Automatically the old Guardsman's gnarled hands began to fill his battered pipe.

"With the astronomer Tyne, Vic Barry reached the Moon—"

In a puzzled voice, the boy interrupted:

"Tell me about the Moon."

"That's another thing the Earth lost, along with her atmosphere and her seas," the old man said. "The Moon was another, smaller world. It used to circle around the Earth, a quarter of a million miles away. Barry and Tyne found that it was mostly ice—which the Cosmic Ice Theory had already suggested—around just a core of rock. They set up a telescope on the Moon. The seeing was better there, because it had no air. Soon Tyne discovered the Dwarf—"

"What was the Dwarf, Grampa?"

"It was a small, heavy, dark world, a dead sun of the degenerate matter called neutronium. It was smaller than the Moon, but heavier than Jupiter. The two men got safely back with their warning. Tyne predicted that the Dwarf would miss the Earth. It wouldn't even change the Earth's orbit greatly. But its terrific tidal pull would peel off the Earth's atmosphere and its seas, as Tyne put it, like the skin of an orange."

**B**ARRY SHANE peered breathlessly down into that stark, bare abyss, which once the sea had filled. It was difficult to think of America without the Ring, of a world with no Outside. Waiting anxiously for the old man to light the pipe, he made no sound.

"Vic Barry found a way to protect America," the veteran went on. "He invented a new kind of ultradyne tube that created a static wall of ultra-electronic vibration. A globe-shaped warp in space is the thing we call the Ring."

Those words sounded bewildering and difficult. The boy looked with worried eyes toward the invisible line that divided the peaceful life of the meadows and the sea from the brown, dead Outside. The words were hard to understand, but the Ring itself was real enough.

"It's transparent to light and gravity and radio waves," the old man went on. "But it's stronger than anything material like pressure—because the space warp, the engineers say, just turns pressure back against itself. Vic Barry designed an ultradyne tube big enough to protect all America. He installed it in the Ring Cylinder, in what is now Midwest Corporation. It was completed just a few weeks before the Dwarf came.

"Of course the gravitation of the Dwarf reached through the Ring. There were tidal waves inside and terrible storms and quakes. But it stopped the great wave, which swept the rest of the Earth and it kept our air from escaping. Most of the coastal cities were destroyed, but America lived on."

Barry Shane looked back toward the brown, dead things Outside, that were now mercifully screened by the strip of weeds. He tried not to shudder.

"What about the other people Outside?" he whispered.

"They all perished. Vic Barry tried to save them. He built plenty of ultradyne tubes and sent one to every continent, with engineers to install it. But a war was going on. Some of the tubes were sunk by submarines and some of them were dive-bombed later. Finally, after the armistice, all the countries were too crippled to complete the installations in time.

"Of course some refugees reached America. Vic Barry kept the Ring open till the last moment." He nodded gravely at the things beyond the weeds. "They came too late."

The boy turned away from the things Outside. The old man took his hand and they started back across the meadows toward the little blue cottage.

"Go on, Grampa," Barry urged.

"The Dwarf passed," the Guardsman resumed. "All the Earth Outside was swept clean of seas and air. Even the polar ice was broken up and floated away. The Moon was captured by the Dwarf and followed it away into space. The Age of the Ring began. You'll be studying about it in

your history books. America had suffered. Millions were dead. The coastal cities were ruined. Chicago, where your father lives, became the greatest city.

"You'll study about the Reconstruction. How America tried to adjust herself to real isolation. How science struggled to find substitutes for raw materials cut off by the Ring. How the forty-eight states were replaced with a dozen new Corporations, planned to give all the people the most liberty and security.

"You'll learn how Uranatomic Central Power was organized—and how your father got control of it thirty years ago. How the monorail system was built. And how the Ring Guard was formed, after a reckless experimenter had made the first disastrous hole in the Ring."

**Y**OUNG Barry Shane looked back toward that tawny abyss of hostile mystery, where once the sea had flowed.

"One day," he said, "I'm going Outside."

Grandfather Barry shook his weary head.

"Many men have wanted to. We need the mineral wealth Outside—metals and oil and coal, uranium for your father's company. But there's a terrible danger."

His solemn eyes looked down at the boy.

"Remember, the invisible wall of the Ring is all that keeps America from being like Outside. The air is pressing out against it, fifteen pounds on every square inch, here at sea-level. If that pressure ever escapes, America will die. Nobody has ever found a safe way through the Ring. You can't burrow under it. The force goes down several miles.

"All you can do is go through it—only the Guard has to stop you, to protect our lives. Of course, that isn't their whole job. They also have to watch for any danger from Outside."

"What danger?" demanded Barry Shane.

"None, so far as we know," the old man said. "There's no evidence that

anything alive exists Outside, but you've got to make routine check-ups on anything as important as the Ring. Some kind of weird life might develop and maybe attack it. I know it's wild, but why take chances?"

Barry Shane's vacation was over much too soon. He went back to his father's big house in Chicago Corporation, back to his books and his teachers. For three years he studied, read and played, but he never forgot the mystery of the Ring.

At last his father let him come back to the little blue cottage by the Ring, for another vacation with his grandfather. He brought a Spanish dictionary, planning to try to read what he could of that ancient newspaper Outside.

Once more he waited for the patrol car to come and go. Eagerly he slipped across the dusty road again. This time he brushed away his tracks with his handkerchief.

He dropped in the weeds with his face against the Ring. He found the same brown, desiccated things that he had found before. But when he looked for the torn newspaper, the icy touch of mystery made him shiver.

The newspaper was gone!

## CHAPTER II

### *The Rock that Moved*

**W**AS there life Outside, after all? Something must have taken that newspaper. Tense with a half-fearful excitement, Barry Shane ran back to the little blue cottage. Grandfather Barry was sitting on the porch, smoking. Breathlessly the boy told him about the paper.

The old Guardsman unexcitedly tapped out his pipe.

"Other changes have been seen Outside," he said. "I used to wonder, but it's the meteors, they say. Meteors must fall often Outside. There's no air to burn them up and no Ring to turn them off. The things Outside are very dry and brittle. When a meteor strikes, they simply go to dust."

"Maybe," muttered the boy. "But I didn't see any dust."

Barry Shane was sixteen when he told his father that he had decided to quit his business courses and enter the Ring Guard Academy. Patterson Shane was a big man and anger made him florid. He stamped up and down the long, formal library of the mansion beside Lake Michigan, bellowing:

"Don't be a fool, son! I've got your career all mapped out. You'll be a director in ten years. By the time I'm ready to retire, you can step into control of Uranatomic Central. One day, with what I can give you, you ought to be the biggest man in America. So you want to join the Guard!" He made an angry snort. "Why, I can give you more right now than you would earn in a lifetime in the Guard!"

He paused at the table, flung open a checkbook.

"I don't want money." Barry's voice trembled as he tried to find the words for the vague but powerful necessities that moved him. "Business and success aren't what I want. I want something real."

"What's more real than a million dollars?" roared Patterson Shane. "Except two millions?"

Barry tried to put his feelings into words.

"I'd like to find a safe way Outside, without making a dangerous break in the Ring," he explained. "That would be worth doing!" Enthusiasm electrified his voice. "I want adventure, danger and something worth fighting for. New deposits of uranium, even, for Uranatomic Central."

Patterson Shane's hard eyes narrowed shrewdly.

"Uranium? Well, at least that makes sense. What's the chance of finding any?"

"In the Academy I'll learn ultra-electronics," Barry went on. "I'll learn what the Ring really is and why all the attempts to make a door in it have resulted in disaster. If ever a way is found and an expedition is sent Outside, it will be in charge of the Guard." His eyes looked far beyond the cramping walls. "I want to be

among the first to go Outside!"

"If there's money in it, go ahead," said Patterson Shane. "Learn all you can at the Academy. Then I'll arrange for Uranatomic Central to finance your experiments—naturally for a controlling interest in all the deposits of uranium you find Outside."

"You don't understand." Barry tried to keep the bitterness out of his voice. "It isn't for money. It's for science. I want to know what's at the bottom of those chasms where the sea used to be. I want to know what happened to a torn newspaper that was taken from a mummy's hand beyond the Ring. I want to find out for myself if there's anything alive Outside."

"Go to the Academy!" shouted Patterson Shane. "Maybe they'll teach you a few practical things. I can't!"

SO Barry Shane went to Ring City, which was only a sleepy little town on the wheat fields of Midwest Corporation, two miles from the ancient gray bulk of the Ring Cylinder. Triumphantly he passed the stiff entrance exams at the Academy.

He spent five hard, happy years in the elm-shaded quadrangle of time-grayed buildings, almost in the shadow of the Cylinder itself. He grew up at the Academy, became a straight, gray-eyed six-footer.

But the great dream stayed with him. One day he dared to mention it to General Whitehall, who was commander of the Ring Guard and also instructor of the advanced classes in military tactics.

"Do you think, sir, that we can ever go Outside—without danger to the Ring I mean? That's what I really want to do—explore the Outside."

Gravely the old general shook his lean, white head.

"It's a difficult problem, Shane," he said. "It's easy enough to rupture the Ring with an ultra-electronic vibration synchronized to interfere with its static field. That's why we have to keep the Guard on its toes. The effect is pretty much like puncturing a soap bubble with a hot needle. The balance of forces is broken. The rupture tends to spread. Fortunately

the Ring can repair itself after the disrupting force is removed, unless the rupture has spread too far.

"That way through the Ring is comparatively simple. It requires only the fundamentals of ultra-electronics, which is why so many experimenters have been able to break through. Probably every one of them thought he had a new method. But that process is beyond control. It's like making a hole in a sheet of glass by shooting a bullet through it. It's so dangerous that the Guard must absolutely prohibit all experiments of that sort."

"Perhaps, sir," Shane suggested, "we can find another way."

"Perhaps," Whitehall admitted. "But men haven't been able to do it in two hundred years. We used to keep the Guard laboratory busy at the problem. But lately, with the Corporation Control Board cutting our appropriations every year, we have our hands full just to maintain the routine patrols."

"There must be a way," Shane insisted. "America needs it! There are minerals Outside that we need. One of these days the Guard might need to go Outside, to defend the Ring."

The general shrugged his thin shoulders.

"We've no enemies Outside."

"There's *something* Outside!"

Whitehall's keen blue eyes seemed sympathetic and friendly, so Shane told him about the newspaper that had vanished.

"Maybe a meteor powdered it," he finished. "But I don't think so. I think something came and took it."

"That's not much evidence," the old man commented. "Our Ring patrols have been watching the Outside for nearly two hundred years and they haven't seen anything alive."

"I know that, sir," agreed Barry Shane. "But still I'd like to know what happened to that newspaper."

**A**T graduation, Shane stood first in the little class of twenty men. Since the latest economy drive, the entire Ring Guard numbered only a hundred and sixty. It was fifteen

years since the last would-be explorer had broken through the Ring, in a rocket plane that crashed and exploded Outside. No others had been killed that time, and danger to the Ring had begun to seem remote.

From the Academy, Shane was ordered to Key West Base. Ten men under Captain Steadman were stationed at the ancient sun-washed town on that low coral isle. They were responsible for more than a thousand miles of the Ring, which chopped off the shallow sea, with its vast, invisible curve, a mile beyond the island.

Shane was assigned to the north flight. Every other day, in a silent little patrol plane driven by the monofilm storage cells that his father's Uranatomic Central charged and distributed, he flew fifteen hundred miles over the calm Atlantic, along the Ring.

The plane was designed for two men, pilot and observer, but the reduced numbers of the Guard had left only one man available for each flight. After all, here over the Atlantic, there couldn't be much danger to the Ring. Ambitious Americans had usually made their suicidal attempts to penetrate the Ring from a land base, frequently somewhere in the lonely arid hills of New Mexico Corporation. And there was no danger from Outside.

Shane himself was tired of wondering what had happened to that Spanish newspaper.

The months went by. He made a hundred flights. The sea within was always different in its living response to wind and sky, yet it bore no hint of peril to the Ring.

The Outside, for all its passive hostility, never seemed to change. Beyond the Ring's endless curve, the dead sea-bottom stretched and sloped away. There were cracked flats of age-dried mud, range on range of rugged mountains that once the sea had covered. The Outside could hold no danger while the Ring remained unbroken.

Then he saw the rock that moved.

It was his hundred-and-fourth flight northward. The morning Sun

was bright on the spume-flecked sea beneath him. Beyond the Ring, it drove harshly out of a black sky. Every pinnacle glistened with burning light and cast a long midnight shadow.

A black blade of shadow stabbed toward Shane across a red mud-flat. Startled, he looked for what had moved. He saw a rugged brown boulder, lurching queerly through a shallow pass in a far-off wall of black-shadowed hills.

With binoculars fast to his eyes, he forgot the danger to himself. In a moment the rock had ceased to move. It looked harmless as any rugged seaworn stone, but he knew that it had moved. Its shadow had been a leaping blade. He studied it for a bewildered moment longer.

The plane had been designed for two men, because of the danger of accidents. It was necessary for patrols to fly reasonably close to the Ring, but that invisible barrier was as deadly in collision as a concrete wall.

Abruptly Shane realized that the sky was turning black before him. Without thinking, he had turned the plane in the direction in which he was looking.

He was flying into the Ring!

**D**ESPERATELY he brought back the stick, lifted the little plane into a loop. The reaction was an instant too late. At a glancing angle the plane crashed into the unseen wall. The prop was shattered. The electric motors whined and stopped. The shaken machine fluttered down toward the lonely sea.

Shane was not aware of much pain at first. He knew that his face had smashed against the cowling. He felt ill, yet he was angry at himself for causing a stupid accident and he was tense with the shock of the thing he had seen.

Stinging blood blinded him. He wiped it out of his eyes and snapped on the radio. His face felt oddly numb and the salt sweetness of blood was hot in his mouth.

"Patrol Eighteen, calling Key West Base!" he croaked through swelling lips. "Shane, calling—"

"Go ahead, Patrol Eighteen," a bored voice rasped.

"Patrol Eighteen, reporting a moving object Outside," gasped Shane. "It's camouflaged to look like a boulder, but it was moving when I first saw it. It was coming through the hills in Sector Forty-one—B." That report seemed the important thing. He caught his breath and added: "Plane crippled. I ran into the Ring. I'm falling. Do you hear me, Key West Base? Patrol Eighteen, reporting a moving object—"

"Forget your moving object." The humming voice was cold with disbelief. "A rescue plane will start at once."

In the little mirror on the windshield, Shane saw a queer red mask that he knew had to be his own face. But it didn't look familiar. The cheek and temple were cut to the bone. Loose skin hung over one eye. Something had happened to the nose. He didn't care much. Looks weren't so important in the Guard, anyhow.

The blue, tossing ocean came up to meet him too steeply, but there wasn't much that he could do about it. The stick was useless.

Water exploded against the pontoons. Spray drenched him, began to sting his face, yet the plane didn't sink. The rudder still worked and he managed to hold the bow into the wind. It would float longer that way. He had to keep afloat, because he had to make a report of the moving rock. He had to make the Guard believe it.

The tossing waves became waves of dark oblivion, but still, with his feet on the rudders, he fought them. He didn't let go. He held out until the rescue plane dropped beside him. He caught the tossed rope and knotted it around him, before he slipped into the waves.

### CHAPTER III

#### *The Flash in the Jungle*

**A**FTER Barry hit the water, everything became a jumble. The rope was hauling him through



"I thought you Americans would be fat and soft," Clayton said, grinning (Chap. V)

cold brine. There was a rock that moved. Men were carrying him on a stretcher. He was trying to tell them something about a rock that moved. His face was sticky and stiff and throbbing.

Then he was in a plane again. It was his own patrol plane and he was searching for a rock that moved. His face was bandaged now, so he couldn't tell anybody anything. A nurse was talking to him.

"Breathe," she repeated endlessly. "Just relax and breathe deeply."

At last he slowly awoke in a clean hospital room. Its walls were creamy plastoid. Through a broad window he could see a strip of green park, then

deep blue water with a white-winged electroplane soaring over it. Even before his mother came in, he knew he was back in Chicago Corporation.

His mother had a tired, sweet face and a wisp of gray in her dark hair. She, too, had always seemed happier on their vacation trips, but she had been a good wife and housekeeper for Patterson Shane.

"I'm sorry, Mother." Barry's voice sounded oddly weak through the bandages that held his lips. "Has anything happened?"

She didn't know what he meant, didn't know that he had seen anything outside, only that he had crashed into the Ring. He made her promise to

send a radiogram to General Whitehall, at the Ring Headquarters.

"I'll send it," she agreed. "But don't you think you might have been mistaken?" She smiled at the stiff little shake of his head. "Don't worry, I'll send it." Her blue eyes shone. "I wanted to be the one to tell you, Barry. You're going to be all right!"

Then he remembered the red, mangled face he had seen in the mirror.

"Dr. Rand did it," she said. "The great plastic surgeon. They wouldn't let me see, but I guess you were pretty bad. We had to send pictures to guide Dr. Rand. The nurse let me see your face when she changed the dressing this morning."

Her tired face smiled again.

"It isn't quite the same," she said. "I guess the pictures were retouched too much. Your mole is gone and the little scar on your lip. Nobody else will mind, but your mother. Dr. Rand is really wonderful."

A nurse came in and said it was time for his mother to go.

"Don't forget," he reminded. "Send a message to General Whitehall."

Next morning the nurse let him see his face. Remembering that red, lacerated mask, he couldn't repress a little shudder. The only scars left were tiny white lines, already vanishing. His face looked a little different—as his mother had said, retouched. But Dr. Rand was wonderful.

The mirror was still in his hands when a girl came in. She was tall and efficient-looking, and she almost glowed with a dark vital beauty. His heart skipped a beat as she walked toward him.

"Good morning, Lieutenant."

Her voice was crisp and throaty. He liked her voice, the creamy glow of her skin, her quick, dark eyes and the luster of her close-shingled hair. He couldn't guess what she wanted. Suddenly the mirror embarrassed him and he tried to slip it under the sheets.

"Oh." Intelligence flashed in her eyes. "You don't remember. I'm Rand." She ignored his astonished gasp. "Will you turn your face to the light, please?"

HER cool fingers touched the scars so lightly that they caused no pain at all. His nostrils caught the faint, pleasant scent of her hair. He wanted to hear her cool, crisp voice again, longed to see what a smile would do to her alert, business-like face.

"Thank you for all you've done." His stiff face tried to grin and he felt a twinge of pain. "If I had known that doctors were like you—"

She didn't smile.

"Don't move your face," she said briskly. "Wait until the local wears off. You're doing nicely, Lieutenant. You'll be out in a week."

As she turned to go, a panic struck him. He wanted to do something to make her stay, but he couldn't think of anything. She must be busy and he was just another case.

"By, Lieutenant. See you again."

He stared at the creamy plastoid wall. If he had followed his father's road, there might have been a chance. But there was no possibility that a famous surgeon would give up her career for a cottage at a Ring Guard base.

He shut his eyes to shut her out. There she stood again, vital and alert, with the little half-frown of concentration on her forehead. He wondered if she ever took the time to smile.

Next afternoon General Whitehall called. The commander of the Ring Guard was slender and precise and erect. His abundant hair was white, but he carried his seventy years easily. In a thin, kindly face, his blue eyes were shrewdly intelligent.

"Well, Lieutenant!" His voice always seemed surprisingly, deliberately gruff. "I received a message from your mother and I thought I had better see you. What's the trouble?"

"My report, sir." Shane was a little breathless with anxiety. "I wanted to be sure my report got through."

General Whitehall looked puzzled. "What report?"

"The reason I happened to smash into the Ring," Shane said urgently. "I saw something move Outside. It



was coming up through the hills in Sector Forty-one-B, disguised to look like a boulder. It stopped an instant afterward."

A smile softened the general's thin, gray face.

"Maybe it was a boulder," he said. "I know you're certain, but men in the Guard have imagined things before. The Outside is strange, mysterious, hostile. It is easy to let it get on your nerves."

"But," Shane insisted, "it did move, sir!"

The general smiled tolerantly.

"If it will help your peace of mind, Shane, I have ordered the north patrol from Key West doubled." He took an envelope out of his blue uniform. "And here are photographs made this morning of the hills in Sector Forty-one-B."

Eagerly Shane scanned the prints. There were the sharp-lit, black-shadowed hills. There was the winding pass. But the stone that had moved was gone! In a low voice he told General Whitehall that.

"Now you've got to believe me, sir!" he protested.

"It is the duty of the Guard to watch for any possible danger to the Ring, from within America or from the Outside. In view of your report, this sector will be watched with the utmost attention."

"But still, sir," Barry challenged, "you don't believe me!"

**T**HE general shook his head.

"I've served fifty years in the Guard," he said almost forgetting to be gruff. "In that time there have been several similar reports, yet no actual threat to the Ring has ever materialized—from Outside. Personally I think you are letting your imagination play tricks on you."

He moved to go.

"That doesn't mean your report will be ignored," he explained. "But I am going to advise Captain Steadman that you be relieved of active flight duty for three months. Key West is a good place to rest. Perhaps that is what you need."

Tears of angry humiliation stung

Shane's eyes. He blinked hard.

"Yes sir," he gulped. "Thank you, sir."

Two weeks later Shane was back at Key West. Captain Steadman assured him that nothing unusual had been reported since his accident, from Sector 41-B or anywhere else. The men made good-natured jokes about seeing rocks and other inanimate things that moved.

Shane rented a little boat and learned to sail. He had been relieved of duty and there was nothing else to do. He began to wonder whether the general wasn't right, if it hadn't been his nerves. Sun and salt air and the pleasant occupation of sailing might help them relax.

But he couldn't help returning to the Ring. It was strange to sail along the brink of that abrupt, wet precipice, looking down upon the dry coral and the dead, brown weed and the white, gleaming sand. His searching gaze could rove far across that parched, harshly lit waste, even to the bare hills that had once been Cuba. Nowhere was there anything that moved.

But he did find the moving boulder—inside the Ring!

He had sailed along the barrier for thirty miles. Tacking back toward the low, green blots of the mangrove keys, he crossed a coral shoal. The water was clear as glass. Against the white coral sand he saw a dark, jagged boulder that was crawling steadily toward the land.

Barry Shane could hardly breathe. His tanned body suddenly felt cold and his hand trembled on the tiller. As the moving object tipped into deeper water, he saw it well enough. It looked like the same boulder that he had seen lurching through the hills in Sector 41-B. It was a disguised machine!

Somebody had solved the old problem. Somebody had found his greatest dream, had learned to go and come at will through the Ring, without any disastrous explosions of air.

Or was it *somebody*? Cold dread tingled up and down his spine. Perhaps it was *something*. The Outside was a gulf of forbidden mystery. The

passing Dwarf might have peopled it with alien beings. It was a fantastic speculation.

He forgot it—and suddenly remembered the riddle of the vanished newspaper.

Here was the secret he wanted. His cold tenseness passed. He felt oddly calm.

This was the moment he had lived for. Whatever it might bring, he was ready.

**H**E let out more sail and the little boat heeled as he tacked toward the palm-fringed mangrove keys. He estimated the direction in which the crawling rock had moved and drew a line on his chart.

When it came to land, he would be waiting.

Of course he had no weapon. He grinned at the dark sub-tropic jungle ahead. After all, he didn't know what sort of weapon might be needed. The little camera slung to his belt might be equipment enough. Film, anyhow, couldn't be accused of imagining things.

He sailed along a broad coral beach, past a straggling line of cocconut palms, and pushed the boat into concealing mangroves. The stalking monorail towers were half a mile away. A car sighed along the high rail, a silver blur of speed. But this was jungle wilderness.

A big-kneed cypress was festooned with blue morning-glories. A lone sea-grape spread its odd broad leaves. Mosquitoes hummed and silent black sand-flies settled painfully on his skin.

Out among the waxen-leaved mangroves a rattler whined.

Hidden, he waited. He fought mosquitoes as he watched and listened. The Sun went down. The shallow sea changed through a thousand shades of blue and aquamarine and became a calm mirror for the purple night.

He began to wonder if his eyes had tricked him. His impulsive plan seemed a little foolish. Perhaps General Whitehall was right about the tricks of imagination.

After all—

A muffled humming sounded over the black water! Something splashed. At last a faint phosphorescence outlined a dark, jagged shape that was lumbering up the beach. It was the same boulder that he had seen in the hills Outside! Deliberately it crawled across the open stretch of coral sand and went crashing into the dark tangle of mangroves.

The little camera trembled in Shane's hand. He opened the diaphragm wide and snapped half a dozen shots. The film was ultra-sensitive. Perhaps it would show something. He ran to where the boulder had crossed the beach, ventured to strike a shaded match. In the white sand were the unmistakable prints of caterpillar tracks.

He snapped the camera again and peered toward the humming in the jungle.

Shuddery dread tried to seize him. He fought it off, caught his breath and groped for reason.

Did this disguised machine have a crew of men? Had some group of Americans built it to slip through the Guard and the Ring, to reach the mineral wealth of the Outside? Or was it operated by some alien, unimaginable invaders? Another idea struck him. Had human beings somehow managed to survive beyond the Ring? That seemed impossible. In two hundred years, he remembered, there had been no evidence of life Outside—except that vanished newspaper.

Shane decided to follow that crawling boulder into the jungle. He couldn't be certain that his photographs would show anything by starlight alone. If he didn't follow it, the machine might go back into the sea before he had learned the answers to any of those desperate questions. Crouching, he stepped out upon the road the heavy tracks had made.

*Flash!*

A point of painful violet winked at him and was gone. It wasn't bright, yet it hurt his eyes. His body tingled and his muscles went limp. A terrible hand closed with agonizing pressure on his heart. He couldn't breathe. The camera fell out of his hand and he dropped flat.



GLENN CLAYTON

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 CHAPTER IV

*The Outsider*


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**A** CRUSHING weight lay on Shane's chest. The beat of his heart was agonized and slow. It took all his will to draw a tiny gasp of breath. His tingling body was numb and useless. That dull violet flash had somehow completely paralyzed him. His senses weren't much impaired. Above the slow throb of his pulse he heard the muffled hum of that disguised machine. The crashing in the mangroves came near again and the damp rough coral trembled under him. He knew the machine was coming back.

His eyes were dim and aching. It was hard to move them and the focus was blurred, but he saw the dark, jagged bulk lurch into the range of his vision. It stopped and the humming ceased. Metal clanged hollowly. A dim, tall thing emerged.

He strained his throbbing eyes, for-

got the agony of his heart and the labor of breathing. The tingling over his body was suddenly a deep chill. His fancy tried to paint an alien monstrosity. Then his heart went on and he breathed again, for a low human voice had spoken.

"Hullo."

That was all. A tiny light dazzled Shane. He could neither close his eyes, nor turn them away. He felt hands going through his pockets and heard a familiar click as the stranger opened his camera, but there was nothing he could do.

Strong hands lifted his lax body and he was completely powerless to resist. He couldn't even keep his head from being bumped painfully against the top of the low doorway. He was carried into the machine and dropped unceremoniously upon a hard, narrow bunk.

The air had a faint, sharp, chemical smell. There was a clang as the door closed. The shoes of his captor grated on a metal floor. There were no voices and he guessed that the man was alone.

Glaring blue lights came on, but Shane, from where he had been dumped, couldn't see his captor. A bare metal wall and a tangle of tubes and cables above him were all he saw. He tried to speak, but his paralyzed vocal cords made no sound. Breathing still took all his efforts.

"Lieutenant Barry Shane." That startled him, until he realized that the man must be reading from the identification card in his wallet. "Division Eleven, Ring Guard, Key West Base."

The hard voice puzzled him. The accent was queer, too careful. Suddenly he thought he understood, froze to a cold touch of horror. That accent, he was certain, wasn't American. His captor was an Outsider!

"Lieutenant," the voice told him, "you will do."

But Shane scarcely heard. His brain spun as he tried to think. The impossible was true. Somehow—somewhere—men had survived Outside. What would they be like, after two centuries? Did this mean a friendly visit, or armed invasion?

The footsteps moved away. Motors hummed and the machine lurched into motion. A radio blared abruptly, modulated, picked up a newscast. Laboring to breathe, Shane thought of all that an unsuspected enemy could learn about American affairs, defenses and the language, by listening to the radio.

**W**ATER slapped against the hull. The radio went silent. Shane knew that the machine had crawled back under the sea.

He tried to fight the paralysis that numbed him. Desperate necessity spurred him. He had to find out who the Outsiders were and what they planned. He had to escape with his warning. He struggled for control of his body and slowly the paralysis ebbed.

First he was able to wink his smarting eyes. Then he could move his lips and finally manage to shift his cramped arms. The pain left his heart and it was easier to breathe. At last he ventured to move his head.

He could see a little more of the machine's interior. The machine was

all metal. There was no wood, no plastic. The bolts and screws all had curious triangular heads. Evidently the builders of this machine had been out of touch with America for a long time, he thought.

Then he saw, pasted on the metal wall, a bathing-girl cover from a popular magazine published in Chicago Corporation. He could see the date—three years ago. Perhaps this wasn't his captor's first trip into the Ring!

Still he couldn't see the Outsider. Desperately Shane's eyes searched for some possible weapon. He found a thick brass cylinder, clipped to the wall above him, that looked like a fire extinguisher. Perhaps that would serve, but the paralysis still gripped his hands and his feet. It seemed that only the deeper nerves, which had not completely ceased to function, were recovering. He couldn't even close his fingers yet. The attack would have to wait.

Despair seized him when the humming motors stopped. There was only the whir of a fan and a slow hissing, perhaps from oxygen valves. Hastily Shane rolled his head back where it had been and deliberately lay still.

Shoes rang on the metal floor. Strong hands rolled him over on the bunk. His eyes blinked against the unshaded blue light. For the first time he saw his captor. He lay there, staring. There was nothing else that he could do.

The Outsider was about Shane's own height. He wore tight trousers and a close-belted tunic of some unfamiliar lustrous gray material. His bearing was erect and military. He had coppery hair and a stiff, reddish little toothbrush mustache. His tanned face was rather handsome. Shane couldn't help thinking that he would look well in the blue of the Ring Guard.

"You're coming out of it," the man said, his voice so crisp and rapid that Shane almost forgot the accent. Its staccato tempo reminded him a little of a certain radio announcer. "I believe that you're precisely the sort of man I came for, but I want to talk to you, Lieutenant."

He lifted Shane's head almost gently and thrust a pillow under it.

"Can you speak?"

Shane opened his mouth in a pretense of feeble effort. He drew another gasping breath and tried to make his face convey a mute apprehension.

"Don't be alarmed," the tall man said. "Some of your motor nerves are paralyzed, but the ray didn't reach your heart, or anything vital. The short-circuiting is temporary, due to a reversible change in the myelin nerve-sheath. You'll be better soon."

**H**E moved Shane's arm to a less cramping position.

"Comfortable? Let me introduce myself. I'm Captain Glenn Clayton. As soon as you are able to speak, I am going to be forced to ask you for certain information. If you supply it, you will be treated with the dignity that a fellow-soldier deserves."

Captain Clayton didn't say what would happen if the information were not supplied. His efficient and aggressive manner suggested that he was confident it would be supplied sooner or later. It occurred to Shane that that paralyzing light would be an effective instrument of torture, even though it left no mark.

What, he wondered, was Clayton captain of? Probably he himself was more anxious to obtain information than the other man. But his hands and feet were still useless and Captain Clayton looked hard, ruthless and alert.

"Soon you'll be able to talk," Clayton said. "I'll tell you now what I want to know—everything about America. Particularly I want to know about the Barrier—the Ring, you call it. The location and defenses of the Ring Cylinder and the numbers, disposition and equipment of the Ring Guard. Your capture was very fortunate for my purpose, Lieutenant."

He moved out of Shane's sight, came back with two pairs of bright, jingling handcuffs and a big, queer-looking gun.

"I must ask you to submit to these," he said. "You'll soon be recovering and repeated use of the paralysis beam would be permanently injurious

to your nerves. Then we'll be free to talk without interruption about your Ring and the Guard."

He bent and caught Shane's shoulder. Shane's hands were numb and dead. He couldn't even clench them into effective fists. His feet were lifeless, too, and this lean fighting man was too grimly watchful to give him any real chance. The thick bright tube, Shane guessed, was the paralysis gun.

But Clayton's words somehow sent his mind back to the Ring Guard Academy. He thought of the old gymnasium, with its faint peculiar smell of stale sweat and disinfectant and the hard mats on the plastoid floor. The physical combat instructor's dry, precise voice seemed to be rasping again:

"Now we shall take up the case of attack against an armed opponent, when both hands and feet are fettered or otherwise incapacitated. Like all combat it is a question of the intelligent use of the weapons available. In this case, those weapons are weight, the massive muscles of the back and legs, the grasping power of the teeth—"

Barry Shane forgot this strange machine. The hard bunk under him became a sweat-stale mat and Captain Glenn Clayton was only another Guard cadet. He twisted off the bunk. His butting head struck aside the weapon. His teeth caught a firm hold of the flesh and skin above Clayton's wrist. His feet were useless, so he had to come down on his knees, but even that put him under his opponent. His head went down and he heaved.

Clayton tried to fight. His left fist, with the jingling manacles in it, struck painfully against the side of Shane's head. But pain didn't matter now. Anyhow, his skin was still too dead to feel sharply.

In fractions of a second it was ended. Clayton went over his head and struck the metal wall behind the bunk. He dropped upon it, rolled off on the floor and lay there.

**T**HE rest of it was more difficult than that. Using his elbows and his knees, Shane scraped the manacles

out from under Clayton. With his teeth he pushed the open jaws over Clayton's wrists and closed them with the pressure of his knees. With the second pair he secured Clayton's ankle to the rail of the bunk.

By the time that was done, Shane was able to stand on his tingling feet. A little life had come back into his hands. He picked up the weapon Clayton had dropped and tried it on the wall. A thin blade of dull violet stabbed out when he pressed the thumb-key. He knew that this was the paralysis gun.

With stiff, numb fingers he searched Clayton's pockets. He found a ring of keys, a metal-handled knife and a thin platinum case that evidently took the place of a wallet. Nothing about Clayton was made of leather. His shoes and his belt were of a gray pliant synthetic. His only adornment was a heavy platinum ring. Clayton remained unconscious, breathing heavily.

Shane's numbed fingers managed to open the platinum case. A fabric pocket contained a dozen platinum coins. Shane read the inscription on one.

"New Britain—161—ten pounds." On the reverse, beside a crouching lion: "Always England."

Shane whistled softly and stared down at the tall officer. This was astounding. These precisely milled coins, together with the machine and Clayton himself, meant that a strong culture existed Outside. If New Britain, whatever and wherever it was, had been strong enough to survive Outside, it was strong enough to be a possible menace to the Ring and to America. Shane's visit didn't exactly have the manner of a peaceful expedition.

Under the pocket Shane found a picture. He almost whistled again. He forgot his prisoner, staring at the picture. It was enameled in color on the inside top of the case. It showed a girl with violet eyes and red-brown hair. The red lips were smiling, but the eyes seemed oddly grave.

Shane's eyes still ached a little from the paralysis ray. He strained them to see, until the picture almost came

alive. It was exquisite artistry. The incredible beauty of the girl created a new pain in his heart. He read the inscription below.

To Glenn  
from Atlantis

Was that her name, or her dwelling, or just a lover's reference that only he and she would understand?

Shane took another sober look at Captain Clayton. Even while he lay unconscious and shackled, the tall Outside officer looked handsome, dashing and formidable.

Barry Shane's next and most alarming discovery came through sheer accident. His fingers were still numb from the paralysis ray. As he turned the metal case around, examining it closely, it slipped from his uncertain grasp and fell. His clumsy effort to catch it only sent it clattering against the metal wall.

When he picked it up, he found that the picture of the disturbingly lovely girl had slipped out of its place. Surprisingly it was on a separate platinum rectangle. Beneath it a narrow secret compartment was revealed. Several folded sheets of dark, tough metal foil had been hidden there.

**E**AGERLY Shane unfolded them. They were covered with writing in white ink. A few seemed to be memos—names, addresses, dates and hours. Another, on a thin sheet of gray metal, read:

The bearer, Captain Glenn Clayton, acts with full authority for the Black Star. Our enemies must be destroyed!

Beneath, like a signature or a seal, appeared a star-shaped symbol. Glittering black, it seemed to be within the gray metal, rather than merely stamped upon it. It was a complex pattern, full of tiny lines and delicate shadings. He wondered briefly how it had been made.

Shane read the words twice, with narrowed eyes. Alarmed questions spun in his brain. What was the Black Star? Had the people Outside planned some insane attack against America? That was what those words ominously suggested.

He returned the scraps of foil to their shallow cavity and snapped the picture back into place. Questioningly he stared at the gravely smiling girl. She was too beautiful to have any part in such a plot.

Clayton's easy voice abruptly startled him.

"Well, Lieutenant, congratulations!"

## CHAPTER V

### *The Letter from Atlantis*

SHANE stepped back watchfully, holding the paralysis gun level.

"I mean that, Shane." Clayton spoke from his awkward position on the floor. His manacled hands came up as he tenderly fingered the back of his head. "I don't know how you did it. You hit me like a meteor!" He grinned. "I thought you Americans would be fat and soft, from the easy living in the Ring."

Shane gestured alertly with the gun.

"Sit up on the bunk," he ordered.

"You'll be more comfortable. Now it's my turn to ask for a little information."

Clayton sat on the bunk and let his fettered ankle swing. His shrewd greenish eyes studied Shane, yet they held no alarm. Shane felt that he still had a self-confident and formidable opponent. Clayton laughed, an easy, ringing laugh.

"I see that I had better explain," he said smoothly. "Really I let caution get the better of me. I must have

seemed unfriendly. I want you to understand, Shane, that my purposes in coming through the Ring are altogether frank and open. I had no plans for anything except the mutual benefit of America and my people."

Shane's eyes narrowed. That didn't quite fit the message signed with the black star. He kept the paralysis gun ready.

"Yes," he said grimly. "I guess you had better explain."

"I see you've examined my pocket case." Clayton's greenish eyes were alert. "You must have gathered some ideas. What do you want to know?"

Shane closed the case, hoping that Clayton didn't suspect he had found the hidden compartment. He sat down on a little metal stool, well beyond Clayton's possible reach. The air-machine hummed and hissed behind him, but it was more important, just now, to question Clayton than to explore his amazing amphibian vehicle.

"Tell me about New Britain."

Clayton's hard, lean face went blank.

"Oh, the coins." His green eyes flashed with understanding. "The history of New Britain begins two hundred years ago, when America set up the Ring to protect herself and left the rest of the world to perish—"

"That's not true," objected Shane. "Ring tubes were supplied to every continent. It's no fault of America that they were all destroyed. Our own Ring was kept open until the last possible minute."

"That's your version of history," said Clayton. "I thought you wanted mine."

[Turn page]



"Sorry. Go on."

A fierce pride illuminated Clayton's ruthless face.

"Old Britain couldn't save the seas that she had always ruled, but her people were used to fighting for their lives. They had survived bombing raids and invasion attempts. When the Dwarf came, with its greater danger, they fought with the same determination to survive."

Shane sensed his pride, felt a sudden liking and admiration for this confident man and the resolute race of Outsiders.

"German bombers wrecked the Barrier tube," Clayton went on. "Peace came too late for repairs. As the Dwarf approached, people took refuge in mines, deep bomb shelters and submarines. My own ancestors were swept out to sea in a rowboat. The Dwarf's gravitation lowered the pressure of the waters, churning huge monsters up from the depths. They clawed blindly at the rowboat, almost capsizing it. But guns weren't necessary against the beasts. They exploded right after reaching the air. My ancestors had to chop the dead monsters away from the boats, or be overturned.

"Only a few Britons survived, of course. My ancestors managed to reach what remained of the land and slipped into a shelter just before the vast tidal wave swept over everything that hadn't been destroyed in the war. Those who lived were faced with a terrible task. You can imagine the difficulties of existing in a world without atmosphere or surface water."

**S**HANE nodded. "I've seen the Outside."

"The people were tough," Clayton said proudly. "Every danger made them great enough to meet the next. They wrote epics of progress. They made pressure suits out of gas-masks. They built little pressure domes, searched England for the means of survival. Oxygen was their great need. The stored cylinders in the shelters soon ran low. They used chemicals to replenish the air, then electrolysis of water. That called for electric power.

"All the old combustion engines were useless, of course, after the air was gone. Materials for electric batteries were soon used up. For a time things were very desperate. Scarcely a hundred Britons were left alive when Sanders invented the gold-film cell, which absorbs and stores the energy of sunlight, with eighty per cent efficiency.

"After a few years another disaster fell. The underground waters ebbed out of the old continental plateau. The wells went dry—wells that supplied vital oxygen, as well as merely water. The Britons had to follow the migrating waters. They moved southwest, to the floor of the dry Atlantic. It was a strange migration."

Triumph rang in Clayton's hard voice.

"Some of their vehicles were converted war tanks, fitted with Sun-power wings. At last they reached New Britain, three thousand miles due east of here. They drilled new wells and installed new power plants under the sub-tropic Sun. They opened rich mines and invented new processes. They built New Dover Dome. They overcame a thousand difficulties. Their numbers grew. Now there are a dozen dome-cities."

The handcuffs jingled on Clayton's wrists. His hard green eyes fell to the queer weapon that Shane held. Suddenly he appeared defiant.

"That's the history of New Britain," he rapped out.

"A splendid history," Shane admitted. "But why didn't your people communicate with America long ago? We might have been able to help."

"Perhaps." Clayton sounded skeptical and bitter. "It's three thousand miles to New Britain. Until the ion-blast rocket was perfected fifteen years ago, we had no means of covering such a distance. America was only a legend. Our first explorers were surprised to find that the Barrier really existed."

"What about radio?" demanded Shane. "Radio waves can pass through the Ring. Didn't you pick up our broadcasts?"

Clayton grinned. "Conditions are



different Outside, even for radio communication. Here, inside the Barrier, it is the ionized layer in the upper atmosphere that reflects radio waves back to the surface, so that they can be picked up beyond the horizon. Outside, there's no real ionosphere, but there are traces of atmospheric gases that are sometimes ionized.

"The Sun causes powerful disturbances that make any sort of transmission almost impossible by day. Even at night, communication is usually limited to the horizon. The result is that radio isn't much more useful Outside than a signal light would be."

"I see. What do you want in America?"

**H**E thought something flickered in Clayton's eyes.

"I came to get help," said the lean prisoner. "The old disaster is repeating itself. There is no rain, of course, to replenish our wells. They are going dry again. I have come to beg for water, for life itself! We've enough to offer in return. Our mines and petroleum deposits are very rich. In exchange for water we can offer oil, coal, metals and charged gold-film cells."

Shane's eyes narrowed.

"America needs those things," he agreed. "But why did you wait so long to ask, if you discovered America fifteen years ago? Why the secrecy?" He jerked Clayton's gun at the magazine picture pasted on the wall. "You must have been in America before."

"I've been in and out half a dozen times in the last two years," the prisoner confessed. "Listening to your radio and trying to gather a few facts. I found that picture in an abandoned farmhouse in the Canada Corporation. I was the first to come through the Barrier. It took some time to perfect the polarizers that make the passage possible. The men who discovered the Barrier were careful to keep out of sight. They found corpses outside the Ring."

His voice ended on a bitter note.

"Oh!" Shane stared. "They found the bodies Outside, where the Ring cuts off the coast?" He caught his

breath. "And they carried away a newspaper?"

"I believe they did," Clayton said. "It was printed in a language that nobody could read. Somebody missed it, eh? It was stupid of them to take it."

"What was the reason for all this?"

Clayton's malachite eyes glittered alertly.

"An obvious precaution. There was a legend that America had been pretty ruthless in shutting the rest of mankind out of the Barrier. The mummies seemed to confirm that. You don't have too much water even inside the Barrier. We had no reason to expect generosity."

Shane met the hard, searching gaze.

"I believe that America will trade you the water you need," he said, "or even give it to you. But I wish your approach had been less furtive."

"Perhaps you don't believe me," Clayton challenged. "Then take a look at the letter I brought from my government to yours. It's in the safe under the control board. Look in the upper compartment."

The hiss of oxygen was louder in the pilot room. The cramped space was crowded with unfamiliar instruments. Shane found a heavy envelope of gray metal foil in the open locker. Hastily he returned to where he could keep a watchful eye on the wily Outsider.

"It isn't sealed," said Clayton. "Read it."

Shane unfolded a thick sheet of tough, pliant gray metal. It was printed in white ink which, against the gray sheet, was easy to read.

To the Government of America,  
Greetings:

Captain Glenn Clayton, the bearer of these presents, brings you our desire for peace and friendship. He will explain in full detail the desperate needs of our people. Please consider them with the generosity of the strong for the perishing.

Atlantis Lee, Secretary,  
League of New Britain  
Level Ten, New Dover

Shane folded the thick metal sheet and replaced it in the stiff envelope. It was convincing—almost. But the ominous little note in the secret com-

partment, bearing the curiously mottled and striated star-shaped seal, was not yet explained. In addition, Clayton's whole manner seemed to betray a veiled hostility.

"Who," Shane asked, "is Atlantis Lee?"

**T**HE handcuffs jingled as Clayton moved abruptly.

"You were just admiring her, eh?"

The hard voice had a snap of ill-concealed resentment. "As the letter indicates, she's Secretary of New Britain."

"A ruler?"

"Scarcely a ruler," Clayton dissented. "Her father, the previous secretary, was the leader of a democratic union of the dome-cities. But the political picture has changed since the Barrier was discovered. An old and long suppressed political party, called the Black Star, has come back into power. The leader of the Black Star has most of the actual power in New Britain."

Remembering the note, Shane tried not to start.

"Who is that?" he demanded.

Clayton yawned. "The Black Star is a secret party. Even though it has won power, there are still embittered factions who make all the trouble they can. The real identity of the leader is supposed to be unknown to anybody else."

"How does a secret leader function?"

"The leader has the Black Star Seal," Clayton explained. "The Seal is said to be made of an artificially radioactive crystal. It makes a peculiarly delicate oxidation pattern on the metal foil that is used for official documents, an impression that cannot be counterfeited. The leader of the Black Star is supposed to select his own successor and pass the Seal on to him."

So that was the meaning of the star-shaped imprint!

"Evidently," Shane said, "you're a member of the Black Star."

The hidden note, which gave Clayton full authority to act against the enemies of the Black Star, seemed proof enough of that.

"If so, I couldn't tell you," the tall Outsider countered easily.

Shane decided to say nothing about the note.

"Another thing." He changed the subject. "How do you get through the Ring?"

"The device is called a polarizer," Clayton told him. "There are two units, in case one goes wrong. I don't know how it works, but you pull a lever and the *Friendship* flies right through, just as if the Ring didn't exist."

"This is the *Friendship*?" Shane was astonished. "It can fly?"

"Sure," Clayton nodded casually. "Ion-blast rockets, powered from the gold-film cells. It would be difficult to enter the Barrier without them, against the pressure of your atmosphere. The rockets easily lift us above it."

Shane caught his breath.

"A remarkable machine," he commented, "for something that looks like an ordinary boulder."

"Thank you, Lieutenant," Clayton said smoothly. "May I ask your plans?"

"I'm going to turn you over to my superior officers," Shane said. "The letter from Atlantis Lee will be properly considered, no doubt." He reflected. "Are you willing to run the machine?"

**H**E didn't trust Clayton, but the *Friendship* was on the bottom of the sea. One glance at the complicated control console made him realize that he couldn't hope to operate the machine without instruction.

That seemed the only way to get ashore alive. Besides, it would be a sort of test for the truth of Clayton's story. If the Outsider proved willing to pilot the *Friendship* peacefully into the hands of the Guard, it would show that he really wanted water to save perishing cities.

"Sure," Clayton agreed. "And thanks, old man."

He held up the manacles to be unlocked.

"Better keep them," Shane told him. "I think you can manage."

He unlocked the ankle chain and fol-



The guards fired desperately at the swiftly escaping rocket ship (Chap. XI)

lowed Clayton into the cramped little control room. He set the discharge-tube of the paralysis gun against the back of Clayton's head.

"I practiced with this," he warned.

Clayton's lean, tanned hands were swiftly busy.

"I don't blame you for doing your duty, Lieutenant," he said. "I was suspicious of you, at first, though not suspicious enough." His laughter rang out lightly. "Strangers—from strange countries—are apt to be suspicious at first."

## CHAPTER VI

### *One Against the Black Star*

**M**OTORS hummed and pumps began to throb. The *Friendship* heaved above the surface of the sea. Metal shutters rose, to uncover wide observation ports. The ion-blasts made a thin, doleful howling.

"Your atmosphere," Clayton explained. "It's always silent Outside."

"Are the motors good for a couple of thousand miles?" Shane asked.

"In three hours," Clayton said. "Two, Outside."

It was better to take the craft directly to General Whitehall, Shane decided. Clayton was a little too clever, a little too dangerous, to be turned over to Captain Steadman at Key West. He was aware of a glowing admiration for the Outsider's quick skill at the machine's controls and for his iron, smiling self-confidence. He couldn't trust Clayton, yet he somehow liked the man.

With the ion-rockets howling wierdly, the *Friendship* plunged ahead with rapidly mounting speed. Between wings of spray, she bounded like a rising seaplane. She left the blue tropical water and sloped sharply upward.

Behind Clayton, Shane watched alertly. He was ready for the Outsider to snatch another weapon from a hidden drawer, perhaps to tip the machine into a suicidal plunge back toward the sea, or swing it away toward the Outside.

But Clayton did none of those things. He followed the course that Shane gave him. The *Friendship* climbed through the stratosphere. The howling of the rockets died and the air grew dark as the sky Outside.

Clayton's hard, brown face looked friendly. Settled in his big metal seat at the controls, he made casual comments on the machine's operation. If Clayton were honestly peaceful, Barry Shane thought, it ought to be possible for him to go back with the tall adventurer on a visit to New Britain. Perhaps he could go Outside!

Now they were so high that the convexity of America was visible. Veiled under the gray haze of atmosphere, the familiar line of the coast drifted back beneath them. They crossed the flattened green mountains of the Atlantic Corporation. Clayton spread out a chart and Shane pointed out the location of the Ring Guard Headquarters. He saw a little red dot where the Ring Cylinder was.

"That is the mathematical center of the Ring," Clayton commented. "I suppose the Ring Cylinder is located there."

"Maybe," Shane said guardedly.

Deliberately the *Friendship* slanted down. The gray haze of air dissolved. Straight ahead, surrounded with golden fields of unharvested wheat, Shane saw the dark, armored bulk of the Ring Cylinder. Ring City made a pattern of roads and squares above it and the landing field at Headquarters was a dark rectangle.

"There's Headquarters," he said. "Turn."

"Thank you, Shane."

Clayton's hard short laugh had a mocking ring. He touched the controls and the howl of the rockets became a demonic shriek. Savage acceleration hurled the *Friendship* into a terrific power-dive.

The big metal chair was designed to protect the pilot from such acceleration, but Shane was hurled back against the bulkhead by the unexpected thrust. His elbow struck the metal wall and the gun snapped out of his hand. He was pinned there by a ruthless pressure.

A square black box dropped in front

of Clayton's head, where it lay against the back of the seat. He peered into hooded eye-pieces. With a stunned realization, Shane knew that the black box must be a bomb-sight.

Clayton was dive-bombing the Ring Cylinder!

**D**ARKNESS hovered over Barry Shane as his thudding heart labored to pump his blood against that merciless pressure. But he clung to his consciousness with a grim and desperate tenacity. He knew what destruction of the Ring Cylinder would mean.

The instant that amazing invisible wall of ultra-electron vibration would cease to exist, the pent-up waters about America would flow down into the dry sea-beds. Even more cataclysmic, the imprisoned atmosphere would expand, creating the most terrific explosion the planet had ever seen. Nothing living, no work of man in all America, could stand against that unimaginable blast.

When it all was ended, there would be a few salt lakes in the old ocean deeps. There would be a breath of thin, useless atmosphere above them. Perhaps the cities of the Outside, under their armored domes, would not be injured. The flood might even bring them the water that they needed. But America would be forever dead.

The enormity of the plot, to Shane, was more stunning than the shock of the steel bulkhead against his skull. How could any man, with any motive possible, attempt to murder sixty million people with a single act?

But Captain Glenn Clayton was an incredible man. Easy and mocking, his hard voice rang back to Shane.

"A power-dive, Lieutenant, is no time to interrupt your pilot."

Perhaps that was true. If the bombs shattered the ultradyne tube in the Cylinder, the grimly named *Friendship* might survive. In a matter of seconds Shane might be the only American living, and a successful attack on Clayton would probably result in death for both of them. But America might live!

Clayton was an incredible man—to think death would matter.

For one horrible instant it seemed

to Shane that there was nothing he could do. He couldn't reach Clayton against that savage pressure. There was no time for him to scramble for the dropped weapon. His groping fingers had already closed automatically on the heavy little platinum case that he had taken from Clayton, but the back of the tall seat protected the Outsider against anything thrown from behind.

With desperate, shoulder-wrenching force, Shane threw the platinum case. The same ruthless acceleration that pinned him to the bulkhead could be turned against Clayton!

Curiously deliberate, the white metal oblong flew past Clayton, into the nose of the power-diving rocket. For an instant it hung poised. Then that terrific thrust flung it back into Clayton's face.

The shriek of the rockets increased again. A shocking apprehension struck Shane. Perhaps he had failed after all. Even if he had stopped Clayton from releasing his bombs, the entire machine might plunge on to strike the Cylinder, like one tremendous rocket torpedo.

Blackness dropped again.

**O**NCE more Shane clung grimly to awareness. In a moment he knew that the *Friendship* was coming out of the dive under automatic controls. Clayton was slumped sideward in the big seat, one side of his face red with blood.

The platinum boomerang had returned with even more force, beneath that terrific acceleration, than Shane had expected. Clayton was knocked out again.

Relieved of that mighty pressure, Shane dragged the unconscious man out of the chair, dumped him on the floor and took his place at the controls. For three hours he had watched Clayton navigate the ship. His first efforts resulted in two or three alarming spins, but he found that the automatic pilot would always bring him back into level flight, if he merely took his hands off the controls.

After three preliminary circles, he brought the *Friendship* down on the long field between the Academy quadrangle and the old, low concrete build-

ings that housed the Ring Guard Headquarters. He hadn't known how to lower the landing struts. Checked with a sudden full burst of the braking rockets, the ship dropped like a falling meteor.

Shane was jarred considerably, but discovered that none of his bones were broken. The *Friendship* evidently was built to take it. He opened the air-valve in the side and dragged Clayton out into the crater the rockets had torn in the ground.

The ship actually resembled a fallen meteor. The metal plates that disguised it were shaped and painted to imitate the ragged contours of a great boulder. Only the open door and projecting rocket-muzzles and the caterpillar tracks betrayed the illusion.

A silent electricar came across the field from Headquarters. Slight, spry, white-haired General Whitehall got out with a little group of officers. They looked at Shane in blank astonishment.

"But it isn't a meteor!" an aide stammered inanely.

General Whitehall was first to recover.

"Congratulations, Lieutenant." His shrewd blue eyes were bright with comprehension. "So there was a stone that moved! Please forgive the skepticism of your superiors. Are you able to make a report at once?"

"I'll try, sir." Shane fought to keep on his feet. The landing must have been more violent than he had realized. "I believe this is the same object I saw approaching the Ring from Outside in Sector Forty-one-B."

After he stubbornly completed his report, an ambulance took him and Captain Clayton to the Headquarters hospital, where he was treated for cuts and bruises. Clayton, suffering from concussion, failed to regain complete consciousness until the following day.

General Whitehall was still at the *Friendship* when Shane returned to the disguised war-machine from Outside. Ring Guard engineers were already arriving, at his orders, to examine it.

"There are a good many things about the ship that need study, sir," Shane told the silver-headed com-

mander. "A device called a polarizer enables it to fly through the Ring. Clayton said he didn't understand it. Then there are the ion-blast rockets and the gold-film storage cells."

"The engineers have orders to photograph and study every single part of the machine and its equipment," Whitehall assured him. "But I imagine that your prisoner himself will be our most valuable source of information."

"I doubt that, sir," Shane said. "Captain Clayton is a remarkable man. I believe he would die under torture, rather than reveal one fact that he didn't want to reveal. And I think he is clever enough so that we can't believe anything he tells us until it is proved."

"Anyhow, you will question him, Shane."

"Yes, sir."

**N**EXT day, in a pleasant little room in the small white building of the Guard hospital, Barry Shane tried to question the man he had captured. The windows of unbreakable vitroid needed no bars, so Shane had the guards wait outside.

Clayton sat up in bed, his brown face smiling under the bandages. The room was quiet. On the surface it was a casual scene, but Clayton's hard, greenish eyes betrayed a mocking defiance.

"Congratulations, Shane!" Clayton said in a crisp voice. "How did you do it?"

When Shane told him, he grinned.

"Clayton, I can't understand you." Shane sat down in a chair by the bed. "You're brave. You're intelligent. I like you—"

"Thanks, Lieutenant." Under the bandages, Clayton grinned again. "I can say the same about you."

"But I can't understand you," Shane repeated soberly. "Yesterday you attempted to murder America, to kill sixty million men, women and children—the large majority, I think, of the human race left on the planet. How could you do a thing like that? Why?"

Clayton's short laugh rang hard.

"Of course you can't understand. No American could. But some of us

can Outside. The Black Star has understood for two hundred years. I told you that some of us resented being shut out of the Ring."

"I explained that you had no reason to."

Clayton's eyes were hard as malachite.

"I rejected your explanation."

Shane tried another angle.

"What has the Black Star—this secret party in New Britain—got to do with your presence in America?"

"There are some things I'll tell you," Clayton said, completely self-possessed. "Some things I won't. I refuse to answer any more questions about the Black Star."

Shane questioned him for two hours. The results were not satisfactory. Clayton's answers were mockingly evasive.

Late that night, in General Whitehall's office in the gray old Headquarters building, he reported his failure. Worry shadowed the old general's shrewd blue eyes.

"He must talk, Shane! We don't know the real reason for his attempt to dive-bomb the Ring Cylinder. We don't know how many enemies America has Outside, or when they are planning to strike, or what unexpected weapons they may use. We've got to have that information to save America."

Shane shook his head.

"I don't think we'll get much dependable information out of Clayton." He hesitated, then blurted hurriedly: "But I've been thinking, sir. I believe we'll have to use the Outsider's own methods. I've got a plan."

Whitehall's shrewd eyes brightened.

"What is it?"

"We must send a man Outside, sir."

Shane thought that the keen blue eyes were looking through his head to the very back of his mind. For a long second Whitehall studied him. A sober little sparkle came at last into the deep-set eyes.

"And you want to be the one to go?"

Shane caught his breath and swallowed again.

"Yes, sir, if you will just listen to my plan. It's the only way I see, to

get the information that America needs." His voice grew husky with excitement. "I want to go Outside, sir—back to New Britain—in Clayton's place!"

## CHAPTER VII

### *Double for Danger*

SITTING behind the rigidly military order of his desk in the room at Headquarters, General Whitehall frowned, shook his white head and began to make objections.

"You mean you want to masquerade as Clayton? It would be suicide, for a dozen reasons. In the first place you don't even look like Clayton."

Shane leaned anxiously over the desk.

"I'm almost exactly the same height," he urged. "We can send for Della Rand and have her do another plastic operation. She can rebuild my face into a duplicate of Clayton's. I'll study his voice and mannerisms."

"That might be done," Whitehall admitted. His keen blue eyes twinkled again, this time with approval. "But we know almost nothing about New Britain and Clayton's life there, and he doesn't seem inclined to supply information. Remember, the Outsiders have been isolated for two hundred years. Language and customs change, especially under such sharply different conditions as must exist Outside. Their vocabulary probably contains thousands of new words. It probably took Clayton a long time to master our English."

"But we can use his own methods," Shane insisted. "I've just been down at the shops, talking to the engineers at work on the *Friendship*. That's where the idea came to me. They've found some more of Clayton's metal foil notes. There are maps that show the cities of New Britain. A few personal letters. Rolls of foil, printed in microscopic type, that seem to correspond with our magazines and newspapers. I can acquire a fair vocabulary by studying them."

"Pronunciation will be different," Whitehall objected.

"I can use the radio," Shane said, "after I get near enough to New Britain to pick up anything. The lack of a Heaviside Layer cuts down the range of radio Outside. Perhaps I can pretend to be injured or exhausted, after I get there, to gain a little more time."

The general nodded slowly. "I see you've thought this out, Shane. Maybe you have something." Another argument made him shake his head. "But you would have to take the *Friendship*. That's too valuable to give back to the Outsiders, at least until our engineers have had time to complete their study of it."

"I realize that, sir." Shane's gray eyes lit with hope. He felt he was about to win his point. "I won't need to take the *Friendship*. The engineers have found escape equipment, stored in a compartment by the air-valve. Evidently it was intended for Clayton to use in case anything went wrong with the *Friendship* itself. That discovery was the beginning of my whole plan, sir."

Whitehall's keen features began to reflect Shane's eagerness.

"What sort of equipment?" he asked.

"An air-suit," Shane said. "It doesn't look comfortable, but it's fitted to keep a man alive for days Outside. And there's a light electric motorcycle, powered with gold-film cells. The helmet of the suit has a two-way radio."

The victory was almost won. Shane caught his breath and confidently drove on.

"You see, I can use the radio to get in touch with them. I'll report that the *Friendship* was destroyed—by a weapon that is waiting for any other Outsiders that happen to come along!"

**G**ENERAL WHITEHALL rose abruptly.

"That's possible." He tried to control his excitement. "You can report that you were captured by the Guard and set free to take back a message. We'll send a reply to that letter from the Secretary of New Britain, offering them the water they need, by peaceful exchange."

Then another obstacle checked the

old general's mounting enthusiasm.

"But how will you get Outside," he queried, "if you don't take the *Friendship*?"

"I discussed that with the engineers. They have identified the polarizer units aboard the *Friendship* and have already learned a good deal about them. Apparently, they tell me, the units create an intense special field on the same ultra-electronic level as the vibration of the Ring itself. Atoms in this special field are polarized, their axes rotated into alignment with the radial axis of the Ring.

"The effect is probably quite temporary, but polarized matter evidently passes through the Ring just as light does, without making any rupture in it. The engineers say they can dismount one of the units from the *Friendship* and use it to put me through the Ring, with the air-suit and the motorcycle, whenever I'm ready to go."

"I see." Whitehall nodded. "But how will you get back?"

Shane grinned. "That's a bridge to be crossed when I get to it. It's easy to get out of the Ring at sea-level, but not so easy to get back against fifteen pounds of air-pressure. There are ways, though. I could make a report from Outside by radio. By that time the engineers probably will have finished their study of the *Friendship* and have her ready for operation, with both polarizers back in place. They might fly the machine Outside to pick me up.

"Also, it will be possible to duplicate the polarizers. A special air-lock could be built, extending through the Ring, with a polarizer inside. That would make it possible to come and go at will. But we've no time to wait for such things, now." Urgently Shane's voice dropped. "Please, sir, what do you think?"

Soberly the old general smiled.

"You seem to have answers for all my arguments. The matter will have to be discussed with my staff, but I suppose we'll have to let you go."

"Thank you, sir!" whispered Shane.

Dr. Della Rand arrived next day from Chicago Corporation, in answer to General Whitehall's urgent call. At the monorail station in sleepy little





## ATLANTIS LEE

Ring City, Shane was waiting to meet her. His breath came a little faster as the huge silver teardrop of the car paused above the station tower. The famous doctor stepped out of the elevator and his heart skipped a beat.

Her dark, vital beauty was arresting as ever. Her skin had the same warm glow, her eyes the same penetrating quickness, but something had changed. Shane felt a pang of vague loss. Then he knew what the trouble was.

Della Rand hadn't changed at all, but he had seen the picture Clayton carried of that violet-eyed girl of far-off New Britain, who bore the haunting name of Atlantis Lee.

"Hello, Shane."

**E**VEN her throaty, efficient voice hadn't changed. Her dark, alert eyes studied his face, yet he knew she saw only the deft work of her surgeon's hands.

"General Whitehall sent for me," she stated. "What does he want?"

Shane could talk to her now. He wasn't afraid of her. He didn't flush or stammer, because she didn't really matter any longer.

"A military secret," he said. "I

need another facial operation."

Her dark eyes widened. "What's the matter with you now?"

He told her about the plan and the situation that made it necessary. Her quick mind accepted and digested the fact that men lived Outside. She studied Shane again, as if she had never really seen him before. In a lower, different voice she asked:

"Isn't this scheme of yours very dangerous?"

"Nothing is too dangerous now," Shane said.

They talked to General Whitehall in the Headquarters office.

"Clayton mustn't know what we're planning," explained the slight, old commander. "We're going to make recordings of his speech and study his unconscious mannerisms. He's clever enough to trick us if he knew, but his face was cut when Lieutenant Shane captured him. The injury hasn't been properly repaired. I'll arrange for you to make an operation on him at once. That will give you an opportunity to study his face."

"Also," suggested the woman doctor, "I believe we should make some psychological tests. That is another

specialty of mine. I was led into it through a study of the psychology of facial expressions."

Shane was present in the hospital operating room when Clayton first saw Della Rand. The prisoner's greenish eyes lit with an instant admiration.

"You are going to complicate my task, Doctor," Clayton grinned. "I came here to make war on America. Now I see that I'll have to save your life and take you back with me to New Britain."

Della Rand caught her breath. It was the first time that Shane had ever seen her air of curt efficiency disturbed. He thought she was pleased as well as flustered. To a woman, he supposed, Clayton must seem quite daring and romantic. In a moment, however, she got back her professional briskness.

"All right," she said curtly. "Let's see your face."

Shane watched the operation. The delicate instruments of bright steel seemed to live in her deft hands. Newly developed adhesives joined the tissue of nerve and muscle and skin, so that no stitches were required. When she had finished, only a tiny line showed where Shane's acceleration-hurled missile had cut its long slash. Even that would slowly vanish.

Next morning, back in his own room at the hospital, Shane confronted the tall Outsider.

"Now we'll have to take you to a cell in the Guard prison, unless you want to give your parole and stay here. You will still be under guard, of course, but you will be more comfortable."

"Sure," Clayton said promptly.

"Then you give your word not to attempt escape?"

**F**OR a split-second Clayton seemed to hesitate. Shane thought his greenish eyes flashed, as if with some concealed reckless amusement.

"I do," he said.

In the days that followed, Clayton proved ready enough to talk to Shane, so long as they kept off certain topics, such as the Black Star. He also insisted on the right to ask as many questions as he answered. Every mo-

ment, Shane could see, he was devouring every possible fact about the science, geography and defenses of America. Shane was haunted with a fear that he would escape, in spite of his parole and the guards about the little white hospital, to make some new attack on the Ring Cylinder.

Shane explained that fear to General Whitehall. The commander admitted the danger. Twenty men of the now enlarged Ring Guard were assigned to the duty of preventing the Outsider's escape.

Clayton's laugh was a mocking challenge when Shane told him that Della Rand was planning some psychological tests.

"Let her go ahead," he invited sardonically. "I'll find out as much as she does. Besides, the tests should be amusing. Della is really too charming to die in America, Lieutenant. I'm going to take her home."

"If that's a joke," Shane retorted, "it isn't funny. What about Atlantis Lee?"

"Atlantis," Clayton said, "is a long way from the Midwest Corporation."

Shane spent many hours with the engineers aboard the *Friendship*. He learned to operate every mechanism and studied every detail of design, material and construction. He memorized every word on the metal foil rolls and letters, every line on the maps.

Shane was never sure just when Clayton perceived the plan. When the guards let him into the hospital room, on the morning that Della was to begin the operations on his face, he asked Clayton for the massive platinum ring.

"I'd like to keep it," Clayton protested, covering the heavy bezel of plain white metal, which didn't even carry a monogram. "It has a sentimental value."

"I can't picture you as sentimental," Shane snapped. "Give me the ring."

Grinning, Clayton slipped it off and tossed it to him.

"I was wondering whether you would think of it," he said. "Not that it will help you much." A cold note of warning came into his voice. "You're a fool to try this, Shane! To

get an idea of your chances, just reverse the situation. Suppose that I had managed to turn up in your place, on my first visit to America.

"Think of all the people I would have had to deceive—your friends, your relatives, your fellow-Guardsmen. Surely, not knowing anything at all about them, I would have made one false step. And one, remember, can be enough to result in the death of a spy."

His hard, challenging green eyes mocked Shane.

"Maybe Della can give you a copy of my face," he continued. "But the scars will be visible, to one who knows how to look. I'm a quarter of an inch taller. My eyes and my voice and my hair are different. You may forget one of my habits, which you've been studying so carefully, and betray yourself with some little trick of your own.

"Remember, Shane, life is hard Outside. It's easy to keep alive in America. A naked animal can do it. But it takes a lot of skill and a lot of equipment to keep alive Outside." He gave a hard little laugh. "Don't you see that you're a fool?"

"Thanks for the hints." Shane grinned at him. "But just keep the situation reversed. Suppose that you were in my place, wouldn't you take all those risks willingly for your own people?"

Clayton's lean face grew visibly warmer. In that moment Shane liked and admired the tall Outsider more than he had before.

"Sure I would."

Then the guards and nurses came to take them to the operating room.

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## CHAPTER VIII

### *The Gentle Death*

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**D**ELLA RAND herself, in Shane's quiet room at the hospital, removed his bandages. Her dark, close-shingled head made a curt little nod of professional satisfaction. Standing behind her, General Whitehall pursed his thin, wrinkled lips in a

silent whistle of astonishment. Della gave Shane a mirror.

He gasped, unable to believe what he saw. It was uncanny. It made shivery cold feet run up and down his spine. He felt just the same, except that his new face was still stiff and painful. But the hard, handsome features that looked at him from the mirror were those of Captain Glenn Clayton!

His dark hair had been bleached and dyed to the bronze of Clayton's. The magic of bio-chemistry had changed his skin to Clayton's ruddy brown. His gray eyes, from the delicate injection of special dyes, had taken on the greenish glint of Clayton's.

"I can't believe it!"

Even his voice startled him. Clever surgery on his larynx and sinuses had given it the quality of Clayton's. He looked down at his hands. They also had felt Della's knife, but the tips of his opposite thumbs and fingers were set together in a characteristic habit of his own.

"That isn't Clayton," General Whitehall warned him. "Don't ever forget that one little gesture. Even a tiny thing like that might destroy you and the hopes of America."

The day he was to leave, Shane couldn't resist the temptation to visit Clayton's guarded room. He was wearing Clayton's tight gray trousers and tunic, to get used to them, with the paralysis gun at his hip. It surprised him to find Della Rand here, at a little table scattered with her test equipment.

Clayton, seated across from Della with his palms resting on two electrodes, stared up at Shane. For a moment he looked blank with astonishment. Then his handsome face broke into a smile of admiration.

"Splendid, Shane!" he cried—in the voice that was now identical with Shane's own. "Thanks for letting me see." His green taunting eyes looked back at Della. "Your gadget must have registered something then, beautiful."

"Surprise," said Della's curt voice. "Point oh sixteen."

Clayton's brown, bold face turned back to Shane.

"She thinks she's learning things from me." His hard voice had a malicious ring. "But I don't need a laboratory to tell that she already registers about point oh sixty degrees of love."

Della's face glowed with color.

"Stop it," she ordered curtly, "or I'll call the guard."

Yet Shane wondered if Clayton hadn't told the truth. Clayton grinned at him.

"Splendid, Shane," he repeated mockingly. "You look exactly like me—to anybody who doesn't know me. There are a thousand things that can betray an impersonator in a world that he has never seen before. Perhaps you have thought of a hundred of them. There are nine hundred more."

Shane waved in farewell and went out of the room. That was the moment Clayton had selected to break his parole. Now that Barry Shane looked exactly like him, he also looked exactly like Barry Shane. It would have been foolish not to make some use of such a convenient fact. He, too, had been observing mannerisms and voice inflections. He had planned a desperate masquerade of his own.

**W**HEN Shane went out, Clayton was left alone with Della Rand. That had been easy to manage, for he was on parole. All the doctor's reaction tests had not revealed his plan, though he had encouraged her to go on by yielding a few unimportant bits of information about New Britain. He simply refused to cooperate when any guards were present.

Eighty seconds after Shane departed, Clayton followed. Della Rand was left lying across the bed. She was unconscious from an anesthetic needle in her own kit, her mouth and wrists turning blue from the pressure of Clayton's hands.

Clayton had flung off the bathrobe he had worn. He had torn his under-clothing and mussed his hair. Della had scratched his face, injuring her own deft handiwork. But even that helped his planned effect.

In the hall outside, he met the startled guard.

"Where is he?" His breathless,

gasping tones were a splendid imitation of Shane's altered voice. "He overpowered me—took my clothes and gun. He looks like me now—Where's Clayton?"

The guard blinked and gulped and automatically pointed.

"Lieutenant Shane—I thought he was Shane—just went that way."

"Fool, that was Clayton!" Clayton's voice cracked like an angry whip at the confused guard. "He's getting away. He's desperate. Spread the alarm! Here, give me your gun!"

"Yes, sir," croaked the dazed guard.

It was a simple plan, one that had the audacious simplicity that was the spice of life to Clayton. Clutching the gun, he grinned as he sprinted down the twisting corridor in the direction the guard had pointed.

It was neat. Shane would be buried, if nothing went wrong, as the Outsider killed while attempting escape. Clayton himself, calmly carrying out his own masquerade, would be escorted to the Ring and safely through it, by the very men assigned to the duty of guarding him. The first intimation of the truth would be the unexpected descent of a Black Star rocket-bomber fleet on the Ring Cylinder.

Of course there were a good many things that could go wrong, but Clayton was used to risks and he enjoyed them. This attempt, he thought, was no more desperate than Shane's own plan.

There was only one phase of the affair that Clayton regretted. He wished it had been possible to take Della Rand with him. He had admired her from the beginning, but he had never quite realized how much he really wanted her until those brief, delicious seconds when her lithe slender body struggled in his arms, before the anesthetic took effect.

He turned a corner and saw Shane ahead of him. Clayton flung up the heavy pistol he had snatched from the bewildered guard. It was a more deadly thing than the paralysis gun Shane had taken from him. The sights crossed the back of Shane's head, but the gun shivered in Clayton's hand and he didn't pull the trigger.

Shane wore his own clothing. Shane

was walking with his own jaunty walk. That bronze head was his own. The man ahead was himself!

**C**LAYTON thrust away that brief, uncanny feeling. He tried to forget a sudden, unwilling liking for the quiet-voiced Guardsman. Emotions didn't matter now. The long-planned final victory of the Black Star was in sight.

He steadied the gun. But Shane had swung on down the hall and Clayton saw the long mirror at the end of it. At the same instant Shane saw the crouching image of his nearly naked double, tense in the very act of firing.

Clayton's bullet broke the mirror, but Shane had flung himself aside. There was no time to turn and aim, yet his lightning reaction served him. Before the mirror shattered, he had discharged the paralysis gun at it, toward the image of his double.

The thin beam of dull violet was reflected back to the Outsider. His gun-arm dropped, suddenly numbed. The borrowed weapon clattered on the floor.

Even then, disarmed, Clayton clung to his story. At Shane's suggestion, the swiftly gathering guards held them both. General Whitehall arrived. Della Rand recovered from the anesthetic needle, gave her account of the affair. They were judges that Clayton could not deceive.

Shane went on, to undertake his adventure Outside.

Handcuffs were snapped on Clayton and he was escorted back to his room. Della Rand's reaction test equipment had been removed. The room was stripped bare as a cell. He spent the rest of the day in the company of six guards.

Next morning, slight, shrewd-eyed, old General Whitehall came in the room to see him. His thin face was sober, his voice low with regret.

"Clayton," he said gravely, "you've broken your parole."

Chains jingled cheerfully as Clayton sat up on the bare mattress in the corner. Red and welted where Della had scratched it, his hard, grinning face looked faintly sinister.

"So I have," he agreed.



Shane rode through airless desolation (Chap. IX)

"You're a riddle to me, Clayton." The old Guardsman shook his head wearily. "I like you personally. Yet, after what you did yesterday, we can't overlook the fact that you are a ruthless and clever enemy."

"No, General." Clayton's voice had a bitter ring. "You can't understand me. But if you had lived Outside—if your forefathers had, for two hundred years—you could. If you had seen human beings dying for want of the oxygen in a cup of water, when you knew there were oceans of it lying inside the Barrier, then you could understand."

"But," protested Whitehall, "we're willing to give you water."

"Perhaps you are now, to save a little for yourselves," Clayton retorted freely. "But you failed to do it two hundred years ago. America should congratulate herself, General, on two centuries of borrowed time—of stolen life!"

**W**HITEHALL'S face went stern. "That attitude is unfortunate," he said, "both for America and New Britain. But it exists and must be dealt with." Cold now, his shrewd eyes studied Clayton. "Captain, we are prepared to offer you two alternatives."

"Only two?" Clayton's smooth voice mocked.

"There is still time to change your attitude," Whitehall stated. "You can answer our questions honestly. You can cooperate squarely with our efforts to establish friendly relations and peaceful trade with New Britain."

Clayton grinned. "The other alternative?"

"Euthanasia," Whitehall answered soberly.

Puzzled for a moment, Clayton's green eyes glinted with understanding.

"Oh," he said softly. "The easy death—your polite and scientific name for murder!"

"If you prefer to call it that. You attempted to destroy the Ring Cylinder. Yesterday you tried to kill Lieutenant Shane. Frankly, Captain, I regret this very deeply, but we feel that you are too dangerous to America to

be allowed to live to endanger us."

Clayton's face lit with a reckless amusement.

"Your regrets are unnecessary. I assure you that in your place I should take the same action, with no regrets at all. You Americans are better men than I thought."

Whitehall stood silent. In a husky voice, hardly above a whisper, he said:

"You're a strange man, Clayton. This is more painful to me than you can understand. Our surgeon will be ordered to prepare for the operation at once. I assure you there will be no pain."

"Thank you, General," Clayton said, "though that is not important."

He allowed himself a wolfish grin. Who, he wondered, would the surgeon be?

## CHAPTER IX

### *Beyond the Ring*

**G**ENERAL WHITEHALL shook hands with Barry Shane before the young Guardsman started for the Ring. Bright with a fresh amazement, his keen blue eyes studied the face, the posture and the odd gray clothing that had been Clayton's own.

"You almost make me think you're really Clayton, carrying out his little plot, after all!" His voice suddenly went grave. "This is a mad adventure, Shane, but you can't fail. It's too important."

When Shane grinned, it was Clayton's own hard grin.

"I'll do my best," he promised. "I was just talking to the engineers about our imaginary weapon. They suggest a decoherer—a beam of force that appears to destroy the molecular cohesion of metal, so that good steel crumbles to useless dust. Actually, sir, is there any possibility of such a weapon?"

Wearily Whitehall shook his shaggy head.

"None, I'm afraid. The defenses of America have been neglected for two hundred years. We have depended on the Ring. We don't even

have the machine tools and trained men to create the sort of armament that America had two hundred years ago. Of course we're trying desperately to get ready for trouble. We're enlisting men in the Guard. Our few arsenals are working day and night, trying to arm them."

His blue eyes were bleak with dread.

"But we've no protection at all from bombing raids on our cities, or the Ring Cylinder itself from such rocket-bombers as the *Friendship*. That's why your mission is so vitally important."

A special monorail car, sighing along at four miles a minute over the high steel thread, took Shane to Key West. Two Guard engineers accompanied him, carrying one of the polarizer units that had been taken from the *Friendship*.

That night a Guard amphibian took them from the Base to a low, barren coral islet that lay half in the Ring and half Outside. Shane shook hands with the engineers, then sealed himself in the clumsy bulk of the air-suit. Awkward in it, he mounted the silent electric bicycle and tried it out on the hard beach within the Ring.

Swiftly the engineers set up the compact polarizer. They anchored it with long steel spikes driven into the coral and ran wires to the controls, a hundred feet back from the Ring. One of them leaned the motorcycle against the Ring's invisible wall, above the polarizer. He stepped back and called out.

"Okay, Joe!"

Something slapped the motorcycle through the Ring.

"Okay, Lieutenant," said the engineer. "Your turn."

Clumsily Shane walked across the coral sand. He pressed his armored body flat against the invisible barrier of vibration. Waiting there while the engineers fumbled with something, he had to fight a momentary panic.

Science had given him Clayton's face and Clayton's voice. He had tried to learn how Clayton talked, how he behaved and even how he thought. Still he wasn't Clayton. One tiny blunder might destroy both him and America.

"Luck, Lieutenant!"

He was glad to hear that brisk voice, because it broke his dread. He moved his hand in a silent signal. Something clicked, a little tube glowed blue and the Ring didn't exist. Air-pressure, like a mighty hand, flung him forward—Outside!

**D**AZEDLY Shane got back his breath in the heavy helmet and stumbled to his feet. He shuffled toward the dark forms of the engineers, but the Ring had come back and he collided with its unseen wall.

The engineers moved and he knew they were speaking, yet no sound came through. For a moment he was conscious of a painful loneliness. With the dials on the chest of the suit, he snapped on the radio. A blare of American dance music lifted his spirits.

He resisted an impulse to call Key West Base. He knew from Clayton's maps that the Outsiders had established outposts of some sort, within a few hundred miles of the Ring. It was one of them, designated on the maps as "Point Fourteen," that he hoped to reach. Possibly, too, patrol rockets would be sent even closer to the Ring under cover of night, for the Outsiders by now might be wondering why Clayton hadn't returned. There was danger that any report might be overheard.

He set up the motorcycle and mounted it stiffly. With a last wave to the engineers, he turned down the first barren slope of the abyss that once the sea had filled. Now he was on his own.

The low coral islet became a dark, looming hill behind him and the two men there were lost. The atmosphere under the Ring made a misty blur against the sky, but the stars that filled the black heavens of the Outside burned with a cruel, naked splendor.

The electric vehicle ran without sound, for there was no air to carry vibration. Its headlight made a tiny, defiant glow against the overwhelming dark. Under the synthetic rubber tires, age-dried weed crumbled to noiseless dust. Empty sea-shells went soundlessly to powder.

The silent wheels jolted over gro-

tesque arms of dead coral, down and down into the chasm that once the sea had filled. Shane inched up the speed and began to take chances on the bumps.

Elation mounted in him. This was the dream of his childhood. He had always dreamed of going Outside, to explore the bottom of the empty oceans and plumb all the mysteries of his wondering youth.

His heart began to pound. He crouched lower in the saddle of the jolting motorcycle and his thick gloves tightened on the handlebars. He jumped a black pit in the dry sea-floor and careered around a boulder. He piled up in the next hole.

Drunkenly he struggled to his feet. He felt hot, fevered. Suddenly he knew what was wrong. He was breathing so much oxygen, he was intoxicated with it.

He adjusted the valves and sanity came back to him. Once more he perceived the sobering perils ahead. He closed the valves a little farther. A few pounds of oxygen might be the price of life itself, before he reached Point Fourteen.

He set up the motorcycle. Except for a few bent spokes in the front wheel, it seemed uninjured. He mounted again and rode on down, more slowly now, into the sea's empty chasm.

**T**HE air-suit, with its burden of oxygen tanks and equipment, was already heavy and irksome. It was ingenious enough. A tiny chemical unit with gold-film power returned drinking water, glucose and fresh oxygen from the moisture and carbon dioxide in the exhaled air. The inside pockets held equipment and packets of concentrated food. He could slip his arms out of the heavy sleeves to reach them.

There was even a waste-disposal valve. But no ingenuity could have made the thing really comfortable for so long a march as this.

Presently the Sun came up. With almost the violence of physical shock, frigid night became blinding day. Through the transparent face-plate, the Sun struck with a savage, blistering force. Despite its reflecting sil-

ver paint, the suit became uncomfortably hot, yet every ink-black shadow among the rocks remained a well of bitter cold.

All that glaring day he went on, with only a few brief pauses for rest, then all the following night. The oxygen and the gold-film cells would last only a few weeks. He had to reach Point Fourteen before they were exhausted.

Long since, the misty blur of the Ring had been lost behind him. He pushed the jolting, silent vehicle across dry mud flats and dead, dark hills, down into the vast desolation of the vanished Atlantic.

It was just before dawn of the second day when the damaged front wheel abruptly collapsed. Thrown from the wrecked machine, he pitched down a rocky slope. He had to move hastily to slap an emergency patch over a hole that a broken spoke had torn in the thick fabric of his suit.

Shaken and breathless, he fumbled uselessly with the wreckage, though the first glance had told him that repairs were out of the question. At last he reluctantly left it and plodded on.

Thereafter, he lost his count of the days. He lived and struggled from moment to moment. He had a job to do and he was trying to do it. It didn't matter greatly whether it was day or night. The sky was always dark. No matter how strange the wastes of age-baked, black-fissured sea-mud about him, or how wild the crags of un-eroded mountains, he couldn't get lost.

He knew the direction of Point Fourteen. Always he could find it, by looking for some familiar group of stars. That was all he had to do—just follow the stars down into the empty sea. The little headlight fastened on the helmet helped to pick out his way.

It didn't matter how his body ached from effort, or how the pressure of the heavy suit chafed him, or how stale the air became, or how the numbing drunkenness of weariness begged for him to stop. There was nothing to do but go on.

He never knew how long it took him to climb that last black volcanic range, which once the sea had



drowned. Rugged precipices opposed him. Sharp lava tripped and impeded him. Recklessly he opened the valves to give himself a new spurt of energy.

It was close to sunset when he came to the summit of the range. Hopefully he looked beyond the cragged pass. According to Clayton's maps, Point Fourteen ought to be in sight from here, on the crown of another range sixty miles beyond.

**F**ROM his feet, the shadows fell. They made chasms of frigid midnight. Half-afraid to look, he let his eyes range farther. Past the black, ragged shadow of the range lay another desert plain, vaster than any he had crossed. Another wall of stark hills broke it, mile on mile beyond.

There was no gleaming dome, no moving rocket, no work of man.

Wearily he sat down on a rugged jet of lava. Once, sometime in the blur of the past, he had seen some rusted steel plates. They must have been part of a ship sunk long before the Dwarf tore the oceans away. But that was the only hint that men had ever been Outside before him.

A dull despair began to chill him. Would he ever find New Britain?

He began to fumble with the radio dials on the chest of the bulky suit, listening anxiously for any human voice. But his straining ears heard only the hiss and crackle of static.

The Sun went down. Like a black tide of death, freezing shadows flowed up through the pass. Barry Shane shivered in the clumsy air-suit and kept fumbling with the radio dials. Slowly the roar of the Sun's in-

terference faded out around them. An hour later, the first voice came through.

Strange in the phones, it sounded harsh and guttural and twangy. At first he thought it was a totally foreign language. It had been repeated three times before he could distinguish the familiar English words.

"Point Fourteen, calling Rocket *Avenger*."

Then the reply came in. It was a garbled blur of strident gutturals, but presently he began to catch a few words.

"Patrol . . . Barrier . . . no trace . . . all night." The last phrase was clear. "Captain Barlow, contact off."

Shane listened all night to the scraps of conversation he could pick up. Whispering huskily in the big helmet, he practiced the harsh accent. It was easier to learn than he had expected. Part of the strange harshness, he thought, was probably due to the fact that the Outsiders lived and spoke under a pressure of only some four pounds of a special gas mixture that was three-quarters oxygen, instead of fifteen pounds of the twenty per cent mixture called air.

That was a fact the engineers had learned from their study of the *Friendship*. Four pounds of internal pressure put much less strain on a sealed ship or a dome-city than fifteen. The helium and other inert gases in the mixture were less likely to cause the bends if any accident caused a change of pressure. There was no nitrogen to form deadly bubbles in the blood.

[Turn page]

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But sound conduction, in the synthetic mixture, was different.

Late the third night, Shane called for help, though he knew his accent still wasn't perfect. All his preparations had been too hurried. Clayton had spent years getting ready for his invasion of America, only to fail.

The dropping pressure in the oxygen tanks cut off Shane's time. He snapped on the tiny short-wave transmitter built into the big helmet.

"Calling Point Fourteen," he panted feebly into the mike. "Captain Clayton—of the *Friendship*—calling Point Fourteen. Calling—"

**T**HE swift reply startled him. "Clayton, where are you?" The harsh voice seemed surprised and excited. "This is Point Fourteen. Go on, Clayton!"

Shane made his voice fainter.

"*Friendship's* lost," he gasped. "I'm in—suit, sixty miles west of—Point Fourteen— Please pick—me up." He let his feeble voice wander incoherently. "Message from America. . . Can't breathe. . . Power going, but I'll keep on the light. . ."

"Hang on, Clayton," rasped the phones. "We'll send for you. I think the *Avenger* is hot."

"Hurry!" gulped Shane. "Can't breathe. . . much longer."

He kept his headlight flashing into the east. Presently the blue glare of rockets grew and sank among the stars. The ship dropped a hundred yards from him, on silent ion-blasts that brushed rugged lava points with white incandescence.

The *Avenger* was larger than the *Friendship* and it carried no disguise to make it look like a harmless boulder. The sleek, tapered lines of its welded gray hull were honestly vicious and deadly.

Shane pretended to be half-unconscious, though any such pretense was almost needless. He had waited almost too long to make the call. The oxygen pressure was low and the chemical air-unit had stopped for want of power.

The glare of jutting rocket-tubes ceased, but a searchlight speared him blindly. Lights flashed from the

opening valve at the base of the upright ship. Portable lights bobbed toward him across the lava.

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## CHAPTER X

### *New Britain*

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**M**EN pulled Shane upright. Harsh voices reached him faintly, but his radio had gone dead, along with the power cells. He couldn't understand the dim sounds that came through the suit. He moved to show that he was still alive and then relaxed. They carried him through the valves of the rocket and took him out of the air-suit. It was good to breathe clean air again, but he kept his breathing slow and his eyes closed, pretending to be out.

An elevator lifted him. He was put in a bed. A savage pressure smashed him against it and he knew the rocket was in flight again. He heard voices around him.

"Captain Clayton, can you speak?"

He had been troubled about the stubble of beard on his unshaven face and his counterpart of Clayton's narrow mustache. The bio-chemical treatment of his skin was intended to give his growing beard and hair the bronze color of Clayton's, at least for a few weeks. He had been worried about a possible difference in shade. Evidently, though, they were accepting him as Clayton. Either the beard was all right, or else these men didn't know Clayton well.

Shane muttered something and let his eyes open blearily. Men surrounded him. He assumed a vacant, unseeing stare, yet he managed to see a good deal. These men—officers, doubtless, of the *Avenger*—wore brown uniforms with black stars on their sleeves. Did that mean they were members of the mysterious Black Star party?

They began to hammer questions at him.

"What happened to you in America? Do you feel all right? What happened to the *Friendship*? Have the Americans any defenses, be-

sides the Barrier? Will you advise Admiral Gluck to attack?"

Shane listened and muttered unintelligibly, still practicing the accent. They could think he was out of his head. Despite the impatient questions, they displayed respect. Clayton, he realized, must be fairly important.

At last the thrust of rocket-motors ceased. The ship swayed and was still. Shane knew that they had landed. He tried to gather his resources for the next test of the masquerade, deciding that it wasn't safe to pretend half-consciousness any longer. He didn't want the attention of doctors. They might too easily find the scars of his facial operations. He tried weakly to sit up in bed.

"Hello," he muttered. "So you picked me up, eh?"

He thought his accent wasn't bad and hoped that the half-intentional weakness of his voice would hide any flaws. A heavy man in brown stepped quickly to the side of his bed.

"Don't you know me, Clayton? Captain Barlow, of the *Avenger*. Seems we were just in time."

"Thanks, Barlow." Shane tried to assume Clayton's grin. "Guess I was about finished. Where are we?"

The heavy man looked puzzled.

"You must have been through torture, Clayton." He clucked sympathetically. "I can see what an effort you're making. You've got to pull yourself together. We've just come down to Point Fourteen. Admiral Gluck has signaled me to take you aboard the *Nemesis*, to report at once. Can you stand up?"

"I think so," mumbled Shane.

"Save your voice for the Admiral. We'll fix you up."

**B**BROWN-UNIFORMED orderlies supported him into a compact bathroom. The tiny spray of water was disconcerting, until he remembered how precious water must be Outside. Doubtless it was distilled and used again and again. The shower refreshed his fatigue-drugged body and awakened him to new awareness of the many perils ahead.

The stubble on his face was only a little too dark, but he was glad of the

chance to shave it off with an odd-looking razor. He left the narrow coppery mustache. The mirror cheered him, for it gave back Clayton's reckless, green-eyed grin.

Barry Shane was appalled by the endless risks of this desperate game, yet this was just the sort of adventure that sharpened Clayton's enjoyment of life. It helped Shane to try to imagine that he was really the daring, hard-eyed fighting man whose face he wore.

The orderlies had laid out a brown uniform that fitted him fairly well. He transferred to its pockets the little platinum case of Clayton's and the letter from the American Corporation Control Board to Atlantis Lee.

A central elevator dropped him and Captain Barlow to the base of the rocket. Orderlies helped them into air-suits. As they entered the valve, air-pumps throbbed and the outer gate clanged open. Shane had his first glimpse of Point Fourteen. It made him shudder in the heavy suit.

It was day again. The blinding Sun had come back into the dark, changeless sky, above a rugged mountain wall that marched ink-black across the east. Point Fourteen was a roughly leveled plateau, dotted with low domes of gray metal. Upon it stood a rocket fleet.

Queerly ominous, the tapered gray cylinders stood on end, supported by angular landing stanchions. They glittered under the Sun and cast long, stark, black shadows. They were like rows of shells in some old munitions factory, before the age of the Ring. They were like metal monuments in some fantastic graveyard of giants.

They were symbols of death—scores of rocket-bombers!

A cold hand of apprehension grasped Shane's heart. America had no weapon that could stop these evil machines from destroying the Ring Cylinder, nor could hope to find one. And this, he grimly reminded himself, was only Point Fourteen. For all he knew, there might be thirteen other rocket fleets, or thirty. In the big helmet, he caught his breath.

He could not fail! He had to win! An armored car was waiting at the

air-lock. Shane and Barlow clambered in and it rolled away through a sinister colonnade of rockets. It jolted heavily on rocks, but there was no sound. The silence of the Outside became queerly oppressive to Shane.

The valves of the *Nemesis* opened for them and an elevator carried them up to the quarters of Admiral Gluck. Brown guards admitted them to a room hung with a barbaric display of weapons, ranging from curved wooden boomerangs to a duplicate of Clayton's paralysis gun.

"Well, Clayton!"

**T**HE sharp, impatient voice was toddly high, almost shrill. It came from a thin, little man standing behind a desk. As he made a queer stiff-armed salute with exaggerated mechanical precision, medals jingled on his brown breast.

Shane imitated the salute. So this was Admiral Gluck! He had shaggy iron-gray hair, bushy white brows over sharp, dark, hollow eyes, and a luxuriant yellow-stained mustache. His face was lean and stern, brown as his uniform.

"At ease, Captain." He sat down with a tinkle of medals. "Your report?"

Shane caught his breath and tried to remember all he had learned of this harsh, guttural accent. He let his lean body sag, yielding to the real exhaustion in him. He didn't try to keep his voice from sounding weak and hoarse.

"The *Friendship* safely entered the Barrier as ordered, sir. On a small island of the Florida Corporation, I attempted to capture a member of the American defense force, which they call the Ring Guard."

Admiral Gluck's bright, sunken eyes narrowed.

"What's wrong with your voice?" he shrilled impatiently. "I can hardly understand you."

Shane made a hoarse, apologetic little laugh.

"I'm sorry, sir. An air-suit cold." That was the diagnosis of his case that he had overheard. "And I'm afraid I've been practicing Americanese so long that it's natural to me."

Gluck shrugged impatiently. "Get on."

"This American destroyed the *Friendship*," Shane told him. "He used a hand weapon."

Gluck's mouth fell open, revealing yellow fangs.

"What hand weapon could destroy an armored rocket?" he blurted in amazement.

"It looked a little like a paralysis gun," Shane said. "It didn't make any beam that you could see, but the rocket crumbled. Hard steel turned to fine gray dust. I heard the weapon called a decoherer."

"D—decoherer, eh?" Gluck's voice stammered. His dark face turned darker with anger. "The pampered rats think they can defy the Black Star, do they?" His tiny eyes glittered shrewdly. "How is the Barrier Machine protected?"

Shane shook his bronzed head and looked solemn.

"They call it the Ring Cylinder," he said. "It is surrounded with hidden batteries of decoherers. Not hand machines, but powerful projectors that can send the beam two thousand miles, all the way to the Ring—the Barrier."

That was almost a slip. Shane felt a little tingle of dread, but Gluck hadn't noticed. He pounded on the desk with a gnarled fist.

"The Black Star will smash them yet!" he shrilled.

"Certainly it will, sir."

Gluck repeated that stiff-armed salute and Shane responded promptly.

"Get on," the General urged sharply. "How did you escape?"

"I didn't." Shane imitated Clayton's grin. He didn't feel a bit like grinning, but he knew that Glenn Clayton would have enjoyed this situation. "The Americans set me free!"

**G**LUCK smiled grimly.

"So you tricked them?"

"No, I didn't trick them," Shane said quietly. "Enough of the *Friendship* was left for them to see I had come to destroy the Barrier. But their defenses are so sure, they weren't afraid to let me go."

He let Clayton's laugh ring scornfully.

"They found the letter from Atlantis Lee and took it to their govern-

ment. They don't know the Black Star." Shane attempted Clayton's most wolfish grin. "They sent me back with a message of peace!"

He showed the gray envelope addressed to Atlantis Lee.

"You know what it says?" Gluck demanded.

"The American Corporation Control Board is willing to establish friendly relations. They suggest an exchange of ambassadors. They are willing to set up a joint commission, to discuss exchanging water for our oil, metals and power cells."

"Fat fools!" shrilled Gluck viciously.

"They don't know the Black Star!" Shane grinned, hoping that his hard, brown face didn't show any of his alarmed bewilderment about what the Black Star really was. He offered the envelope. "Do you want it, sir?"

"Deliver it," Gluck snapped impatiently. "Let your pretty friend play our game. Perhaps we should send an ambassador—to find a way for our bombers through these blasted d-decoherers."

"Yes, sir," Shane said. "Your orders, sir?"

Gluck's keen little eyes gave him a startled, stabbing look. Shane knew he had made a mistake. Clayton wouldn't have asked for orders. He grinned and tried to chuckle, to make a little joke of it. But Gluck's dark face remained bleak and grim.

"The *Avenger* is ready to take you back to New Dover tomorrow," he said. "You can present this message from the plutocratic Americans to Atlantis Lee. No doubt you will take time to rest from the hardships of your expedition."

The bushy eyebrows lifted knowingly.

"Thank you, sir," Shane replied, grinning more widely.

He made the stiff-armed salute once more, but he was both puzzled and alarmed. Evidently there was something he didn't know about the relationship between Clayton and Gluck. Somehow he had blundered.

He was anxious to meet Atlantis Lee, even though that meeting might be the gravest test of his masquerade—if, as he surmised, Clayton had been

on close terms with the lovely girl of the picture.

Shane was a little surprised at himself. This was the sort of bold adventure that would appeal to the reckless audacity of Captain Clayton, yet he really meant that grin himself. There was something haunting about that picture of red-haired, violet-eyed Atlantis Lee.

Gluck's next shrill words were a shock.

"I'm calling a general staff conference aboard the *Nemesis*. It will be necessary for you to give a detailed report of your expedition through the Barrier and to answer all questions about the defenses of America."

"Yes, sir."

Behind Clayton's hard face, Shane felt a chill of dread. Did this mean that the little admiral suspected? A grilling by men who doubtless knew the real Clayton would be a difficult test.

He might never see Atlantis Lee.

## CHAPTER XI

### *Enemy of the Ring*

**W**HITEHALL'S office, in the gray old Ring Guard Headquarters building, was suddenly still. Even the clock on the plain military bareness of the wall seemed to pause in its muffled ticking.

Dr. Della Rand tried to breathe again, struggled to move her frozen face, to speak. But she could only stare at the old general, who stood so precise and straight behind the military neatness of his desk. She had thought that he was kind, but now his air of stern decision terrified her.

The eerie howl of rocket-jets broke that painful silence. Dully she looked out through the window. Something that looked like a rugged brown boulder dropped toward the flying field, cushioned on the hot blue flame of braking ion-jets. It settled to an easy landing and the shriek of jets was stilled.

"Clayton's machine," commented Whitehall. "The engineers are test-

ing it today." He looked back at Della Rand and she saw the dark shadow of pain in his eyes. "I'm sorry, Dr. Rand. It's a long time since the death penalty has been necessary in civilized America, but that is our decision. In such a case, involving the safety of the Ring, no appeal is allowed."

Della caught her breath with a little gasping sound.

"Perhaps he has to be killed." Her voice sounded false and choked and strange. "But why must I be the one to do it?"

Behind his stern military mask, the slight old Guardsman looked uncomfortable.

"Secrecy is necessary," he explained. "It is just possible that the Outsiders have sent another spy into the ring to find out what became of Clayton. Perhaps the risk is small, but we can't afford to take chances. If the Outsiders learned that Clayton is dead, that would be the end of Lieutenant Shane's masquerade."

Della made a tiny nod of understanding.

"You are the only doctor who has been connected with the case," Whitehall went on. "I don't want to call in another. I am requesting you to administer euthanasia merely for Clayton's sake. Of course you are free to refuse. In that case I'll call a firing squad for Clayton."

Her strong hands clenched.

"May I have time—time to think?"

He shook his head. "The sentence must be carried out at once. I've already sent for an ambulance to carry Clayton's body to the Ring City crematory. If you wish to refuse, just say so."

She tried to swallow the dry, harsh pain in her throat. With an effort, she shut Clayton's reckless green-eyed grin out of her mind. Her duty seemed clear. In a faint hoarse whisper, she said:

"I'll do it."

Whitehall smiled grave approval.

"When you get to the crematory," he added, "don't put Clayton's name on the death certification. Designate him simply as an enemy of the Ring. I'll notify the officials what to expect."

Walking across toward the white hospital building, she paused to stare at the *Friendship*. The testing crew was just coming out through the valve. They climbed into a waiting car and drove away. Three or four guards were left about the disguised rocket-bomber.

Della felt a painful lump in her throat. Destructive as she knew that machine to be, it was still a symbol of soaring power. It stood for Clayton's hard strength.

Now she was going to put Clayton to a nameless death as an enemy of the Ring.

**T**HE ambulance startled her. It had come in under silent electric power, but its tires shrieked on the pavement as it stopped by the side door of the hospital. Two men carried a stretcher into the building, to wait for Clayton's body.

She hurried on. The morning sunlight was suddenly devoid of warmth. Her body felt numb and a little shiver shook her. The world wasn't quite real any longer. Her actions were stiff and mechanical.

She found her kit in the locker room downstairs. She went into the laboratory to mix crystal drops of instant death. With hands that were like skilful machines, no longer part of her, she filled the little needle.

The guards let her into Clayton's room. The thick vitroid windows gave a tantalizing view of the broad flying field, with the brown, jagged shape of the *Friendship* at the side of it. But they were stronger than steel plate. They needed no bars.

Clayton lay on a mattress on the floor. His hands were manacled in front of him. His ankles were fettered and a short length of chain secured them to a ring-bolt in the wall. Six Guardsmen stood in a row at the other end of the room. They carried no arms, lest the prisoner should secure one of them. But there were six more men in the corridor outside, with plenty of guns. The Ring Guard was taking no chances.

"Hello, beautiful."

The chains made a soft little jingle as Clayton sat up on the mattress. He grinned at her. For the moment his

hard, green eyes held only amusement. His voice was light and calm as ever.

Della merely stood there, the black kit clutched in her clammy hands. Her numb body ceased to exist. A darkness settled over the room. She couldn't see anything but Clayton's grinning face.

"Good-by," Clayton said. "It was nice of you to come."

She clung to his words and they steadied her. She breathed again. Sudden tears flooded her dry and aching eyes. Clayton knew that he was going to be killed and he wasn't afraid.

"What's the matter, beautiful?" he asked. "Aren't you going to speak to me?"

She couldn't speak. It was all that she could do to hold back hysteria. His eyes dropped from her face to the black bag in her tense hands.

"Oh," he said softly. "You're the executioner?"

Mute and ill, she nodded. Amazingly he grinned again. The chains tinkled as he made a cheerful shrug. His voice was softer than she had ever heard it.

"Don't let it get you down," he comforted. "I'd rather take the poison cup from you, beautiful, than any other girl I know."

Something happened to her then. The agony of that conflict in her mind became more terrible than she could endure. Clayton's reckless grin and that softness of his voice tipped a balance in her. The conflict was solved.

**I**T wasn't an act of reason. Her tortured mind couldn't reason any longer. It had been a conflict of emotions. Now, while Clayton grinned, one emotion won the victory. The other, for the time, was simply blotted out.

Suddenly her purpose was clear. All the numbness left her. Her senses and her mind were sharper than they had ever been. In one lightning instant the plan was made. Her hands were quick and sure.

She opened the black case. Discarding the needle that she had already filled with quick and painless death, she filled another with something else.

Clayton watched her from the mattress on the floor.

"Quite a treat, beautiful," his hard voice mocked, "to see your own lovely hands mixing the fatal dose."

But she thought that a change had come into his tone, for her alone to hear. It told her that he understood. It thanked her for what she was doing. It said that they were comrades now, boldly playing a desperate game.

"You're a cool one, beautiful." Admiration rang in his voice. "You're the kind I like." Cold steel tinkled as he waved her a kiss. "Good-by. I'm ready, when you are."

The new needle was filled with its imitation death. The few bright drops were mixed without research or tests. She realized that any error might have made them fatal, but she knew she had made no error.

General Whitehall was in the doorway, watching silently. Clayton, grinning, managed to slip his own sleeves up. He held out his arms to wait for the needle. It seemed to Della that they were steady as iron. Her quick hands were steady, too. She thrust the tiny point into the vein and drove the little piston home.

"Good-by, beautiful," Clayton murmured wearily.

The hard grin faded. Her heart swelled with tenderness when she saw the face of a tired, bewildered child. He went to sleep. The fetters jingled as he fell back on the mattress. Della put away the needle and found her stethoscope.

Clayton's heart made two faint beats and stopped. She gave the instrument to General Whitehall. He listened, then nodded at the guards. They removed the fetters. The men from the crematory came in and unrolled their stretcher on the floor. Guards lifted Clayton's limp body upon it.

Della followed down the stairs to the waiting ambulance. That march seemed to take a thousand years. She was afraid Clayton would stir too soon. The drug should keep his heart and breath slowed beyond detection for four or five minutes. After that—

She started at Whitehall's quiet-voiced statement.

"Thank you, Doctor. Remember about the certificate."

"Of course, General." She asked the ambulance driver, who was waiting by the open doors at the back of the vehicle: "May I ride to the crematory with you?"

"Sure, Doctor." He nodded at the cab. "Get in."

She walked slowly to the cab and climbed into the seat. The key, she saw, was in the lock. She knew she must look tense and pale. But if these men noticed, they must think it was because she had just killed a man, not because she hadn't killed him.

SHE watched them slide the stretcher into the vehicle behind her. Silently she slipped behind the wheel, turned the key. Her foot found the accelerator. She waited. She could scarcely breathe. Her heart paused. At last the doors were closed. The driver and the two others came around toward the cab.

"Hang on." She caught part of Whitehall's low-voiced order to two of the guards. "See him into the furnace. We can't take—"

She stepped on the accelerator, hard. Tires screamed beneath the sudden drive of electric power. The ambulance lunged out of the startled group. A breathless shout faded away.

The ambulance turned on two wheels, jolted across the hospital lawn and burst through a white-painted wooden fence. Lurching and bouncing, it careered across the flying field toward the jagged, brown hull of the *Friendship*.

She started the siren. An ambulance racing across the airport was not a novelty. The guards stationed about the disguised rocket-bomber looked about for the crack-up.

"Thanks, beautiful."

Clayton's hard voice was still breathless from the temporary effect of the drug. A little pale, he climbed up into the front seat beside her, but he kept grinning at the startled and bewildered guards about the *Friendship*.

"Neat work, beautiful."

Swiftly searching the glove com-

partment, he found a heavy automatic. They didn't need it and they had no time to use it.

One of the guards made a gesture to wave them away. A bullet drilled a neat hole in the windshield. Then he and the man beyond had to fling themselves desperately out of the way.

Della didn't set the brakes until she was a few yards from the *Friendship*. Its steel hull finished the task of stopping the ambulance. Clayton had flung open the door of the cab. They stumbled toward the open air-lock.

Guards were running across the field. Stray bullets had begun to ping on the rocket's steel hull, but in another second they were aboard. Clayton slammed the valve and ran to the controls.

"They've got armored cars," gasped Della. "Three of them—under tarpaulins in the hangars—with cannon."

"Don't worry, beautiful." Clayton raised his voice above the mounting scream of rockets. "We'll be a hundred miles high before they can get them uncovered. We'll be dive-bombing the Ring Cylinder before they know what has happened!"

## CHAPTER XII

### *Atlantis Lee*

IT seemed to Barry Shane that he spent a thousand hours at the long metal table in the wardroom of the *Nemesis*, surrounded with the brown-uniformed officers of Admiral Gluck's general staff. From his long trek across the dry sea-floor and the strain of his interview with Admiral Gluck, Shane was near the limit of exhaustion. He didn't try to conceal that. It gave him some excuse for not mentioning names, or promptly recognizing faces.

But that exhaustion was real. His faculties were slowed and dulled with it. Once again he spoke of the Barrier as the Ring and heavy Captain Barlow challenged him harshly.

"Forgive me, Barlow," he said lamely. "I've been drilling myself for



years to think like an American. That was necessary to prevent unconscious slips, but the habit persists."

Their questions came in battering volleys. It was easy enough to talk about America. The real danger was that he would display too much knowledge. To half the questions, he said he didn't know. To many, he told the truth. The more these men were interested in what he said, the less attention they would pay to himself. He didn't attempt to lie, except to make them believe that the Ring Cylinder was impregably defended.

At last they were done.

"Splendid work!" thick-jowled Barlow applauded. "The Black Star will give you your due for this."

Shane felt a tiny shudder of dread. He didn't like Barlow's small, piglike eyes. Several of his questions had appeared faintly suspicious. Did Barlow mean that he knew, that Shane had somehow already betrayed the impersonation? But the thick-set Outsider appeared suddenly friendly.

"Shall we go back to the *Avenger*, Clayton? I can see you're all in and I think you'll need a bit of life when we get to New Dover tomorrow—for her, eh?"

His elbow poked into Shane's ribs. "That's right, Barlow."

Shane followed gratefully into the rocket's elevator. He was all in and he did want to be at his best tomorrow. His life and the fate of America might turn on what happened when he met Atlantis Lee. For all his apprehensions, he thought, the real Clayton himself couldn't have been more anxious for that meeting.

Back aboard the *Avenger*, in his tiny metal-walled room, he took out the platinum case before he went to sleep and looked again at her picture. Her violet eyes smiled at him, grave and sweet. Only, he reminded himself, they were smiling for Clayton. The more she loved Clayton, the more likely she was to discover the masquerade and the more she would hate him when she did.

He shut the case, and went to sleep.

The lurch and thrust of acceleration woke him. He knew that the *Avenger* had already taken flight for New

Dover. He rose and put on the brown uniform and an orderly brought him breakfast—a large bowl of a sweetish, yellow gruel.

The Outsiders must have few food animals, he knew, and probably only a limited variety of plants. Probably this mess was synthetic. It did have a faint sharp chemical taste. Such food was one more basis of the jealous envy of America, the paradise beyond the Barrier.

**T**HE elevator took him up to the control room in the nose of the rocket. Captain Barlow was not in evidence. The brown-shirted pilot nodded cheerfully from the intricate banks of controls.

"Hello, Clay," he called familiarly. "Want to spell me?"

Shane knew that he ought to reply with the pilot's name.

"Thanks," he said. "I'm not quite up to it today."

The pilot stared curiously.

"Something must have hit you pretty hard, Clay," he commented. "You aren't acting much like Iron Clayton. First time I ever saw you turn down a spell at the rod."

Shane imitated Clayton's careless shrug.

"It was pretty tough." He tried to change the subject. "When do we get to New Dover?"

"Five minutes late." Evidently he was supposed to know the schedule. The pilot smiled challengingly at him. "Unless you want to take the rod and make it up. Guess you're pretty anxious to see Atlantis."

Shane nodded, assumed Clayton's green-eyed grin.

"Lucky guy"—the pilot looked sober and lowered his voice—"if the Black Star lets you keep her!"

Shane didn't dare ask what he meant. He was a little sorry he had ventured up here. He was supposed to know everything already. Any show of curiosity could give him away. He was glad when the pilot had to look back to his instruments and controls.

Shane looked out through the observation ports. The view was both magnificent and appalling. Forgetful

of the danger, he caught his breath in audible wonderment.

The rocket was at least a hundred miles high. It was early morning and long, inky shadows made the convex mountainous landscape appear almost as rugged as Earth's long-lost Moon, in pictures that Shane had seen. The lateral thrust of the rockets altered his sense of down, so that the stark cragged surface of the planet seemed crazily tilted.

"You've changed, Clay." The pilot's cheerful voice alarmed him. "Staring at the scenery like a yellow cub! Atlantis has got into your blood, all right."

Shane shrugged and tried to grin Clayton's reckless grin. He was more and more certain that he would sooner or later betray himself.

Presently the rugged desert of the ocean floor tipped beneath them and swung vertiginously back. Shane knew that this was mid-flight. The rocket was reversed for deceleration. He moved to another view-port, to watch for the first glimpse of New Dover.

"There she is!"

There was nothing that Shane could see, except new expanses of stark desolation, plain on plain of dried sea-mud, walled with range on cragged range of wild black-shadowed volcanic mountains. But the cheerful pilot nodded at the telescope beside him.

Through the lenses, Shane glimpsed the city. New Dover stood on the end of a high, rugged, dark plateau. The gray-white metal that walled it against the Outside's grim hostility was probably some aluminum alloy. It was really more a flat disk than a dome. Several upright rockets stood on the level center of it. Grouped about it were a number of smaller domes. More rockets stood upon a long, dark rectangle.

**B**YOND the city lay fields of dull yellow. The plateau was covered, square mile on square mile, with close-set blocks of yellow. For a moment Shane was completely puzzled. Then he remembered the gold-film storage cells of the *Friendship*. Here

were the solar power accumulators, drinking up the Sun's tremendous energy.

He was startled by the pilot's cheery voice.

"Anybody would think you had never seen New Dover! Well, you'll be seeing *her* in an hour. Say, do you think you'll be at Din's tonight?"

"Sure." Reluctantly Shane gave up the telescope. He decided he had better get out of here before he gave himself away. "See you there. I've got another report to write."

He returned to his tiny stateroom. Blue-jowled Captain Barlow came in a few moments later and began to ask more questions about America. The pig-eyed officer seemed eager and friendly—altogether too eager and friendly. Shane tried not to show his relief when the *Avenger* landed.

The ship descended upon the flattened top of the low metal dome. Her wheels dropped after the landing stanchions had absorbed the shock of descent and dock-hands in air-suits rolled her over a valve in the city's roof. Her bottom valve was sealed against the opening, so that the ship's elevator could drop through the roof to the top level of the city.

Shane stepped out of the little cage with Captain Barlow at his side. He mustn't seem to be too interested or astonished, yet his life might depend on what he could quickly see and understand. Swiftly he looked about him.

The elevator had come down into a long space, like a covered wharf. Up and down it, other cages were rising and descending. There were piles of crates and bales and kegs and bright metal ingots. Sweaty men with silent electric trucks and cranes were moving cargo.

Outside, through broad doorways, he glimpsed one of the streets of New Dover. It was roofed, of course, and narrow, so that it was really more like a corridor. The pavement was moving steadily. Perhaps the street below, he thought, moved in the opposite direction.

The people he saw looked hardy and vigorous. They were rather scantily clad in variously colored, lustrous,

metallic-looking material. The warm conditioned air didn't call for much clothing and fabrics were probably rather scarce and expensive.

Shane was a little surprised at these evidences of vigor and industrial efficiency. New Dover didn't look like a city about to perish for want of a few gallons of water. Perhaps Clayton had been lying.

"Here she is, Clayton!"

It was Barlow's heavy voice. Once again Shane thought he seemed too friendly. His small, heavy-lidded eyes seemed almost suspiciously watchful. In a moment, however, Shane forgot all his apprehensions about Barlow—for he saw Atlantis Lee.

SHANE had been prepared for the ordeal of some ceremonial reception, fitted to the importance of the Secretary of the New Britain. He was expecting brass bands, or their Outside equivalent. But the girl came to him across the busy wharf, quite alone. He had a few seconds to study her, to try to guess how the real Glenn Clayton would greet her.

She was a little taller than he had expected. Her red hair had gleaming lights that the miniature had only suggested. She wore a sort of tunic of a dull, lustrous green. Her walk was deliberate, proud. She really had the manner of a ruler and she was truly beautiful.

Shane knew that he was staring, breathless. He knew the real Clayton wouldn't be doing that. Clayton wouldn't merely surrender to the beauty of Atlantis. He would grin his reckless grin and—

Suddenly Shane wasn't sure exactly what Clayton would do. As the girl came up to him he was seized with panic. He realized that disaster was near, but he was paralyzed. He couldn't think. He couldn't move.

"Hello, Glenn."

The girl stopped in front of him. Her violet eyes smiled gravely. She was lovelier than the picture had hinted. The sheer beauty of her set a pleasant ache throbbing in his heart. Then he was shaken with a black and bitter jealousy for Clayton.

She was speaking again. He could hardly hear the words. He knew that her voice was softly melodious, somehow quite free of the twangy harshness that seemed to characterize the English of New Britain.

"I'm glad that you came safely home," she said. "Do you have an answer from the Americans, Glenn?" Anxiety put tenseness in her voice and there was a cool note of scorn. "Or did the Black Star refuse to let you deliver our message of peace to America?"

Shane saw the hurt in her violet eyes. Desperately he broke the panic that chained him. He caught his breath and tried once more to imagine that he was the real Glenn Clayton. He tried to grin Clayton's reckless, green-eyed grin.

"You're so beautiful that for a moment I couldn't think."

Captain Barlow was standing near. His small, beady eyes were quickly watchful. Shane thought the heavy man had stiffened imperceptibly at the girl's mention of the Black Star. He was almost sure that Barlow had begun to suspect, but he tried to forget the Black Star.

He did the thing he was certain that the real Glenn Clayton should have done. He swept the girl into his hard arms. His eager face brushed through her fragrant hair. He kissed her soft, startled lips thirstily.

The next instant Shane knew that he had made a mistake.

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## CHAPTER XIII

### *The Dream of Eden*

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THE anti-aircraft batteries about the Ring Cylinder and the Ring Guard Headquarters patterned the sky with bursts of white, but the escaping *Friendship* was far too swift for their range-finders. The howl of rockets faded as she came up through the stratosphere.

Della Rand's dark eyes looked into Clayton's reckless grin.

"There'll be no dive-bombing the Ring Cylinder!" Her voice was low

and shaken. "I thought of that before I helped you get away. I knew that all the bombs had been unloaded from the *Friendship*. That was a safety precaution before the test flights began."

"Thanks, anyhow, beautiful."

Glenn Clayton locked the controls. He turned to Della Rand, his green eyes bright with elation. He took her in his hard arms and kissed her. Despite the monstrous alarm now awake in her, she liked the ruthless pressure of his lips.

"That doesn't matter," he told her. "In three hours we'll be back to Point Fourteen. They'll load the bomb-racks for us there and we can leave word with the patrol to look for Lieutenant Shane."

Della Rand thrust her lithe body out of his arms.

"Do you think I'll let you do that?" Her face had turned a little pale, but her dark eyes flashed. "Do you think I'll let you murder America?"

Clayton grinned. "What did you think you were doing, beautiful, when you set me free?"

"I didn't have time to think. I only knew I couldn't kill you." She stared at his brown face, bit her quivering lip. "Perhaps we could hide the ship somewhere. You can't go on with this insane attack against the Ring."

His face set grimly.

"The Black Star doesn't owe America anything. The breaking of the Barrier will give us the water we need. That has been planned since the time when America was only an unpleasant legend. All our cities are built where they won't be flooded when your precious bit of ocean pours down."

Della Rand tried not to shudder.

"You owe something to one American," she reminded him in a low, urgent voice. "You owe your life to me."

He gave her his green-eyed grin.

"Don't you worry, beautiful," he said. "I'm going to pay that debt, personally, to you." His hard fingers caught her arm, drew her almost roughly to him. "This way."

She yielded to his kiss, found it queerly sweet, but already she was planning what she must do. It had

been impossible for her to murder Clayton. It was equally impossible for her to let Clayton murder America.

"Thank you, darling," he whispered. "I'll never let you be sorry."

But she could see that his greenish eyes remained alertly watchful. Perhaps she had the shadow of a chance, yet she knew it would not be easy.

**W**HEN the wail of the rockets grew silent she realized they were above the restraining air. The sky was purple-black above and the gray misty convexity of America rotated beneath them. As Clayton took the controls again she moved away from him.

"Wait," he said. "Better stay where I can watch you."

The gun he had found in the ambulance was thrust in his belt. It made her a little ill to realize that he would use it unhesitatingly against her. She watched his brown, busy hands at the controls. He kept talking easily to her, as if they were at peace. But she knew that it was impossible to do anything now. She could only wait and hope for the chance to come.

The dim line of the Atlantic coast drifted back beneath them and presently Della Rand knew that the invisible wall of the Ring was near. Testing the polarizer, Clayton watched her with a new alertness. The chance didn't come.

She didn't know just when they crossed the Ring, but she saw that the misty Atlantic was sliding away behind them, cut off as if by a long, curved blade. Beneath was the barren mountain desert, where once the sea had flowed Outside.

Clayton seemed to relax. He grinned at her and began testing a new piece of equipment.

"We're through the Barrier. In half an hour we can signal Point Fourteen and tell them to send patrols to look for Lieutenant Shane."

Half an hour—still there was a chance.

"Kiss me, darling," Clayton said. "You'll never be sorry."

All her surgeon's strength and quickness flowed into the fingers that snatched the heavy automatic out of

Clayton's belt. She didn't wait to threaten him, because no threat would have meant anything to Clayton. He would have used any delay to take the weapon back.

She fired instantly, yet her surgeon's skill was in control. She didn't want to kill him. No matter what he was, she would never want to do that. She tried to do nothing that her skill could not repair.

The gun made a frightful sound. It leaped in her hand and hot smoke stung her face. Clayton's hard body jerked to the bullet's impact. She felt a stab of pain, as if it had been her own flesh, but she clung to her purpose. She stepped away from Clayton before he could gather any strength. She sent a second bullet into the radio, so that it could never send out the message that would betray Barry Shane.

"You win, beautiful."

Clayton's voice seemed to hold no anger, only admiration. The bullet had torn his side horribly. It must have gone deeper than she meant. Already blood was flowing, but Clayton's pale, tense face contrived to grin.

"Let me set her down," he whispered. "I can hold out for that."

He clung for a moment to the console, then lowered himself carefully into the big metal seat. Still dazed, his fingers touched the controls. The ship spun and Della felt the crushing pressure of deceleration.

Already she was on her knees beside him, trying to stop the blood. That ruthless pressure made it difficult and multiplied the strain on his heart, but Clayton clung grimly to his task and brought the rocket down.

**I**T crashed with bruising, dazing force against the flank of a dark volcanic summit that once the sea had flooded. But the tough hull took the shock. There was no shriek of escaping air.

"Well, darling," Clayton breathed. "Here we are."

Consciousness flowed out with his leaking blood, but Della got him out of the chair. With a strength she had never known she possessed, she carried him back to the bunk. She found an emergency surgical kit and dressed

the wound, after cauterizing it.

Clayton would live. In two weeks, she thought, he would be able to walk.

She wasn't sure that the radio had been hopelessly destroyed. She made sure. Then, one by one, she smashed the six ion-blast rocket tubes in their ports and the six spares she found in the storeroom aft.

That made the *Friendship* quite helpless. The caterpillar tracks, with which the disguised machine had been able to move over the ground like a crawling boulder, had been hopelessly smashed when Barry Shane landed it at Headquarters. They had been removed for repair and had not been replaced. Nor could either of them leave the machine. The air-suit in which Barry Shane had ventured Outside was the only escape equipment that had been aboard.

The charge in the gold-film cells, Della knew, would last indefinitely. The banks of cells would keep the air-machine in operation, condensing exhaled moisture and liberating oxygen from it. There were sufficient supplies of food to last for several months. In addition, the air-machine made starch and glucose.

Della Rand came back to Clayton. All the reckless hardness had gone from his face. His monstrous purpose, to shatter the Ring and destroy America, seemed completely incredible now. Smiling a little, she softly smoothed his forehead.

After all, she had managed things well. It would have been difficult for them to hide in America. Here, she supposed, there would be little danger. On the crown of this rugged range, one more boulder would hardly be discovered. She forgot that she was a brisk, efficient surgeon. She let herself dream. The disguised hulk of the fallen rocket was a tiny world, secure against invasion. She and the tall Outsider could find a kind of happiness here.

The dream ran on. In case some catastrophe did overtake America, in spite of Shane's effort, she and Clayton might survive. The breaking of the Ring would make a new sea in the dry valley below them. Perhaps the deep would hold air enough so that they could breathe. In time they

might emerge from the *Friendship*—a new Adam and another Eve.

Della bent and her lips brushed his gently.

"Thanks, beautiful."

His faint whisper shocked her. Searching the pale mask of his face, Della bent and her lips brushed his.

"Do you really mind, Glenn?" she finished. "Do you mind so very much?"

"Don't you worry, beautiful." He tried to grin. "I didn't really need to get back. Your bold American spy will be taken care of without any help from me."

"What do you mean?" she whispered apprehensively.

"There's a man named Barlow who wants my place in the Black Star," his whisper explained. "I was playing him along until I could learn all about his plot." Clayton's pale lips smiled, as if deadly intrigue had been merely an exciting game. "Barlow, no doubt, will take care of Shane. It'll be a good joke on both of them."

Della Rand bit her lip.

"Oh, if I hadn't smashed the rock-ets—"

"But you did, beautiful." Clayton's green eyes mocked her. "We're stuck here together. Shane might be on another planet, for all the warning you can give him." He grinned. "Do you mind—so very much?"

For answer, Della bent to kiss his pale lips lightly.

"Thanks, beautiful," he murmured.

He closed his eyes, thinking. When the time came to leave the *Friendship*, he could manage it. Some rocket would pass in sight of them. He wouldn't need the radio. A signal light would do. He smiled again, thinking how confused Barlow would be when the treacherous rat found he had murdered the wrong Clayton.

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## CHAPTER XIV

"Time's up, Traitor!"

---

**I**N that busy wharf under the metal roof of New Dover, Atlantis Lee stiffened in Shane's embracing

arms. Her lips were cold to his. They drew away and the red-haired Secretary of New Britain spoke quietly.

"Let me go, Glenn."

That was all she said, but the icy restraint of her voice seemed to cover something more than pain and anger. Her calm tone stung like a slap in the face. Shane released her and stepped back. He knew that the hard, brown features that Della Rand's surgery had given him, the living mask of Glenn Clayton, were flushed with an unwonted color of confusion. But he forgot to wonder what Clayton would have done.

"I—I'm sorry," he stammered. "Please—"

"It's a little late to be sorry now." Her voice was painful as a whip. "I could never understand you, Glenn. Certainly I'll never make an attempt again."

She stepped away from him, so that heavy pig-eyed Captain Barlow stood almost between them. Her face was cold as marble and her violet eyes were dark with the shadow of some old hurt. Shane couldn't understand Clayton, either. He was suddenly bewildered and angry at whatever Clayton had done to make this girl despise him so. But that feeling didn't help. He had his masquerade to think about, his life and the safety of America.

"Sorry, beautiful." He tried to grin Clayton's hard, reckless grin. "You used to forgive me."

It hurt him to see the wrath on her face, yet he knew that Clayton would have enjoyed it and he kept grinning. Her red head jerked angrily. The smooth column of her throat pulsed as she swallowed. She tried visibly to smooth the pain and the anger away.

"Rage is becoming to you, beautiful," he commented lightly. "It sets a sparkle in your eyes."

"Please, Glenn!"

Her voice was low and grave. With one little nod she seemed to dismiss everything that had happened. Her violet eyes flashed with a proud humility. A painful lump came into Shane's throat. He wanted desperately to make peace, to get her for-

giveness, to take away all her hurt. But he had to keep in character.

"Okay, beautiful." He tossed her the thick gray envelope that held America's offer of peace, of water in a fair exchange for oil and metals and power. It fell on the floor. He picked it up and gave it to her lazily. "This ought to make you happy."

He stood admiring the unconscious grace of her hands as she tore open the gray envelope and anxiously unfolded the heavy stiff letterhead of the American Corporation Control Board. Her violet eyes drank in the message. It did make her happy.

"Glenn, it's wonderful! I knew the Americans couldn't be so bad as the Black Star claims. I knew they would be generous, if we would just give them a chance." Tears brimmed in her eyes. "Glenn, I could kiss you!"

"Here I am," he said.

**A**MAZINGLY she did kiss him. She laughed and her warm lips lightly brushed his cheek. He didn't dare take her in his arms again.

"Glenn, I could never understand you," she repeated, her bewildered violet eyes searching his face. "You knew—you must have known—what this letter said and still you brought it to me." Then a doubt was on her white face. "Or is this just one of your jokes?"

Shane forgot to grin.

"It isn't a joke," he said soberly.

"The Americans are really willing to be friendly?"

"Of course they are," he told her. "I think they would give us water to relieve our temporary distress, without any payment at all. But they do need oil and metals and power. They are anxious to open trade."

Beside him, Captain Barlow made an abrupt, angry movement. He said nothing, but his heavy, greasy face had a sullen look. Shane wished that Barlow hadn't heard, wondered what he wanted, what he was waiting for. The girl herself looked surprised.

"Do you mean that, Glenn? You aren't just trying to hurt me again?"

"Of course I mean it, beautiful." Remembering that he was Clayton, he grinned. "Did you think I was a green-eyed monster?"

"Maybe I did," she said gravely. She scanned his face again. He saw that the letter was trembling in her hands. "I can't believe it! Will you come to the League? Will you tell them that?"

She waited anxiously for his answer. At Shane's side, Captain Barlow cleared his throat. It was a noisy bark of warning. Shane hesitated. Didn't Barlow have anywhere to go? Another thought made him shiver. He didn't like the way Barlow clung to him. Now he thought he guessed the big man's purpose.

It had seemed a little odd that Admiral Gluck had been so willing to grant Shane two weeks' leave. His unexpected report about the decoherer must have precipitated a crisis in the plans of the Black Star, whatever they were. It was a little strange that Clayton, the one man who knew the most about America and that imaginary weapon, could be so readily spared—unless Admiral Gluck suspected something!

Looking at Barlow's pig-eyed face, Shane tried not to shudder. Were they just giving him rope enough to hang himself? Was Barlow detailed to shadow him, to keep a record of all his slips and errors until the evidence was certain?

Slowly Shane turned back to Atlantis Lee. She was an ally. Besides, she was beautiful. It made his heart beat faster, just to look at her. He knew he loved her already. He wanted to tell her who he really was, yet he didn't dare. Perhaps she wanted peace with America, but still she was a citizen of New Britain. He wondered if she wasn't, unconsciously and unwillingly, still in love with Glenn Clayton. She couldn't be expected to aid an American spy.

**H**E would have to tell her that it was he who had captured Clayton, that the Ring Guard had decided the prisoner must die before Shane left America. He was, in a way, responsible for Clayton's death. He couldn't tell her.

"Will you come, Glenn?" she asked urgently again. "Will you speak to the League?"

"Sure, beautiful." He grinned. "I'll

tell them anything you like."

That wasn't what he wanted to say, but he had to keep in character. Within the limitations of his role, he was determined to do all he could to help the cause of peace. If trade were actually begun, before the only defense of America was found to be a lie, the disaster might be averted.

Atlantis bit her lips, annoyed.

"I'll telegraph the delegates," she said at last. "The League will meet at twelve tomorrow." Her shoulders stiffened defiantly under the green tunic. "Perhaps the Black Star has taken the real power. Perhaps the League is just a shadow, but it still has a constitutional authority. For once I'll take the risk of using it." Her violet eyes were pleading. "If you will come, Glenn, really?"

"I'll come," Shane told her soberly.

She smiled and took his hand. Her grasp was firm and cool and it made his heart beat faster. Then she left him. Shane watched her go, with a dull ache in his throat. He was sorry she had gone.

Suddenly he was uncomfortably aware of Captain Barlow waiting beside him—waiting, he suspected, for him to make some fatal blunder. Shane didn't know what to do next. He didn't know where Clayton would stay in New Dover. He didn't even know where the League would meet next day. Still Barlow waited, his piggy eyes watchful.

"Going my way?" Shane said desperately.

"All right." The blue-jowled face was a heavy mask that betrayed no thought. "If you have anything to drink at the apartment."

At least he knew now that Clayton had an apartment. It was cheering news, if Barlow would guide him to it. That would give him a chance to relax, if too many friends of Clayton's didn't unexpectedly turn up. After he got rid of Barlow, he ought to be able to learn a few things by studying Clayton's papers and effects.

"There ought to be something." He made a weary little gesture. "Glad to have you along, Barlow. I'm about all in today."

"You aren't acting yourself," the heavy man agreed.

Again Shane tried not to shudder. He tried to hope that his apprehension had no base, but the double meaning in Barlow's words seemed ominously clear.

Displaying a fatigue that he really felt, he let Barlow lead the way. Another elevator dropped them four levels. They stepped upon the moving floor of a corridor-street. At a corner they descended a stair, to another moving at right angles.

At last Barlow stepped off in front of a door and waited for Shane to open it. Shane had Clayton's ring of keys. Fortunately the second one he tried happened to fit, but he thought that Barlow's small animal eyes reflected new suspicion.

**T**HE apartment was larger and more luxurious than he had anticipated. There were half a dozen spacious rooms. The chill of metal walls was relieved with tapestries. Deep-piled rugs, perhaps of some mineral fiber, covered the floors. Shane didn't know where to look for a drink.

"Help yourself," he told Barlow, "if you can find anything. I just want to rest."

He dropped into a big chair, found he didn't have to simulate exhaustion. Barlow went into another room. Presently he came back with two tall glasses. He cleared his throat and said:

"Don't you think you're going a little too far?"

Shane blinked and prevented himself from shivering. He managed to keep his hand steady as he accepted the drink.

"What do you mean?" he asked.

"You'll find out tonight."

It sounded like a threat. Staring sullenly, Barlow drained his glass and wiped his thick lips on the back of a hairy hand. He stamped out of the room. Puzzled and worried, Shane locked the door behind him.

Shane began an anxious search for information. In the bedroom were several pictures of women, all different, all with endearing inscriptions. That was hard to understand, when there had been Atlantis Lee.

He paused in the dressing room to



try on some of Clayton's clothing. The garments didn't fit exactly. The Outsider had been slightly larger, taller and straighter. In far-off Ring City, making the plan, Shane had hardly thought of clothing. Now, when he was wondering what to wear when he spoke before the League tomorrow, the matter assumed an alarming importance.

The letters and other metal foil documents in a big desk revealed nothing new. Clayton must have hidden or destroyed every important document before he started on the adventure to America.

At last, behind a tapestry, Shane found the door of a concealed wall-safe. He caught his breath. Perhaps this held the evidence that would show Clayton's connection with the Black Star, or something else equally revealing. But he was unable to open the combination lock. Tomorrow he would try to find a locksmith.

He settled down to study one of the odd metal foil newspaper rolls. The advertising gave him names of streets and stores and resorts, lists and prices of commodities, a thousand items that he might desperately need to know.

A heavy knock interrupted him. Tense to face a new emergency, Shane laid aside the roll and magnifier and unlocked the door. Barlow thrust himself into the room, followed by four nervous men in brown. They all wore paralysis guns. Barlow's blue-jowled face was damp with perspiration.

"Sorry to disturb you." His voice was hoarse and uneasy. "Just a routine matter." His trembling hands pushed out a rolled sheet of gray metal foil. "If you'll just put the Black Star Seal on this warrant."

Shane blinked and gulped.

"The Seal?" He caught himself and tried to conceal his astonishment. With narrowed eyes he surveyed the sweating men again. "For a routine matter, you all look pretty excited."

Barlow thrust the rattling sheet at him.

"It's no secret that you are leader of the Black Star. No secret to us." His piglike eyes glittered anxiously. "You keep the Seal here?"

Shane swallowed again and tried to

stop the room from spinning. This was astounding. Clayton himself was the secret leader of the Black Star!

**F**OR a moment that seemed incredible. If Clayton had such power, why hadn't he sent some subordinate on the dangerous mission to America? The answer was Clayton's own character. He liked danger. Besides, it was possible that the prestige won by his successful preliminary expeditions had helped earn the leadership.

Shane bit his lip. It was no wonder that Clayton had refused to talk about the Black Star. If Shane had known this, he might have been able to assume that power for himself. Now, as he faced the uneasy ominous faces of the men in brown, it seemed too late.

"Where's the Seal?" demanded Barlow.

That was what Shane also wanted to know. In all his searches of this apartment, the *Friendship* and Clayton's own person, he hadn't found anything that could be the Seal. Of course it might be in that safe, but Clayton more likely had hidden it so cleverly, he would never find it at all in the time these men would give him.

Shane's eyes challenged Barlow.

"It seems to me you're a little too curious about where I keep the Seal. This looks like a ruse to get your hands on it." He glanced briefly at the metal foil document. "What is it?"

Barlow wet his lips and blinked his small animal eyes. Two of the men stepped alertly to his side. The others moved behind Shane. Their hands stayed near their guns.

"We have information that Atlantis Lee is calling a special meeting of the League." Barlow's voice was flat and ominous. "She is plotting to deal with our enemies in America, in defiance of the Black Star."

"On the contrary," Shane said, "she told me about this meeting. I am going to attend it myself. What is that document?"

Barlow glared at him.

"This is a warrant for the arrest of Atlantis Lee, on the charge of suspicion of treason." The metal sheet rattled as he added: "The time has come

for the Black Star to smash the last vestige of the League!"

Shane stepped forward.

"You knew I wouldn't put the Seal to that!" He made his voice crack hard. "You knew I was going to speak at the League!"

Barlow flinched uneasily from his eyes.

"Let me tell you now," Shane rapped. "The extreme policies of the Black Star are going to be changed. I have learned that the Americans are willing to be friendly. We can get far more by peaceful trade than by war. I'll never order and never allow another attack on the Barrier!"

Barlow crumpled up the warrant and threw it on the floor.

"That's what we wanted to know." His voice was a tense, hurried croaking. "The aim of the Black Star, from the very beginning, has been to destroy the Barrier. It is as important to avenge ourselves on those who shut us Outside as it is to fill our own seas again. Any man who opposes that purpose is a traitor to the Black Star."

His sweaty face made an uneasy grimace.

"I've been planning to get you, Clayton," he rasped, "ever since you beat me out of the leadership. But I never hoped you'd lay yourself so wide open. I used to think you were clever, but your time's up, traitor!"

## CHAPTER XV

### *Life Was a Dream*

**D**ELLA RAND, aboard the *Friendship*, had fired the bullet with a surgeon's knowledge. After the disguised rocket fell upon that bleak volcanic summit, which once the Atlantic had covered, she had repaired Glenn Clayton's wound with a surgeon's careful skill. She couldn't fail. The tall Outsider's hard, green-eyed grin moved her with a feeling that was as strong as her love for America. Always she had risen to emergencies. A calm confidence ruled her hands. She had no fear of blunders.

The wound healed swiftly. Sooner

than she had expected, Clayton was able to leave his bunk for tiny expeditions about the disabled machine. He showed no great concern about the smashed rocket-tubes.

"Well, beautiful, you're through," he complimented. Still a little pale and hollow, his hard face grinned. "You must like my company, taking such precautions as this!"

He put his arms around her and she was careful not to hurt his healing wound. When he kissed her, she liked the harshness of the stubble on his chin. She closed her eyes and let herself dream again of the new Adam and another Eve.

Glenn Clayton let her dream. Now he had a role to play and a secret to keep. He was resolved to make no blunder. He kissed her and they went on with the business of taking an inventory of the supplies aboard.

"The air machine manufactures carbohydrates," he told her. "With that we can keep going two years, anyhow." His green eyes seemed warm and kind. "Like the prospect, beautiful?"

She did and she let him know it, for two years would be an eternity of paradise. There was scarcely any need to look beyond that time. But she let herself dream of a day when they might walk out of the rocket, to begin a new life somewhere.

Clayton let her go on dreaming. Della didn't object when he set up the telescope. The instrument was small. The perfect vision in the airless Outside, together with a powerful system of electronic amplification, made large lenses or reflectors needless. The image was reflected on a screen.

"Time here will hang heavy, beautiful," he said, "even for you and me. We must plan our lives in this little world of ours, keep doing things. Let's have a look at the stars."

Della didn't guess his purpose. She was eager to follow any interest of his, happy because he was accepting the situation with such apparent cheer. The control room in the nose of the helpless ship became their observatory.

Glenn Clayton proved to be an excellent astronomer. The Outsiders

had lived for two centuries under perfect astronomical conditions. The catastrophe of the passing Dwarf had given them a sharp, if rather apprehensive interest in the mysteries of illimitable space. Clayton, as she already knew, had a keen and ready mind.

**T**HE little round screen was black, or sometimes gray with dusty nebulae. Stars swam across it and seemed to come near or recede again as Clayton's fingers moved the controls. He was talking easily to Della, who sat beside him on the big chair's arm, about the wonders of the southern constellations they explored.

He started when he saw the object. "There!" he whispered. Then, sensing the alarm that he had caused, he tried to allay it. "A comet." He pointed to a tiny fleck of white that Della soon lost again among the dazzling stars. "It must be a comet, because it wasn't there last night. We're discoverers, beautiful!"

For a moment she felt admiration for his photographic memory of the heavens. Fondly she touched his hard shoulder and a sudden doubt shocked her. His shoulder was tense. She felt his concealed excitement.

"What's so important about a comet?" she asked.

"Nothing, beautiful." He grinned. "But it's the first new thing that's happened today."

Della chilled to a secret fear that life might grow stale for them in the tiny world of the ship. She was afraid that Clayton would find a way to leave her and the dim dread turned to dark alarm.

"Is that a ship?" she whispered.

Clayton had thought it was the blast-glow of a distant Barrier Patrol rocket. That was what had startled him. But in a moment he knew that his hope was defeated.

"No such luck, beautiful. A ship would move much faster."

Alarm had chilled her voice.

"A ship wouldn't see the *Friendship*," she told him. "We look like a boulder: You aren't to signal, Glenn. I'm stronger than you are, till your side gets well."

His pale grin mocked her.

"But only till I get well." He looked back at the little screen. "Anyhow, beautiful, we've got a whole new comet to amuse us."

She tried to follow his work. He increased the electronic magnification enormously, until the tiny fleck of the comet crawled visibly across the screen. With instruments he recorded the rate of its motion.

"The elements," he said at last. "Now where's it going?"

She couldn't follow any farther, but he took readings from the instrument and set them up on a little calculator. The first result banished his grin. He turned back quickly to the telescope screen for another observation.

"What have you found?" Della wanted to know.

"Nothing," he said. "Nothing that could be."

That was all that he would tell her. But he worked on and on through the night, until the slow rotation of the heavens carried the strange body below the ragged southwestern horizon. Even then he waited to check the positions of Venus and Mars before he slept.

All the next night he worked again, silent and abstracted. Then at last he told her.

"You might as well have saved your bullet, beautiful." His lean face was haggard from the long effort. His hard voice had a gravity that was new, yet something made him grin sardonically. "That comet is going to smash the Barrier and your precious America, more completely than all our rocket-bombers could have done."

**S**HE clutched at the big chair's arm for support.

"The Ring is strong!" she protested. "It's strong enough to stop the heaviest meteors."

"This is more than a meteor, beautiful."

Tense and breathless, she waited for him to go on. Even now his hard voice rang lightly. It seemed to her that Clayton rejoiced in danger. She had never seen him afraid.

"It's more than a comet, too. It's round and solid and it doesn't have any tail. It's still so far away that I can't measure it very closely. And

I still haven't been able to estimate its mass from the perturbation of other planets." His green eyes seemed maliciously gleeful. "But I can guess, darling!"

She tried twice, before her husky whisper came.

"What can you guess?"

"It is coming out of the same part of the sky where the Dwarf disappeared, two hundred years ago, after it had stripped the air and the oceans off the Earth — except under your precious Ring, sweetheart."

"You think—" Della gulped. "You think it is the Dwarf?"

"Why not?" he asked lightly. "It's the same size. It's coming from the same direction. Of course the astronomers, two hundred years ago, said that it was going on into space, never to return. But astronomy was pretty well disorganized by the time the Dwarf had passed. Suppose they were mistaken. Its mass was only a fraction of the Sun's. Suppose that it was pulled into a long cometary orbit. Suppose that it is just now returning for a second visit. Anyhow, darling, that's my guess."

She stared at his brown, smiling face. She didn't know what to believe. Perhaps it was all a joke, or a ruse to get her to let him signal a ship.

"How close will it come this time?" her low voice asked.

"The aim seems to be improving." A shadow drowned the reckless glint of his eyes. "That's what I've been working on these past two nights." His bronze head made a grave little nod. "This time, sweetheart, the Dwarf isn't going to miss us."

She stepped back a little and her voice went sharp.

"Glenn, is this a joke?"

He shook his head. "None of mine, anyhow, beautiful. If the forces that rule the cosmos have a sense of humor, it may be a joke to them, but that body is coming straight toward Earth's orbit. Collision is inevitable. There won't be much left."

Her exhaled breath made a tiny sob.

"Even your precious Barrier won't be much use," he told her, "after the whole planet is smashed into white-hot vapor. If this is a joke, it is one

on the whole human race, the Black Star, as well as America. Even on your daring Lieutenant Shane!"

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## CHAPTER XVI

### *The Black Star Seal*

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**I**N Clayton's apartment, listening to Captain Barlow's harsh-voiced threat, Shane reached for the paralysis gun at his hip. The two men behind him seized his arms before he could draw it.

"Hold him!" Barlow rasped from a safe distance. "Get the gun!" He came closer when Shane was disarmed, his broad face leering triumphantly. "Call right, Clayton. Where is it?"

"Where's what?" evaded Shane.

While the two men held Shane, Barlow threatened him with the thick cylinder of his paralysis gun.

"You know what," he snarled. "I want the Black Star Seal. You know that it is the rule for each leader of the Black Star to hand the Seal and his authority on to another—before he dies." His voice went hard with menace. "Where's the Seal?"

"I don't know." That was the truth, but Shane managed Clayton's mocking grin. He tried not to reveal the despair he felt. Barlow obviously meant to murder him. Even if he had the emblem of authority, it would be no use to him now. He added: "You might take a look around."

"We're going to," said Barlow.

At his curt nod, the two sweaty men behind him nervously stepped forward to search Shane's pockets. They found only the little platinum pocket case.

"It might be too large to carry," Barlow said, "or he might be afraid to carry it. Search the rooms." He made a noisy gulp. "And hurry, don't stand there like a pair of frightened fools!"

Pale and uneasy, the two ran and began rummaging frantically through the several rooms. Shane watched, trying to maintain Clayton's reckless grin.

"Frankly, Barlow," he said, in the words he thought Clayton might have spoken, "I don't believe you'll like it. You seem uneasy already and the longer you hold the Seal, the more you'll have to be afraid of."

"Blast you, Clayton!" the big man growled. "Where is it?"

"There's a wall-safe behind the tapestry in the second room," Shane told him. "You might try that."

In a moment the men found the safe, but Barlow was afraid to let them touch it.

"Leave it alone," he warned uncertainly. "It might be a bomb, or an alarm. He was a bit too willing to tell us where it was." His pig-eyes came watchfully back to Shane. "Clayton, I think we had better dispose of you, without any further delay."

"Go ahead." Shane shrugged and tried to ignore the prickle of deadly apprehension along his spine. Barlow's obvious fear only made the big man more dangerous, more anxious to get him out of the way. He tried to grin. "What are your plans?"

Anxiously the men in brown had leveled their weapons. The paralysis guns, Shane realized, were ideal for such an occasion. Used at full power on the higher nerve centers, they were instantly deadly and they made no sound. Shane waited for the black impact of death.

"No, not yet." Barlow stopped them and turned to Shane. "Clayton, I'll give you a choice. Hand over the Seal, without any tricks or fuss, and you can have a nice, easy death. They say a man never even feels the ray on his brain."

**S**HANE had to swallow before he could trust his voice.

"And," he prompted, "what if I refuse?"

Barlow's cold eyes narrowed.

"We'll take you to the vacuum cell. That fits our plans much better, anyhow. It will appear in the records of the Black Star that you were tried by a party court and sentenced to the vacuum cell for treason. The cell isn't comfortable for a live man." His broad blue face was thrust forward. "What's your choice, Clayton?"

Shane shrugged. "I don't want to spoil your hunt for the Seal." His borrowed voice rang light and clear, but he felt numb and cold and ill. His own words seemed to come from far away. "You'll have to take me to the cell."

Barlow's thick lips quivered with anger.

"Let's see you grin in the vacuum cell—with your own blood boiling out of your body!" The gaping muzzle of his weapon gestured at the door. "Get moving!"

Dimly Shane had hoped that the trip to the vacuum cell, wherever it was, would give him some opportunity to escape or call for aid. But Barlow's plot was more completely organized than he had suspected.

The moving pavement outside was stopped. Ropes were stretched across the corridor-street, at the ends of the block. Brown-clad Black Star guards were stationed there. Men in blue, with noisy pneumatic equipment, were making unnecessary repairs to the pavement.

Barlow's men rushed him across the corridor, into a convenient elevator. It dropped them through a darkened shaft. They emerged in a narrow passage, somewhere deep in the hive-like city, walled with plates of gray-painted steel.

For five minutes they pushed Shane along it, until a metal door stopped them. Barlow found a key and unlocked the massive door. Then he stopped Shane with a wave of his heavy hand.

"Still time, Clayton," he said. "An easy death, if you want to change your mind. Just tell me where the Seal is."

Shane made his stiff face grin.

"You might try that safe," he said.

"Get inside!" Barlow jabbed him with the weapon. "We'll try the safe, all right. We're rid of you, whether we find the Seal or not."

A kick sent Shane reeling into the cell.

"Last chance!" croaked Barlow.

As he thought Clayton might have done, Shane thumbed his nose. The airtight door closed with a heavy, muffled sound. The lock made a dull click. He was alone in the bare, win-

dowless cell. Dim blue light came through a small, heavy glass plate in the ceiling.

Shane looked around apprehensively.

The metal walls and the metal floor were bare. The only thing to attract attention was a metal valve high in the opposite wall. That must be the outside wall of the dome-city. The valve was intended to let the air out of this death-chamber.

**B**ARRY SHANE crossed the floor to examine it. It was two feet in diameter, large enough for his body to pass through, if it hadn't been for the heavy bars over the inside. But those bars seemed strong enough. Anyhow, what would be the use of getting outside? A man would die as quickly there as in this lethal chamber.

Shane felt weak and ill. He sat down on the cold metal floor and wiped chill sweat off his face. He had failed. That realization was more painful than the danger to his life. Clayton had beaten him, after all, merely by keeping silent about the danger of Barlow's rivalry and his own unsuspected possession of the Black Star Seal.

Where was the Seal?

Squatting on the floor, Shane began to wonder what Clayton would have done with the Seal. It kept him from thinking about what would happen when Barlow opened the valve.

Since it apparently was the sole proof of his power and position as master of the Black Star party, Clayton wasn't likely to have entrusted it to anyone else. Neither was he apt to leave it in such an obvious place as the safe in his apartment. The logical thing would be to carry the Seal on his person.

But Shane had searched the Outsider when he first captured him. There had been only the thin platinum case that contained the picture of Atlantis Lee and a few other trinkets, such as the heavy platinum ring.

Absently Shane turned the ring on his finger. He was certain, too, that the Seal couldn't have been hidden aboard the *Friendship*, unless it had

been cleverly disguised. . . .

He caught his breath and stood up abruptly. With fingers that trembled a little, he slipped off the massive ring. He remembered Clayton's protest against giving it up. The plain platinum bezel was larger than the star-shaped impression of the Seal.

The idea seemed fantastic. Barlow and his men had evidently been looking for something larger, for they hadn't given the ring a second glance. But then they had never seen the Seal.

With quivering fingers he twisted at the bezel. It failed to yield. Shane gave a bitter laugh. After all, there was no use getting excited about it. Even if he found the Seal, it would be no use to him now.

Under the bezel, he found a tiny stud!

He pressed it. The top of the bezel snapped back. It was merely a platinum cover. Beneath was revealed a star-shaped jewel. It was black crystal, scintillating with tiny vanishing points of diamond light.

His quivering fingers fumbled in his pocket and found a scrap of the gray metal foil. When he pressed it against the coruscating jewel, it came away marked with that striated, inimitable star.

He had the Black Star Seal!

**W**ITH a weary sigh Shane snapped down the metal cover and replaced the ring on his finger. It was no use to him now. He only hoped that Barlow wouldn't be clever enough to discover it, if they searched his body. He had admired Clayton, but there was little to like about Barlow.

*S-s-s-s-s-s!*

Shane started and went cold at the sound of that thin, deadly hiss. He saw that the valve-gate was sliding aside slowly behind the massive bars. The room felt cold and a mist of condensing moisture swirled like a ghostly shape under the blue light. The air was going out.

Barlow might open the valve slowly, to prolong his discomfort. That didn't matter greatly. The end would be the end. The Black Star Seal was no use to him now.

Then something happened to the valve. First there was a tapping. Then an explosion made a dull, muffled thump. The air was already nearly too tenuous to carry sound. The gate was ripped away and Shane saw stars in the dark sky Outside.

*Whoof!*

The air was gone.

Shane knew that Barlow and his men hadn't been responsible for that explosion. Somebody else had caused it, but he had no time for riddles. He opened his mouth, threw back his head and exhaled swiftly, so that lungs and eardrums might escape rupture.

Only agony was left in his lungs. Automatically he tried to breathe. That only increased the pain. His ears hurt. A savage force was pushing his eyes out of their sockets. He could hardly see.

But he did glimpse the long wrecking bar that had been thrust through the valve. It fell on the floor. The metal quivered under his feet, but his throbbing, roaring ears, in the vacuum, heard no sound.

Somebody was Outside. Somebody had come to help him. That seemed incredible, yet he had no time or power to think. His reeling brain was too numb.

He picked up the wrecking bar. It was made for such jobs as this. There was a sharp blade of some hard, bright alloy and biting claws that worked on a fulcrum. He set the blade against the base of one bar and threw his weight on the handle.

The blade cut through, but his strength was ebbing. His aching lungs tried to breathe and found no air. A froth of blood and expanding oxygen strangled him. The metal walls seemed to recede. Black splotches blotted out his sight.

He worked on blindly. He tried to grin Clayton's hard grin, for no audience at all. He lifted the tool and brought it down, again and once again.

One bar was out of the way, then another. The tool dropped out of his frozen hands, but perhaps the space was large enough.

He thrust himself into it. Dimly he knew that hands had grasped him. With all that was left of his strength,

he kicked and squirmed and pushed.

He slipped through the valve. It came to him, with a sense of far dim wonder, that he was Outside—where no naked human animal could live.

## CHAPTER XVII

### *Man Outside!*

**H**IS lungs still feebly tried to breathe. All the pain had gone. There was only wonder left and a comfort in the nearness of oblivion. He did his best to see, but his eyes were almost past seeing.

There was the terrible, black sky over cruel, dead mountains that had been the bottom of the sea. There was some low, sledlike machine near him. It must be night, for the machine was not much more than a blot of shadow. There were two bulky figures in air-suits.

Who could they be?

Queerly that question lingered in his ebbing mind, even after he had forgotten the need to breathe. But it was dark, or else his eyes had grown too dim to see. He knew that they were slipping a helmet over his head. He felt them wrapping him in the stiff fabric of an air-suit. Oxygen hissed into his lungs. It seared his throat and burned like fire in his lungs, but he labored to breathe.

Then he was in a white bed. Through small, heavy windows he could see a rocky landscape, glaring strangely bright under the Outside's ominous sky. Two or three miles away, he saw the flat, gray dome of New Dover. He knew he was in one of the smaller structures, outside the dome-city.

He moved a little and Atlantis Lee came silently around the bed. A shaft of sunlight, as she passed it, turned her hair to sudden red glory. But her face looked tense and white and her smile was grave.

"Feel better?" she asked, her voice low and musical.

Shane tried to speak. His throat felt as if iron hooks had torn it.

"Don't talk, if it hurts," she soothed.

"You'll feel better in a few minutes. Dr. Wolf just looked you over. There's nothing wrong that a little rest won't fix."

He managed a faint, painful whisper.

"Didn't know—a man could live—Outside."

"The combined oxygen in the blood is enough to keep life going for several minutes. The main danger was rupture of the lungs or blood vessels. Dr. Wolf says you didn't suffer anything serious." Her tense smile reflected her admiration. "Cutting those bars must have taken courage and strength."

"Thanks," he whispered. "It was you who got me out?"

"With the help of some friends," she said.

"How did you know—"

**A** COUGH choked off his question and his throat burned with intense misery again.

"Dr. Wolf left this for you." She held a glass of something to his lips. It had a sharp biting taste, but immediately he felt better. "We had a friend in touch with Barlow's plot. He learned about the warrant for my arrest and your refusal to sign it. We had planned the escape beforehand, in case one of us went to the vacuum cell."

"Us?" whispered Shane.

"There's just a handful of us," she said, "all that's left of the old democratic opposition to the Black Star. We've kept together a little underground organization, hoping somehow to prevent the destruction of the Barrier and bring peace between New Britain and America."

"Where are we?" Shane inquired, looking across the dead miles to New Dover.

"Lee Observatory," she said, her eyes watchful.

"Thanks, beautiful." Shane remembered he was Glenn Clayton and tried to grin. His throat felt slightly better. "Nice of you to help an old enemy."

"Don't be an idiot!" She came close to the bed and her worried violet eyes looked down at him. "If you feel able to talk, tell me who you are."

**S**HANE tried not to look astonished.

"Could you forget me, darling?"

"I haven't forgotten Clayton." Her voice seemed to indicate that she wished she could. "You look the part—almost, but you just don't know the lines. You've made half a dozen blunders. The worst one was getting caught by Barlow. Clayton had been watching Barlow set his trap for two years, planning to catch Barlow himself in it, whenever it was sprung." She glanced at the window. "And Clayton wouldn't have asked where we are."

"All right," Shane yielded. But Clayton's green-eyed grin seemed natural now. "I'm Barry Shane, American. We caught Clayton before he could smash the Barrier. I came out in his place."

"That was foolish." Her grave eyes smiled again. "But I like you for it."

Shane watched her face.

"Don't you want to know what happened to him?" He had to catch his breath before he could go on. "It was I who captured him. When I left, he was awaiting execution for attempted escape."

For a long period she looked past him. Then her red head shook slightly.

"It would have mattered once," she said softly, "but things have changed."

Shane felt relieved.

"I'm glad," he told her huskily. "I was afraid you would hold me responsible for his death. You see, he was carrying your picture."

"You thought that—and still you told me?" Her white face smiled. "I think you're all right, Barry Shane. Glenn wanted me to marry him. I might have done it once, if he hadn't insisted that I must join the Black Star and abandon our little opposition party."

"I'm glad you didn't. You knew he was leader of the Black Star?"

She nodded. "He told me when he asked me to marry him. In fact, a good many people knew, besides Barlow and his gang. Clayton had a few trusted subordinates. It's impossible to keep such information really secret. Somebody must know where



the Black Star's orders come from."

Shane sat up in the bed.

"What's the situation now?" he asked. "Barlow will be desperate when he finds out I was rescued. Now that he has shown his hand, he knows he'll have to win or die. Can he find me here?"

Anxiously he watched her face.

"Probably," she answered. "Most of the opposition to the Black Star exists among our scientists and engineers. The observatory has been a headquarters for our small group. Barlow and his henchmen will know where to look. A rocket took off from the city before sunrise. It's probably Barlow's *Avenger*."

Shane looked out again, across the dead, harshly lit miles to New Britain.

"What about weapons and defenses?" he pursued. "If Barlow's ship should attack, or his men on the ground, have we the weapons to hold them off?"

**A**T LANTIS shook her head.

"There are two dozen men of our group here at the observatory now—astronomers, engineers and members of the League council. Dr. Winston called them in a secret meeting here to inform them about a recent discovery of his."

Her white face looked grave as she mentioned the doctor's discovery.

"But we have no weapons," she went on. "We can't hold out against the Black Star. The extremist element of the party has been wanting for years to wipe us out. Clayton restrained them only, I think, because of his old friendship for me. That was one of the arguments Barlow used in getting recruits for his plot."

She shrugged unhappily, yet her lovely red lips did not tremble.

"I don't see what we can do," she concluded. "Barlow and his extremists will doubtless order an attack on us at once. Admiral Gluck can destroy the observatory and all of us, with one rocket-load of bombs."

"Admiral Gluck?" Shane repeated. "Is he in on the plot?"

"I don't think so. Our friends in the Black Star party are certain he knew nothing about it. He is loyal to the party. If orders come to him,

stamped with the Black Star Seal, he will obey them without question. Barlow will order him to attack the observatory and he will do so promptly."

Shane grinned. He caught the girl's arms, pulled her to him and set a kiss on her startled face. His triumphant whoop was checked by the pain of his raw throat.

"Then we're all right, beautiful!" he croaked breathlessly. He liked that word of Clayton's—for Atlantis Lee. "We'll just send an order to Admiral Gluck—and have Barlow and his gang taken care of for the traitors they are."

He slipped the massive ring off his finger, pressed the tiny stud to uncover the black, scintillating star-shaped jewel. He waved it under her eyes.

"There it is. I've still got the Seal!"

Her violet eyes failed to light with his own elation. Her white face smiled a little, but it still seemed tense with dread. The shadow of fear was still dark in her eyes.

"What's the matter?" he asked. "Do you think Barlow will attack before we have time to send an order to Admiral Gluck?"

"That's possible," she admitted. "Barlow and his men must be desperate. They will do everything they can, without any delay. We might be betrayed by others in the plot that we don't know of. But there's something else, something much more serious."

Shane caught his breath.

"I thought there must be something," he whispered. "You look so pale and anxious." He caught her hand and found it cold. "Tell me what's wrong."

Her red head turned away.

"If you feel able to stand some dreadful news," she said. "I told you Dr. Winston had made an important discovery. I called our group together to hear about it. He is going to make his announcement in a few minutes."

"What is it?" asked Shane.

"I'll let Dr. Winston tell you."

Her voice was hushed and ominous. "When you've heard it, the Black Star and Captain Barlow's plots won't matter very much."

## CHAPTER XVIII

*Mad Moon*

SHANE was rapidly recovering from his ordeal Outside. Atlantis Lee wanted to take his arm, but he walked without her aid into the small lecture room, where two dozen scientists and engineers—the chief opponents of the Black Star—were waiting for Dr. Winston's grave announcement.

Atlantis introduced him before they sat down.

"This is Captain Clayton, just back from America."

Quick hostility flashed on several faces.

"We don't want a Black Star leader here!" a spectacled man said angrily.

"Captain Clayton's viewpoint changed after his recent visit inside the Barrier," the girl said. "He is now a friend of America and one of us."

"That's right," Shane added in his hoarse, painful voice. "I'm going to use my power in the Black Star to try to prevent any attack on America, or on any of you. But I have enemies in the Black Star. Miss Lee just saved my life. There will be trouble."

A bearded man shook his head.

"You don't know how much trouble, Clayton, until you have listened to Dr. Winston."

An ominous, expectant silence settled over the room as a tall, gray-faced man came through a door behind the speaker's platform. He looked over the room with troubled, preoccupied eyes.

"Dr. Winston," Atlantis Lee breathed.

The tall man cleared his throat and his pale, nervous hands took metal foil documents out of a brief-case. In a low, grave voice, he began simply.

"Thank you for coming here. A few of you have received some hints about this discovery, but I waited, before making any formal announcement, until two of my associates had checked my work. The check has just been completed. There is no escape from the truth."

A breathless stir swept the room.

Somebody made a little stifled outcry. One man rose and stalked out silently, white-faced.

"Go on," Shane whispered hoarsely.

"A few days ago," resumed the tall astronomer, "our large telescope picked up a new object in the southern sky—almost in the same position where the passing Dwarf vanished, two hundred years ago, after it had stripped off the air and the seas of Earth. On observation, it proved to be no ordinary comet. It is a solid object, of almost planetary size.

"Although the astronomers of the time had stated that the return of the Dwarf was impossible, we supposed for a time that their observations had been in error. We thought the Dwarf was coming back! That is the report that some of you have heard. It was very alarming, because the object is heading directly toward an intersection of the Earth's orbit.

"It will reach the point of intersection at exactly the same time Earth does. That means collision! Last night, studying the object, I made another discovery. Apparently the observations of the old astronomers were correct, after all. The approaching body is not the Dwarf."

**E**XCITEMENT swept the little room again. Half the men were on their feet. Shane swayed upright, leaning on the desk in front of him.

"Then what is it?" somebody shouted. "Was it all a mistake about the collision?"

The lean astronomer put out his hand and breathless silence fell.

"It isn't the Dwarf," his low voice repeated. "It's the Moon, the Earth's old satellite, which followed the Dwarf into space. Evidently it was drawn into a very long cometary orbit, but it escaped the Dwarf's attraction in the end. It is still a part of the Solar System. Now, after two hundred years, it is coming back to perihelion."

"What about the collision?" Shane rasped.

"That doesn't alter our other observations," Winston said. "The Moon is moving toward collision with the Earth. It isn't as heavy as the

Dwarf, of course, but that will make no difference to Earth. The impact will destroy everything alive—inside the Barrier or Outside."

"How much time have we?"

"Here are my figures." Winston's gray, nervous hand held up a sheaf of pages. "You may go over them, if you like. They indicate that the collision

little room had suddenly become a deadly trap.

Shane went swaying down the aisle to the table where Winston stood. He waved aside the metal foil document. His painful voice rasped the question.

"What are you going to do about it?"

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will take place in twenty-two days."

Most of the men in the room sat motionless, in stunned silence. One kept repeating that last phrase under his breath.

"Twenty-two days . . . twenty-two days."

One made aimless scrawls on a metal foil sheet. Another rose and bolted through the door, as if the

The spare astronomer shook his gray-streaked head.

"What can we do?" His lean shoulders shrugged. "If we had years of time, it might have been possible to outfit expeditions to colonize Mars or Venus. Our rockets have never reached such distances, but now there's no time for anything, even that."

Other men came up with questions. Shane took the sheets of gray foil and began to thumb through them.

Beside him, Atlantis Lee spoke softly.

"Dr. Winston is our best scientist. When he gives up, it means that we are beaten. New Britain can't do anything to avert this disaster." Her voice dropped to an urgent whisper. "Barry Shane, can America help?"

Shane looked up from the gray metal sheets, stared into her troubled violet eyes.

"I'm sure America could do nothing alone," he said hoarsely. "But I was just wondering—"

With brow furrowed, he looked again at Winston's calculations. Softly the girl prompted him.

"Wondering what, Barry?"

"New Britain can do nothing," he said. "I'm sure America couldn't, for want of power and industrial organization. But I was wondering what we both could do together."

**H**ER eyes lit with eagerness.

"You have a plan?"

"Not a plan yet." He glanced at the gray sheets again. "Tell me, could one of your rockets go out to meet the Moon, say at a distance of a few million miles?"

"I suppose so." Her tense fingers caught his arms. "Tell me, Barry, have you found a way?"

"I don't know," he whispered. "Let me ask a question." His husky voice called to lean Dr. Winston: "Suppose that the Moon could be cut off from all gravitational forces for the last few million miles of its approach, what would be the result?"

The astronomer's thin face grew sardonic.

"If it could!" he repeated with unhidden irony.

"Please, Dr. Winston," Atlantis Lee said urgently. "This is serious."

Winston looked keenly at Shane.

"Nobody can cut off gravitational forces," he said. "But if you want a serious reply to a fantastic question, of course the curve of the Moon's orbit would straighten. It would no longer be drawn toward the Sun. Consequently it would pass outside the

Earth's orbit."

"How far outside?" demanded Shane.

"That depends on how long you imagine it it be cut off."

"Suppose it could be done in ten days, would the collision be averted?"

Impatiently Winston scrawled symbols on his metal sheets.

"By a narrow margin, it would." Suddenly he moved toward Shane and his gray eyes were piercingly intent. In a new, breathless voice, he blurted: "Is there a way to cut off gravity?"

"It might be done," said Barry Shane, "if America and the Outside work together."

At that moment, a lean, freckled youth with tangled red hair came running into the room.

He was breathing fast and he looked excited.

"That's Tony," Atlantis Lee told Shane, "my brother. He's the one who helped me get you out of the vacuum cell. He has been on watch in the communications turret above, in case Barlow tries anything." She called:

"What is it, Tony?"

**T**HE panting boy thrust a trembling scrap of metal foil into her hands.

"A radio message!" he gasped. "Picked it up two hours ago, just before sunrise. Didn't know it was important till I got it decoded. Read it, Lan!"

The girl's clear voice read aloud.

"Urgent and confidential. Captain Barlow, patrol rocket *Avenger*, to Admiral Gluck, war rocket *Nemesis*. Open rebellion against Black Star. Revolt headed by Atlantis Lee, headquarters in Lee Observatory. Dr. Winston spreading unrest with propaganda rumors of danger from space. Rebels have been joined by man claiming to be Captain Glenn Clayton. Have evidence this man is impostor and traitor to Black Star. He does not possess Black Star Seal, as previously rumored. I urge immediate attack on observatory, before rebels can undermine Black Star authority with propaganda lies of approaching cataclysm."

Shane felt cold and weak, as if the stark chill of the Outside were still in his blood. This was a cleverer blow than he had expected. His clammy hands clutched the edge of the battered lecture table.

It was hard to think of anything to do.

"Can you take me to the radio?" he asked. "I want to talk to Admiral Gluck."

He knew he had to communicate with Gluck, but it was hard to think of what to say.

"Sure, Captain." Tony Lee's blue eyes were shining. He seemed completely unafraid. "We can try, but the Sun is up now and radio won't reach very far. Barlow's message came just in time to reach the relay stations. Now the solar interference has shut down."

"We must try!" Shane insisted.

He followed the boy up a circular metal stairway into the communications turret. Evidently this was Tony Lee's domain, for the metal walls were decorated with model rockets. Observation ports looked out in every direction, upon dead black mountains that had never seen the Sun until the Dwarf came, upon the gray disk of New Dover and the smaller domes around it.

Confidently the boy twisted dials.

"Lee Observatory, calling Rocket *Nemesis!*" he chanted into the microphone. "Captain Glenn Clayton, calling Admiral Gluck—"

**H**IS breathless voice broke off as the floor pitched and jerked. Shattering glass crashed somewhere. A great mushroom of white vapor grew up beside the observatory.

Black fragments of rock hurtled out of it. Debris rang against the observatory dome.

The boy's eyes were still shining and he didn't seem afraid. He knew that his world had only days to live. Death clanged and rattled incessantly against the metal dome, yet his voice was low and calm.

"That was a rocket-bomb, Captain. The fleet must be above us now, but maybe they can't hear. The Sun plays queer tricks with radio. . . ."

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## CHAPTER XIX

### *Ring Around the World*

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**T**HE hail of bomb splinters and rocky debris ceased. In the narrow little communications turret, above the observatory dome, Barry Shane turned to Atlantis Lee's red-haired brother.

"Try again, Tony. Get me the admiral."

Excited but unafraid, the boy went back to his dials.

"Lee Observatory," he calmly resumed his chant, "calling Rocket *Nemesis*. Captain Glenn Clayton, calling Admiral Gluck—"

Barry Shane watched the dark sky. A glance toward the low Sun dazzled him. He couldn't find the rocket fleet. Admiral Gluck's shrill voice startled him.

"Hello, Clayton." It rose and fell on a sea of hissing static. "Will you surrender the observatory and submit to a party trial on the charges of treason that have been made against you? Or do you want another and bigger bomb?"

Shane swallowed to clear his husky throat.

"I refuse to surrender," he rapped in Clayton's hard tones. "I am not a traitor. The real traitors are Barlow and his henchmen. I have let them show their hand."

Upon the roaring static, Gluck's sharp voice seemed uncertain.

"Can you explain your dealings with the enemies of the Black Star?"

"I can explain whatever I like." Shane tried to speak curtly, like the Black Star's leader. "Send a ship to pick up a confidential message. It will be stamped with the Black Star Seal."

On the rushing static, Gluck's thin voice audibly faltered.

"The Seal? But Barlow informed me— A ship will be sent at once, sir."

Atlantis Lee helped him compose the message and typed it on a sheet of gray metal foil. Shane stamped it with the scintillating crystal star in Clayton's ring.

A grave emergency exists. The attack on the Barrier must be abandoned. The fleet and all the resources of the Black Star will be placed at Captain Clayton's disposal, for the task of averting disaster. With your own telescopes, you can confirm Dr. Winston's discovery that the Moon is coming back toward collision with Earth. When you have done that, come with your staff to the Lee Observatory.

A gray war rocket dropped on angular landing stanchions at the edge of the new bomb crater beside the observatory. Tony Lee, wearing an air-suit and waving a black flag, carried the message to its valve.

A long hour passed. Shane talked a little to Atlantis Lee. She was as unfrightened as her brother. Shane suddenly knew that he loved her, but it was impossible to speak of love when the shadow of disaster hung over Earth.

Two rockets dropped beside the observatory—Gluck's *Nemesis* and Barlow's *Avenger*. A dozen men came through the air-lock, into the observatory. Shane met them. The fierce, yellow-mustached little admiral was tense and suspicious. Barlow's sullen face looked uneasy, defiant.

"You checked Dr. Winston's discovery?" asked Shane.

"There is a strange object in the south." Gluck's small, shrewd eyes were piercing. "But your behavior has been suspicious, Clayton. Grave charges have been made against you. I am here only because I must obey the commands of the Black Star."

"Dr. Winston is waiting in the lecture room," Shane told him. "I want you to listen to him. Check his work all you like. Convince yourselves that the danger is real. Then we'll talk about what to do."

**S**COWLING ferociously, Barlow pointed a thick finger at Shane.

"Admiral, don't trust this man! This looks like a trap. Are you going to walk into it? This man's dealings with the known enemies of the Black Star are obvious treason. Why don't you arrest him?"

The little admiral did not take his probing eyes off Shane.

"The Black Star," he repeated,

"commanded me to come here."

Barlow stepped forward, one hairy hand trembling near the gun at his hip. His broad face held a look of leering triumph.

"Admiral, look at this man!" his thick voice rasped. "Is he Captain Clayton? Is he our real leader? I have evidence that he is not. When he came back from America, he didn't even know where Clayton lived in New Dover!"

A blunt finger jabbed.

"Look at him! You can see he's a different man. His hair is a little too dark and he's a little too small. See, Clayton's clothing doesn't quite fit. Look—" Barlow stepped closer and his voice grew harsh with excitement. "Look at the scars on his face. I hadn't noticed them before, but they are the scars of plastic surgery!" He drew his gun as he finished triumphantly. "This man is just a copy of Clayton!"

Shane grinned Clayton's hard grin. "Better put up your gun," he advised Barlow. He turned to Gluck. "Admiral, I want you to listen to Dr. Winston. Then I have something to tell you."

"Wait, Admiral!" yelled Barlow. "Are you going to allow this impostor—"

"The Black Star's command," Gluck shrieked. "Put up your gun, Barlow."

An hour later, when they came out of Winston's lecture room, the little admiral and his staff looked shaken and pale. Even Barlow appeared subdued and his pale, thick lips kept moving.

"Twenty-two days!" he whispered. "Only twenty-two days!"

With Clayton's hard voice, Shane rapped at Gluck.

"Admiral, you are convinced of the danger?"

The stern little man tugged fiercely at his yellow mustache.

"I am convinced." His thin voice was husky and quavering. "I have checked everything. It is more than a danger. It is a sentence of doom." Medals tinkled as he shrugged hopelessly. "What were you going to tell me, Captain? What can the Black Star do?"

"The Black Star can do nothing alone," Shane said gravely. "But I believe that all of us, working together, have a chance." With a hard grin at Barlow, he confessed: "It's true that I'm not Captain Clayton!"

The shaken men merely stared at him.

"I'm Barry Shane, an American." Before the officers' startled gaze, he slipped Clayton's ring from his finger and snapped open the bezel to show the glittering star-shaped crystal. Barlow made a gasping sound, as if of rage and pain. Grinning at him, Shane gave the ring to Gluck.

"The Black Star Seal," he told the astonished admiral. "I don't need it any longer. Will you keep it in trust for the party?"

**A** STERN pride lit Gluck's thin, old face. The suspicion vanished from his shrewd eyes. He put the ring on a gnarled finger of his right hand and looked dazedly at Shane.

"You are an American," he quavered hopefully. "You know the science that created the Barrier." He paused and his keen eyes probed Shane's. "Do you know how to stop the Moon?"

"It can't be stopped," Shane admitted without hesitation. "But there is a way to turn it a little aside—if we can get there with the necessary equipment in time."

"How?" demanded the admiral.

"If sufficient power is used," Shane explained, "the space-warp wall created by an ultra-electronic tube can be made opaque to gravitation. We must set up a new Barrier around the Moon to cut it off from the Sun's gravitation. That will change its path enough, if we can do it in time, to make it miss the Earth."

"But we have no Barrier tube," objected Gluck.

"There's a spare tube in America, in the Ring Cylinder," Shane told him. "Remember, the war is over. It will take the united efforts of all of us to avert destruction. The Americans couldn't do anything alone. They haven't the ships to reach the Moon, or the gold-film cells to supply the

tremendous power that will be required. But America can supply the tube."

Admiral Gluck tugged doubtfully at his yellow mustache. He wasn't used to the idea of Americans as allies.

Two days later the *Nemesis* landed at Ring City. Shane introduced the little admiral to General Whitehall. The bulky crates that contained the parts of the spare ultradyne tube were loaded without delay.

"The tube wasn't designed for a gravitational shield," Whitehall warned Shane. "You will have to overload it about a hundred times. I don't know how long it will hold out—perhaps a few minutes, perhaps long enough. If we only had time to build another—"

But there was no time.

The *Nemesis* flashed out through the Ring again, to overtake the rocket fleet already bound for the Moon, loaded with gold-film cells. After six days the fleet reached the returning satellite. The long cylinders dropped to form a ring on the cragged floor of a vast ice-crater.

With a crew of men in air-suits, Barry Shane assembled the tube in the center of that ring. The six-armed tube was shaped somewhat like one of the pick-up toys called jacks that young girls still played with. But it rose seventy feet high, hung in a steel tower. Thick cables connected it to the power rooms of the rockets ringed about it.

At last, after sixty sleepless hours, the job was finished. Reeling with weariness, Shane gave a signal. A river of power came through the cables from the ships. The transparent quartz arms of the great tube glowed faintly green.

**O**VER the cragged ice-peaks of the wild moonscape, the dark splendor of space appeared unchanged. The Earth was like another strange Moon—brown and bare, except for the sharp-edged greenish circle of America, inside the Ring. Not even a flicker passed across that dark, strange sky.

Presently a signal came from the

navigation room of the *Nemesis*. The Moon had ceased its slow curve toward the Sun—and toward collision with Earth. The tube was working!

But would it burn out?

Weary as he was, Shane couldn't take his eyes off that pale green glow in the great arms that now meant the chance of the world to survive. It remained steady for minute after minute, hour after hour, until Shane went to sleep on his feet.

Anxious days went by. The brown, barren Earth grew vaster in the heavens and still the overloaded tube endured. The Moon reached the point of closest approach. The desolate Earth filled the lunar sky. In a few more hours the Moon would have been safely past.

But the reaction of Earth's gravitational stresses increased the overload. The tube flickered and went dark. The invisible gravity wall was gone. The terrific power of gravitation reached the passing satellite and shattered it. Cataclysmic moonquakes tossed the ice-plain where the rocket fleet had landed. The dead tube was swallowed in a new crevasse.

The rockets fled from the doomed satellite, through space already dangerous with flying ice.

Aboard the battered *Nemesis*, Barry Shane watched that display of cosmic fury, his heart cold with apprehension for the safety of violet-eyed Atlantis Lee, back in New Dover. What would happen to the dome-city, under the fragments of the shattered ice-world?

Even in his concern, he realized that the spectacle had an awesome beauty. The Moon's cragged face melted into white chaos. Two long plumes of white reached out. Slowly, as the hours passed, they stretched into a white and shining double ring about the dead, brown Earth. The Moon's rocky core hurtled onward into space.

Finally, then, the hail of ice-fragments reached the naked, brown Earth. The heat of impact turned them into expanding steam. The barren planet was splotted with white. The splotches grew and ran together, until the planet's face was veiled in white.

Only the misty greenish circle over North America remained unchanged. Under the shelter of the Ring, America had escaped all harm, but white clouds hid the fate of the cities of New Britain in the unprotected, exposed Outside.

Despairing for Atlantis Lee's life, Barry Shane found it difficult to live up to the hard, cynical grin he had so willingly assumed.

## CHAPTER XX

### *Gateway to Paradise*

**A** MAN and a woman, alone in a broken machine on the dead, dry, skeleton-strewn waste where once the sea had been, waited for the end of the world. Under the skilful care of Della Rand, Clayton recovered from the effects of the bullet she had fired. He continued his observations of the approaching object in the southern sky and found it was not the returning Dwarf.

It was Earth's old, lost Moon, but that fact seemed to make no difference. Night by night the returning satellite loomed larger and more ominous in the circular screen of the powerful electronic telescope. Clayton also watched the sky for the ion-glow of any passing rocket.

"I'm going to signal a ship," he told Della, "whenever one comes in sight. The ship's lights should attract attention, if we open all the shutters and wink them."

Della's gaze was searching, almost hostile.

"Why?" she demanded, her voice cold with scorn. "Do you want to go back, to rejoin your friends in the Black Star? Do you want to expose Barry Shane and start a new attack on the Ring?"

Clayton laughed and put his arm around her.

"Are you trying to start a fight, beautiful?"

"I won't let you go back, if that's what you want to do!"

"Forgive me, darling," he said, his face grave and oddly tender. "I don't



blame you for thinking that about me. I've given you cause enough. But things are different now, beautiful. You've made them different."

Wonderingly she scrutinized his features. He smiled back at her—a little smile that seemed strangely abashed and diffident. The hard, reckless glint of his green eyes had vanished, grown soft.

She waited bewilderedly, silent in his arms.

"I remember something I read in an old book," he said slowly, "one of the few books that were saved after the Dwarf passed. It said something about the gateway to paradise. We in the Black Star have been knocking on the wrong gate. You've helped me find the right one, beautiful."

His arms drew her closer and he kissed her gently.

"I want to go back and help Barry Shane," he continued. "The trap was waiting for him. I knew that Barlow had already set it. It was amusing to let Shane walk into it—amusing, then, because you hadn't shown me the proper gate. I suppose it won't make any difference in the end, but I'd like to do what I can to repair a little of the harm I've done. Besides—"

He laughed and the old hard glint came back to his eyes.

"Besides," he repeated, "if Captain Barlow has already sprung his trap, I'd like to see him face to face with the ghost of the man he murdered!"

"I wonder, have you really changed?" whispered Della Rand.

They watched the dark skies for a rocket's passing glare, but no ship passed. Slow disappointment grew upon Clayton's face.

"There seem to be no patrol flights any more," he said at last. "Gluck must have moved the fleet from Point Fourteen." He grinned at her. "I guess we'll see the end together after all, beautiful."

"I'm glad," she whispered in his arms.

Night by night they watched the Moon.

Growing on the telescope screen, it showed a face that Earth had never seen before. But the other side of the Moon was only another crater-pitted

wilderness of jagged, glaring ice. "Just a big snowball, beautiful!"

CLAYTON grinned at Della Rand and his hard green eyes seemed unafraid.

"How is that?" she breathed.

"That's all the old explorers found, two hundred years ago." He adjusted the instrument and the Moon's cruel, white features grew upon the screen. "Just a hard snowball, molded on a core of rock. A cosmic prank on the human race!"

A day came when the telescope was no longer necessary. The terrible Moon grew larger than the Sun. Its savage ice-mountains were visible to the unaided eye. Della Rand thought they were like the spikes in some ancient war-club, glimpsed by a victim as the weapon descended.

Dread created numbness in her brain. She tried to find small tasks about their cramped quarters in the disabled *Friendship* to occupy her mind, but all the business of life had lost its meaning now. She was glad to be with Clayton, yet all her love seemed always to turn into fear of the moment when he would be gone, with all the doomed world. She looked up dully as he came into the galley.

His brown face looked perplexed. For once, he seemed too disturbed to grin.

"I said it was all a joke. Now the Moon is playing another prank. It has left its orbit!"

Her dark eyes went black, staring at him. Her strong, slender hands caught suddenly at her throat. The pang of hope was more painful than despair had been.

"What do you mean?" she gasped.

Clayton recovered his grin.

"The Moon isn't following quite the orbit I predicted," he told her, "though the difference isn't great. An error, I suppose, in my calculations. I can't figure it out. I checked them a dozen times."

"Will it miss us?" she whispered anxiously.

He shrugged. "Too soon to say, beautiful. Not much, at the best. Just a graze, perhaps, instead of the center shot I predicted. Probably not enough to make any difference." His

hard fingers caught her trembling arm and she found comfort in his strength. "Want to have a look?"

Hour by hour the Moon expanded, until it blotted out the stars. Its rays flooded the dead sea-floor with a cold, strange radiance. Its awesome, mountainous disk became the only reality.

Della Rand tried not to look at it. Again and again she left the ports to begin some useless task of sweeping or setting their living quarters in order. But always the appalling spectacle drew her back unwillingly.

Clayton seemed scarcely disturbed. He grinned at her visible apprehension. Sometimes it seemed to her that he felt a strange elation on this terrifying spectacle of cosmic catastrophe.

**S**HE fixed a tray of food in the little galley and brought it to him, but of course neither of them could eat. He finished a new set of observations and his calm, brown fingers solved one more problem on the calculator.

"What—" Della gulped. "What have you found?"

"Things are going to be interesting, beautiful." His green eyes held the old reckless glint. "It's going to miss us, but not by very much. It's going to pass inside the critical distance of four radii."

"What does that mean?"

"Your guess is as good as mine," he replied. "Theory says the Moon should be broken up by tidal stresses, inside the critical distance. The rocky core might go on past, but I imagine most of the ice will be peeled off of it. I think we're going to have a hail-storm, beautiful—a hail-storm like none there ever was before." He swept her into his hard arms and kissed her. "Whatever happens, things are going to be interesting."

They watched the end of a world.

Huge beyond imagination, cruel with mountain-fangs of glaring ice, the Moon filled the southward sky. The battle of cosmic energies made a spectacle such as man had never seen. Della felt numb and ill with dread, but Clayton's greenish eyes were bright and his hard, brown face had a faint, eager smile.

Ice-crags shattered on the Moon. Tidal strains ripped new black fissures across the craters, wider and longer than the snow-filled cracks that once had spread their mysterious web from the meteor-shattered crater named Tycho.

The Moon dissolved into white chaos. The stricken satellite shuddered and spun. Gleaming plumes of debris were flung across the sky's black face, yet the cataclysm had the stately deliberation fitting to a planet's death.

It was like a picture in slow motion. Time was suspended. Eyes ached and necks were cramped and still the watchers dared not look away, for no man had ever seen the death of a world.

They had lost the track of time. Hours must have passed. The rays of the rising Sun picked out the first jagged fragment of the shattered world falling near them. Clayton pointed and caught Della's cold hand.

They watched silently. The cragged missile struck a distant line of dead, brown hills. The dry ocean-bed rocked to the impact. Della's forgotten tray of dishes fell and shattered on the floor.

Steam exploded from the point of impact. White vapor filled the sky and veiled the crumbling Moon.

"Now what will happen?" Della's cold hand was tense in Clayton's. "To the Earth?" Her dark eyes searched his face anxiously. "And to us?"

"Too soon to say, beautiful," Clayton told her. "We'll have to wait and see."

\* \* \* \* \*

**I**T was two days before the ice-battered fleet could return to the white-ringed Earth. By that time the clouds had begun to clear from the lake-jeweled uplands. Still a soft haze veiled the brown mountains that had been so stark and bare.

"That's more than water-vapor," Shane told Admiral Gluck. "The Moon must have caught a part of our lost air as it was drawn between Earth and the Dwarf. Just a fraction, of course, but it might be fairly dense in the old sea-bottoms."

The watch-officer of the *Nemesis* caught a flashing signal light. Dropping to investigate, the rocket found the jagged, brown hull of the disguised *Friendship*, lying on the shore of a new shallow sea.

Della Rand and Clayton came running hand in hand to greet their rescuers. They were breathing fast in the thin air, but they needed no air-suits.

Clayton met Shane with a hard green-eyed grin.

"Congratulations, Captain Clayton," Clayton said. "Good work! You can keep the name, if you like. I have something else." He looked at the dark-eyed girl and the hardness went out of his grin. "We've found something else," he repeated softly. "I have found a gateway and Della has found a dream."

Shane grinned back.

"I'm not using the name. Thanks, anyhow."

Two hours later the rocket dropped through the thinning white ceiling over New Dover. Now the gray dome-city stood upon the end of a long rugged headland. A new sea washed the black cliffs beneath it.

The *Nemesis* landed upon the level top of the dome. The city was unharmed, for the returning atmosphere had cushioned Earth from the hail of icy debris. A cheering crowd surrounded the battered rocket. Shane glimpsed the bare red head of Atlantis Lee and went out to find her.

"Barry!" she called to him.

The sky had cleared and across it soared the white eternal arch of the ring around the Earth. It was man's own arch of victory in a battle with the cosmos.

"See, Barry!" Atlantis Lee turned gently in Shane's hard arms and pointed to the soaring pillars of the double ring. "Aren't they like a splendid gateway?"

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# Calling of the Harp

By **MARIA MORAVSKY**

Author of "The Great Release," "The Hydraponic Monster," etc.



They were found hanging from the same rafter in the tool shed

## Two Men Burn Their Dimensional Bridges Behind Them—and Leave Themselves Hanging in Mid-Air!

**T**OM HARPER was an unimaginative, baldish bank teller. His wife laughed when he said:

"If you insist on giving me something for Father's Day, make it a harp."

It was at the dinner table, a round, old-fashioned table given to the Harpers as a wedding present. For the past few years, Mrs. Harper wanted

to trade it in for a drop-leaf table, but Tom always objected. When pressed for an explanation, he would explain sheepishly:

"I kind of like it. It reminds me of the round table of King Arthur—"

"If you spent as much time thinking about getting ahead as you spend reading about dead people," she scolded, "we wouldn't have to worry

so much about money!"

Her stepson Edward, whom she called "our boy" when everything went well, and "Tom's brat," when he brought home bad marks from school, usually took his father's side. Shrewd for his age, he advised his stepmother in a whisper:

"Let Dad have his harp. Then maybe he'll buy you those summer furs."

Mrs. Harper was a thrifty soul where others were concerned. So next day she went to Sampson's junk shop and asked if, by any chance, they had a second-hand harp. Old Sampson looked around, poking among the used tools, broken-down typewriters, motorless electric pumps and rusty, bottomless bird-cages. In one corner, wedged between a garden rake and a sewing machine table, stood a tarnished harp with several strings missing.

"But it has the sweetest tone," the junkman insisted. "Just listen!"

He twanged the remaining strings. They gave forth a gentle, penetrating sound, like the whisper of angels. Mrs. Harper never heard angels whisper. She did not believe in them anyway, yet the thought occurred to her as the most natural thing in the world. A few days later, when she presented the now regilded and restrung instrument to her husband, she repeated it.

"It's a good harp. It sounds like a whisper of the angels."

Tom Harper looked at her in surprise. His Martha had never been known to express a poetic thought. The comparison seemed oddly alien.

**A**WED with joy at having his wish granted, which happened so seldom in his caged life, Tom touched the strings almost reverently. The harp sang under his fingers.

He was amazed. He never learned to play any musical instrument, yet from the very beginning he was able to strum a simple tune on that second-hand relic. He felt happy. From then on, all his spare time was occupied by the harp. When not in action, it stood in the place of honor in the Harpers' living room. Martha endured it, because the harp was ornamental.

It was exceedingly ornamental. It

had angels and cherubs all over its front bar and many small, weird creatures in between. Those fantastic dwarflets with butterfly wings made Tom think about humming birds which go south, hidden under the wings of wild geese. Carved angels with partially outspread wings seemed to guard the minute stowaways.

It was looking at those queer creatures, carved in bas-relief on the ancient wood that prompted Tom's improvised songs. That is, he thought he was improvising them, until he met Professor Tolison.

"Where did you learn those ancient melodies?" Tolison asked, a glass of home-made wine poised before his open, startled mouth.

"Oh, never mind him, Professor!" Mrs. Harper frowned. Tolison was her new lion, for he had written that prize non-fiction book "Ancient Troubadours." She wanted him to grace her small social gatherings, not waste his time talking to her obscure husband.

"Oh, I just heard them with my soul's ear when looking at those small folk," Tom informed his illustrious guest.

Martha laughed self-consciously.

"Tom uses such outlandish expressions, I do declare. Never mind him, Professor."

But the professor was profoundly interested. From that very evening, he began to frequent the Harper household. To the jealous chagrin of Mrs. Harper, he always asked for Tom.

Those visits usually took place just before dinner, a brief interval of leisure Tom could afford after he returned from his cage in the bank. After dinner, numerous chores waited for him—helping his impudent son with lessons, repairing broken-down household gadgets. Martha always found plenty of chores for her uncomplaining husband.

It was during one of those brief twilights of leisure that an unexpected fact came to life.

Tom and Professor Tolison sat in Harpers' living room, as usual, listening to Tom's improvisations. The days were growing shorter and darkness fell before dinner was ready. Much as he liked to play in the gloom, Tom did not want to appear discour-

teous. Without taking his fingers off the harp's strings, he called out to his guest:

"Will you switch on the light, please? The button is by the door."

Mechanically, still listening to his host's haunting melody, Tolison pressed the switch. But as soon as the lights blazed on, the playing ceased.

"What's the matter?" the professor asked perplexedly. "I just began to enjoy that song. Have you forgotten the rest of it?"

**Y**OUTHFUL inspiration died out in Tom's eyes. Haltingly he passed his fingers along the strings. The harp did not respond. Nothing resulted but a badly played scale.

"I—I seem to have lost it. The melody, I mean."

His new friend began to hum it. Still Tom shook his graying, baldish head.

"No use. I don't seem to recognize it at all. Darn those lights, they hurt my eyes."

Impatiently he switched off the light, trying to soothe his suddenly jarred nerves. Professor Tolison seemed to understand. For awhile the two men sat in silence. Then, ever so gently, Tom's fingers caressed the harp.

A simple, haunting melody filled the darkness once more. With it, strange recollections began to filter through the harpist's brain—a high-ceilinged hall and a tall, richly carved chair. No, not a chair, a throne. On that elaborately carved throne, a man in dark silk costume sat, leaning over a strange, heavy cane, set with precious stones. On his long-haired head was a real crown of wrought-gold lilies, cunningly intertwined.

The king was listening with rapt attention. So was everyone else. Beautiful ladies in colorful brocaded gowns, fair pages with perfumed curls, even somber-faced palace guards—they all were listening to Tom.

"Good little harper you brought with you from that curious land, Your Majesty." It was the guttural voice of a black-clad knight. "But methinks he seems to be dazed by his own gift."

Tom was dazed. He saw everything

as clearly as a technicolor movie, yet he did not understand. Ordinarily his visual memory was poor. He never could describe anything in detail. And here he seemed to be dreaming a picture and a melody.

Suddenly the beautiful dream was shattered by Martha's simpering voice.

"Why do you two sit in the dark? Has the bulb burned out?"

For the life of him, Tom would not confess the strange enchantment of the gloom. He hated to stop it. Glibly he lied:

"Yes, the bulb in that bridge lamp."

"Wait, I'll screw in another."

"This is the spare one," he lied desperately. "We are out of them now. Let it be, Martha. Our guest doesn't object."

Curious, how sure he was of that. He felt as if the professor could share and understand the weird enchantment which the harp had created in the darkness.

Martha had her own rigid ideas about hospitality. She came back presently, carrying an old, seven-armed candlestick.

"Have you any matches, Professor?" she asked her lion. "Tom doesn't smoke, you know."

"Certainly, madam."

The professor's voice sounded different, younger and more resonant in the dark. But this did not surprise Tom. He, too, felt younger while the vision went on. He heard a match being struck, then a spurt of feeble flame. With a resigned sigh he released the harp. Now it would be of no use. . . .

**H**E closed his tired eyes against the painful sensation of sudden light. He hoped Martha would go and leave him alone with his lost dream.

"Why, what's this—a masquerade?" she cried out. "Tom, you wretch, you must have been rehearsing for Miami's anniversary in Bayfront Park! And you, too, Professor? Neither of you whispered a word of it to me, you bad boys!"

Tom opened his eyes again and was amazed at seeing his dream wavering in the candlelight, but still definitely present. It was Martha who

seemed to recede. Soon she disappeared altogether, gesticulating wildly.

"So it doesn't go in candlelight," his friend stated warmly.

His friend! Tom realized with happy finality how good a friend was young Tolison. Yes, the professor was now quite young and he wore an outlandish, dark costume with a tall, peaked hat. He was not an American professor any longer. He was . . . an alchemist.

"How about that gold you promised us?" the king demanded "Didn't the experiment turn out well? You had enough paraphernalia. We need gold for the new crusade."

"Your Majesty must give me more time, for the alchemy of gold is a tedious and long thing," Tolison mumbled, imploringly looking at his friend the harper.

"Your Majesty never heard this one," Tom interrupted boldly. "It was composed in your honor."

He struck the strings. The majestic melody grew in volume and sweetness. The king's anger calmed down.

"It flies on the wings of seraphs," the courtiers murmured. "What a harper! My Lord, what a harper!"

Tom felt exalted. All the memory of his tedious real job fell from him like a worn-out garment. He was no longer an underpaid bank teller. He had no shrew of a wife, no antagonistic son, no work-cage to imprison him. The only bars he knew now were the golden bars of music.

"Tom, you fibber, I did find another bulb!"

The triumphant, strident voice shattered it all. In a moment the lights were switched on and the enchantment broken.

"My, you two are quick-change artists," Martha simpered. "When I left you, you had some colorful rags on. You even rigged up some sort of scenery. And now everything is normal again. Why, Professor, I did not know you were an actor, too."

Tom hated that alien, jabbering woman. Could she be his wife? In his previous life, centuries ago, he never knew her. He had been free and happy then. A king's favorite

troubadour. Not Tom Harper, the prosaic bank teller, but Tom the Harper. Playing a harp was no hobby, to escape from the boredom of prosaically ordered living. In that glorious medieval past, it was his profession, his calling.

It seemed to him that the newly found ancient friend of his former reincarnation also disliked his wife. Professor Andrew Tolison, always so meticulously polite, was speaking with unconcealed impatience.

"We were not rehearsing theatricals. You imagined all that, Mrs. Harper."

He stroked his pointed Vandyke and this artful, small beard inexplicably reminded Tom of the pointed hat Andrew had worn in the past.

"I did not imagine it!" Martha screeched, insulted. "Do you take me for a lunatic?"

**M**RS. HARPER'S anger could have been explained only by the undercurrent of animosity she felt in both men. Tom tried to pacify her, half-explaining the truth.

"An illusion, my dear. Not an optical one, but a sort of confusion between the past and present."

"Drivel. I don't understand you. Get out of here and bring me a pound of butter from the store. We need some for dinner. Are you staying to dinner, Professor?"

"I'd rather not." Andrew bowed politely, regaining his composure. "I have some pressing correspondence to answer."

After he left, Martha exploded in full fury.

"Look here, Tom Harper! I invited that stuffy professor here first. He was my find. I gave a party in his honor. The neighbors talked about it for weeks afterward. And you stole him from me. Now he's your pal and won't even talk to me as he used to."

"Martha, you're not jealous, are you? If you are, I'll give you back your lion."

Even as he said it, he knew that he was lying. He could not release Andrew's affection any more than he could forget the dream of the ancient past. His dream had taken too strong

a hold on him and Andrew Tolison.

From then on, he and the professor were as inseparable as two men working for a living could be. All their leisure they spent together, discussing the mysterious vision and slipping into it whenever the door opened on the past.

They sat in the small tool shed in the backyard, a few paces from the house. To avoid being interrupted by modern lights, they held their fantastic musical sessions there, for the shed was not wired for electricity.

"It's not real," the professor stated flatly. "It's a form of escape. We've been so intent on medieval history that both of us constructed the same dream. We don't even know the king's name or the century. It's a wishful escape from the less interesting present."

"I don't think so," Tom objected, trying to organize his vague thoughts. "I've been reading about relativity. The dimensions exist simultaneously. That is, time is more like a coil than a stream. I don't know who made this harp, but it certainly isn't an ordinary one. Without taking a single lesson in my life, I can play it like a master. Well, my idea is that the coils in time are usually stable, but certain things—like this harp—can make bridges between the past, present and future. I mean, it's like squeezing the coils together and we can step from one to another."

"That isn't very clear," Tolison said thoughtfully, "but it's a good start. The stimulus of sound definitely affects more than mere auditory nerves, while certain evidence has established the relative instability of the so-called present. A number of people simply refuse to remain in their era. What caused the temporal migration, usually mental but sometimes physical, has only been hinted at. However, there is no reason why sound—"

"Oh, here you are!" cried Mrs. Harper. "You boys aren't very particular about where you talk. Well, if you insist on being eccentric, you may as well be comfortable. I'm having this shack wired for lights."

Her voice dripped honey. She had

learned that the professor's book had been sold to the movies. The two friends looked at each other with mute dismay. After Martha left in a huff, without being thanked, Andrew winked.

"Just as well." He found a measure of comfort in the situation. "If I go back now, the old king will demand his alchemic gold again and you know I can't produce it. It might mean jail . . . or worse."

**T**HE sky outside the shed darkened. Sudden storm clouds brought the swiftly deepening twilight. Instinctively Tom touched the harp, which stood in the corner next to a saw-horse. The strings uttered a strange, plaintive call.

"Don't!" Andrew warned. "I feel a premonition of evil."

But it was too late. Faster than the flicker of a film, the two friends found themselves in a medieval dungeon. They had no time to orientate themselves in their new surroundings. A heavy key grated in the lock and a barred door swung back on squeaky hinges.

"You have half an hour of grace. After you say good-by to your friend the harper, the priest will come. After that—" The jailer made an eloquent gesture, indicating his throat.

"What shall we do?" the Professor moaned. "We are caught in the trap of our own making. After all, that other life was not so bad. We were Americans. They could not execute us without a fair trial, like here. Our president couldn't say: '*L'etat, c'est moi.*' Even with Europe at war and starving, we had our jobs, such as they were, and enough to eat. You had a lovely house."

"No time for reminiscing!" Tom interrupted. "Hear the clock strike?"

The friends cocked their ears. Strangely enough, it was not a sound one might have expected, the tolling of the church clock, magnified by the dungeon's echo. They heard a rather reedy sound, such as could be heard daily from their local radio station, when it announced:

"At the signal, it will be ten o'clock."



Oh, how they longed for the modern announcer's voice! Back to civilization, out of that clammy dungeon, with drops of selitra faintly gleaming on its walls and the rats scuttling and squeaking in the shadowy corners. Romance of the past? In America, Tom remembered with sharp nostalgia, even jails had running water and central heating.

"Look here, why did you get yourself into this mess with your futile dreaming?" he asked his friend, as if continuing a peaceful, purely theoretical argument. "You didn't need any escape. You didn't grow middle-aged and paunchy, like me. You weren't in a rut. You had fame and money."

The condemned alchemist laughed mirthlessly, shaking his emaciated wrists, which were chained to the wall.

"Yes, my book sold to the movies—to be made into a short educational feature. I won't even recognize it after it's made. The money already is appropriated by my creditors. Mrs. Tolison is rather extravagant, you know. Fame? I was given plenty of publicity, but just how many non-specialists read my book? Who really cares for ancient melodies, except a few dreamy fools like you and me?"

"Your time is up," the jailer's voice boomed in the gloom.

"You can't hang him!" Tom argued. "He couldn't make gold. Besides, he is an American. He doesn't even live in France. It's all a dream. France doesn't even exist any longer. Germany conquered it."

The jailer laughed, contemptuously and menacingly.

"France doesn't exist? Then what is this? *Voilà!*" He passed his hairy hand over the incredibly soiled sleeve. "Silk! Royal silk. I get one of the king's own discarded shirts every time a traitor dies."

**I**N terror the prisoners realized that the jailer was also the hangman. He continued to laugh raucously.

"His Majesty wants to question you himself. The priest couldn't come. He was poisoned this morning—

quietly, for heresy. His Majesty wants to know . . . I'll report you, whippersnapper! talking high treason. France doesn't exist, eh? France is conquered?" Suddenly he grew straight, sobering. He ceased to cackle. "France cannot be conquered, only defeated. There is the difference. French spirit, conquered? Imagine you, a vagabond minstrel, saying such things! You may hang, too, when I tell His Majesty."

"What is it you wish to tell us?" asked the repulsive, oily voice of a man.

A cane, thumping over the stone floor, brought in more menace. How did he enter? Why did he wear the dark silks of the king? He was not the king who had condemned the young alchemist.

"The king is dead, long live the king," mumbled the jailer, blinking.

"Quick changes here," the alchemist complained. "Why can't I remember the century we are about to die in? I know my history and yet, in these surroundings, I always grow vague. Well, that part is good. It means we are just dreaming."

But the oiled rope, which was being adjusted about his neck, did not feel like a dream. The light of the leaded-glass lantern, which now flickered in the dungeon as if suffocating for the want of air, picked out the stooping figure of an evilly smiling man in damp royal garments. Or were they damp? "Blood on black doesn't show," Tom thought.

"Well, are you going to tell us your secret of gold transmuting?" The new king was enunciating his words carefully, as if unsure of his speech. With only a trace of surprise, for nothing could surprise them much now, the two friends noticed that the king was drunk.

"Permit me, Your Majesty," the hangman said solicitously, picking something off the royal sleeve and crushing the thing with a faint cracking sound between his two dirty fingernails.

"You have good eyes, Antoine," the king complimented him, hiccupping, "to be able to pick up vermin in this gloom."

"Escape into the age of romance!" Andrew remarked with an ironic grimace.

"This one is a traitor, too, Your Majesty," Antoine croaked insistently. "Now may I have two of your old garments?"

"Yes, if you hang them properly. Is the other one an unsuccessful alchemist, too?"

"No, Your Majesty. He is Tom the harper, a member of your own court."

"You mean the court of my predecessor. I will have none of Louis' favorites. Make another noose quickly!"

**N**OW the drops of selitra seemed to seep into Tom's very heart. Mutely he clasped his friend's hand, which felt pitifully thin in his own. A few more torturous minutes and all would be over. He saw a huge iron hook above his head. Weren't there public executions in troubled times like these? What year was it, anyhow?

As he was straining his memory, he heard a strange, distant hum that sounded oddly familiar. It was not the noise a carriage might make, nor the galloping of post horses. It was the humming of an approaching car.

"We are back in the present!" he shouted.

Antoine smiled grimly. "Would the Holy Pope approve of hanging an insane man? This one is talking gibberish."

He looked questioningly at the sovereign.

"We will ask him afterwards." The new king laughed vulgarly at his own ghoulish joke.

Tom saw the executioner uncoil another piece of rope. He refused to believe that the scene was real. It was some kind of trance, or was it the beer they had drunk just before—before what?

Although he could not think coherently, he still could hear clearly.

Even with the noose already around his throat, he heard that welcome hum, which grew in volume. He actually heard the faint honking of the horn, coming to him from another century. In that century he had not been an adventurous young troubadour, but a staid clerk in a gilded cage.

He remembered his baldish head, his humdrum job, his shrew of a wife. He submitted, no longer wishing to struggle against the tightening noose.

"Where do yuh want us to put those fixtures?" he heard a loud, nasal voice in another language.

"Why, this barbarian doesn't speak French!" he thought with the mild, indifferent surprise of a drowning man who has given up struggling.

"Store them in the tool house. That's the place we're wiring for electricity. Have you a flashlight?"

Simultaneously, as Tom recognized Martha's shrill voice, a powerful stream of electric light illuminated the dungeon. He wanted to shout for joy, but no sound came from his restricted throat.

The noose was already too tight. . . .

\* \* \* \* \*

**A** DELIVERY man from Maxim's Department Store found them hanging from the same rafter in the unfinished tool shed. The coroner's verdict was suicide. The local papers played it up big, though nobody could explain why two moderately successful friends, a rising, still young writer and a happily married, middle-aged bank teller, should commit suicide together.

But even stranger was the greased rope that had obviously been made by hand. In addition, both men were clad in modern clothes above the waist, with singlets and buskins below.

Maxim advertised a special in electrical fixtures on the same page in the newspaper that carried their obituaries.

THE MAGICIAN OF MARS, a Complete Book-Length Novel by EDMOND HAMILTON, Featured in the Summer Issue of Our Companion Magazine CAPTAIN FUTURE — Now on Sale 15c at All Stands

# Thrills in SCIENCE

Thumbnail Sketches of Great Men and Achievements

By MORT WEISINGER

## BLOOD WILL TELL

**T**HE tall, gray-haired sleuth polished his magnifying glass until it gleamed crystal clear and trained it upon the *corpus delicti* before him. He squinted his eyes at the enlarged image the glass brought him, breathed a hopeful sigh. Perhaps this time, after studying all the evidence, he would be able to solve the baffling mystery.

It was a strange *corpus delicti* that confronted the sleuth—the body of a dead wasp. It lay there on the table before him, locked in the grip of rigor mortis. Yet it promised a possible solution to the perplexing enigma that had been mystifying the tall man.

The sleuth glanced to his right. Still stranger *corpus delicti* were huddled in a corner. Dead flies; mice; chicks. Curious corpses in a curious case.

For the tall, gray-haired sleuth was William Harvey, a scientific Sherlock Holmes who was trying to solve the biological mystery of the Middle Ages. And, like the fictional character to appear centuries later, he dealt with magnifying glasses and blood spots.

The riddle that William Harvey was determined to solve was the unknown action of the human heart. For the past thousands of years everyone had believed that the breath of life was formed in the heart from the breath which we take into our lungs. They believed that when a person was "down-hearted" it was because the heart was not making enough vital spirits. And when a person felt "high-hearted," it was because his heart was being swelled with the abundance of "good spirits" that it was making.

William Harvey, doctor to King James I, scoffed at this theory. By various experiments he was able to prove that this theory of the heart was utterly wrong. Then he set himself the tremendous task of finding out what the heart really does. In his own words, he proceeded "to contemplate the motion of the heart and arteries, not only in man but in all animals and insects that have hearts."

Harvey dropped his magnifying glass, picked up a sharp blade and neatly split the dead wasp in two. The cleavage exposed the insect's small heart. It was still now, its minute pulsations arrested for all time by death.

The heart! The most mysterious organ

in all living creatures. It was the one structure in all breathing entities that never slept. It began its action with the first moment of life. When that action stopped it meant—death.

Harvey stared at the insect's heart, so



William Harvey

like the hearts of the many other organisms he had studied. What was the function of this strange multi-chambered organ? Why was it that a knife-thrust through this vital organ always resulted in quick death? Why was the heart the key organ in everything that crawled the surface of the earth?

The English biologist attacked the problem in practical, scientific fashion, like a criminologist indicting Nature and weighing the different values in a chain of clues. He used his magnifying glass to show him the heart beating in animals and insects. And gradually a theory began coalescing within his mind. . . .

The day after Harvey observed the heart of the wasp, he studied a developing egg—that is, a developing chicken—and saw the tiny heart beating in the beginnings of the chicken, as they are seen in the egg when the hen has been hatching it for about five days.

Harvey studied the tiny heart for hours, and his observations drove him toward one conclusion—that the heart drives the blood. A simple fact to every school child of today, yes. But to a scientist in the year 1620 it was a revelation as startling as the secret of life itself.

And now that Harvey knew that the heart drives the blood, his scientific curiosity became whetted all the more. Where did it drive the blood? And how?

The scientific sleuth redoubled his energies. The great enigma of the heart was nearing unraveling. But now he required a new kind of *corpus delicti*—the body of a human being!

The king's doctor had more than ordinary privileges, and cadavers were supplied Harvey in the name of science. And now a new mystery presented itself. Harvey studied the action of the heart in the human body and the arrangement of its valves showed him that the blood could only pass through the heart in one direction.

Harvey made rapid calculations. If the left ventricle holds 2 ounces and beats 72 times a minute, it will pump to the body every hour 8,640 ounces of blood, or more than three times the weight of a man!

Where did all this blood go? Moreover, where was its source, Harvey pondered. The two riddles were unfathomable. There had to be an answer, Harvey's trained mind

told him. What was it?

Harvey conjectured about this problem for days. Then one night, just as he was about to fall asleep, he saw the explanation. It was fantastic in the light of the teachings of the day—but Harvey knew it was the only logical solution to the whole puzzle. His theory was that the same blood passed through the heart again and again. The heart's function in the living organism was to circulate the blood!

Harvey jumped out of bed, grabbed a pen and wrote: "It is absolutely necessary to conclude that the blood in the animal body is impelled in a circle, and is in a state of ceaseless motion; that this is the act or function which the heart performs by means of its pulses, and it is the sole end of the motion and contraction of the heart."

Thus did William Harvey arrive at his thrilling discovery of the circulation of the blood, by which he is famous for all time. So far as his own time was concerned, he had the common fate of great reformers and thinkers, and all the physicians were against his opinion and envied him. Such was the reward of this man for one of the greatest discoveries of the human mind.

Harvey never saw the tiny vessels which the blood passes from the arteries to the veins on its way back to the heart. Four years after his death these vessels were seen in the lung of a frog through the microscope. Nowadays thousands of people have seen magnified living pictures, showing the microscopic blood-cells rushing through the little tubes in the tail of a tadpole.

But the discoverer of the circulation of the blood could see these tubes only by the eye of faith!

## KING OF INVENTORS

**G**RANVILLE BIGBY, the rotund president of the Liverpool Shipping Company, smiled benignly at his visitor in the manner of a fat spider contemplating a fly within reach.

"Ah, good day, Mr. Parsons," the great executive said affably. "My secretary tells me you—er, would like to invest ten thousand pounds in my company."

Charles Parsons, the fly, suddenly shook off the sticky strands of Granville Bigby's hospitality.

"I'll come right to the point," he told the big official. "I haven't got ten thousand pounds. I haven't even got ten pounds. I know you're an important man. I told your secretary I had money to invest in your firm because I knew that was the only way I could obtain an interview with you. I have an invention that will revolutionize the shipping industry. If you will grant me ten minutes—"

President Bigby cut his visitor short. "Of all the confounded impudence," he blazed. "Get out of my office. I have no time for crack-brained inventors."

Charles Parsons pointed to a wooden model of a schooner that rested on Bigby's desk.

"Maybe I haven't any money, Mr. Bigby," he said, "but I do have something to invest in your company. It's a machine

that will enable all your ships to go faster, save on fuel. I've called it a turbine. Here, let me show you the blueprints—"

"Rot!" exclaimed Granville Bigby. "I don't want to see any blueprints. Get out, now, before I have you thrown out!"

Charles Parsons took the hint. He walked out of the offices of the Liverpool Shipping Company, the roll of blueprints under his arm. This was getting to be a familiar story. For months now he had been tramping from office to office, always hoping for a chance to talk about his wonderful invention, the turbine. It was a development of the steam engine that drove electric generators on a ship, thus allowing for considerably more power than the ordinary steam engines of the day yielded.

But everywhere the young inventor had

met with rebuffs. Shipping magnates refused to listen to him. Those that did were incredulous. How could anything propel a ship faster than the steam engine, they asked. And so Charles Parsons was hurled out of the best offices in England, his blueprints tossed after him.

Leaving the offices of the Liverpool Shipping Company, Parsons walked the streets, headed toward the docks. The wind whipped the spray of the waters over his face as he stood at the pier's edge. Out in the distance he could see the smokestacks of the big steamships that made England the mistress of the seas.

Charles Parsons was a loyal Englishman, and he choked up with pride as he beheld the majestic retinue of ships streaming into harbor from every port in the world. He saw the ships like beads of some gigantic necklace that girdled the globe, a necklace that was a fitting ornament for Britannia, queen of the waves.

"She rules the waves today," Parsons told himself. "But ten years from now—will she maintain that reign? Suppose some other country develops an invention like mine. England will not be supreme on the high seas!"

Parsons hung around the docks the rest of the day, watching the ships unload cargoes obtained from colonies in Africa and the South Seas. Darkness soon came, and Parsons pulled up his collar to keep out the cold that came with it. He gave a last look at the ship, turned to go.

As the youthful inventor turned about, he noticed an old, small ship, that had seen better days, anchored to the dock. There was a sign nailed to the cabin of the ship: For Sale—Cheap. Inquire of Frank Selby.

"She's probably so old the rats have left her months ago," Parsons muttered to himself. "And there are so many barnacles on her hull she'll sink the minute she's afloat. But if she's cheap I can buy her. I'll raise the money somehow from my friends. And then—and then I'll show Mr. Granville Bigby and the others a thing or two!"

Several years passed by after Charles Parsons bought the battered ship that was almost a derelict. It was 1897, and England was celebrating Queen Victoria's sixtieth year on the throne. All the country's leading notables had journeyed to Spithead, where a colorful review of Great Britain's mighty fleet was being staged as the chief tribute to the aged monarch.

Martial music filled the air as stately warships sailed down the harbor in orderly formation, past the reviewing stands. Thousands cheered as the ships cruised by, their gaily colored flags fluttering in the breeze. And as each man o' war passed the Queen's stand, the midshipmen aboard fired a salute in honor of her majesty. It was a thrilling sight, and the smoke from the guns had hardly drifted away, to mingle with the smoke from the ship's smokestacks, when a second salute was fired.

Suddenly a gasp escaped the throats of the watching thousands. A small, pygmy vessel had entered the harbor. Blithely ignoring the dozens of warships, the little

craft darted in and out among the giant vessels, like a porpoise playing tag with a school of clumsy whales. It circled each ship in the twinkling of an eye, dashed about recklessly, and pirouetted in madcap fashion.

Up in the reviewing stand, the admiral of the British fleet turned to an associate.

"Unofficial crafts aren't allowed off Spithead," the admiral snapped. "Send out a destroyer after that ship."

The associate saluted, did as he was told. A few minutes later a fast destroyer steamed away after the little craft. But pursuit was impossible. The mite of a boat fled before the oncoming destroyer like a rabbit before a turtle. It scurried ahead, waited for the destroyer to come near it, then pivoted swiftly and headed back at a furious pace. When the big destroyer had turned around, the little ship rushed by it once again, knifing through the waters like a hot blade slicing through butter.

Up in the stands, a stout, well-dressed man, Granville Bigby by name, followed the little ship's bee-like maneuvers with a pair of binoculars. He focused the glasses at the ship's prow, read a name painted there. "S.S. *Turbania*," he murmured to



Charles Parsons

himself. "Turbania? Sounds familiar. Where the devil have I heard that word before?"

The S.S. *Turbania* put on a solo exhibition that afternoon that made chaos out of the British armada. The monster crafts, their impressive formation a thing of the past, smoked back to port, the little boat piloting the way.

Aboard the *Turbania*, Charles Parsons, the captain, grinned at the two men that composed the crew.

"All right, boys," he said. "We're nearing Her Majesty's reviewing stand. Ready!"

The two men sprang into action. A moment later the thousands of spectators on shore saw the British flag being raised up the mast of the little mystery craft. While not understanding what it was all about, but sensing the drama of the incident, the thousands broke into a loud cheer.

Charles Parsons sailed into port before the Queen's stand, a smile of thrilling victory lighting his face. He had showed them all with his turbine. Sure, there was

fat Bigby there in the stand, behind Queen Victoria. Parsons felt like thumbing his nose at him.

Instead, he bowed before the queen.

"The *S.S. Turbania* belongs to Her Majesty," he said simply. "It's an old ship that I rebuilt myself and equipped with a new means of power, a turbine. My invention is England's—and long may she rule the waves!"

England took the daring inventor's turbine and made him Sir Charles Parsons. In 1904 Sir Parsons saw the first great turbine liners under construction. Today the *Queen Mary* possesses turbines supplying the gigantic ship with 200,000 horsepower.

Sir Charles Powers, king among inventors, had helped make England queen of the seas!

## THE GENIE OF THE BOTTLE

**E**DOUARD BENEDICTUS' physiochemical laboratory was just like any other colleague's workshop. It featured the usual array of test-tubes, retorts and beakers. Transparent flasks containing amber fluids and viscous potions lined a pair of shelves on the wall, the two rows resembling a set of nicotine-stained dragon's teeth.

In the rear of the laboratory, a large cabinet, the repository of hundreds of brightly colored bottles of all dimensions, extended eight feet from the floor. Each of the bottles had a little white label on it, and on each label was neatly inscribed, in black ink, chemical symbols and dates. It was all very neat and efficient, as though the scientist who ran this laboratory treated his work like a business.

Edouard Benedictus, the Frenchman in charge of this business that translated formulae into elixirs, was now preparing to close up shop. He had worked hard all day, and it was late. As a matter of fact, he would have to hurry. For he had a date that evening with a young lady. And he wanted to keep his appointment on time. Gentlemen don't keep ladies waiting.

Edouard's fingers fairly flew as they raced over the table, collecting bottles and beakers, pouring the contents of some of them down the drain. Automatically he shut off the flow of gas that had been going into the Bunsen burner. Then he returned to the sink, to turn on the faucet and rinse a few bottles of the syrupy liquid they had recently contained.

This job finished, the French chemist inverted the bottles on the table, allowing them to dry. Then he hurried over to a corner of the laboratory, took off his white coat, and prepared to dress.

In a thrice Benedictus was dressed, shaved. He looked at himself in the mirror, gave his tie a final flip, knotted it, and was satisfied with what he saw. He reached for his hat, was about to leave the laboratory for the day, when his casual glance caught a bottle he had forgotten to file away in his haste.

Benedictus turned back to restore it to its proper place in the tall cabinet. And thus he brought about the first in a series of events that was to result in an astounding contribution to science.

For the Frenchman, meticulous in his habits, was not prone to leave the laboratory with even the slightest object out of order. Aware of the fact that he was already late for his engagement, he stifed an oath and raced back for the bottle. He swiftly scanned the label, noted that it belonged on the topmost shelf of the cabinet.

Edouard stepped on a chair beside the cabinet, extended his arm and conveyed the bottle to its proper niche. As he did so,

his hand brushed slightly against a neighboring bottle. Too quick for Benedictus to do anything about it, the adjacent bottle, catapulted by his careless touch, toppled downward. A split second later he heard the thing smash below.

From high up on his perch, Benedictus lowered his gaze. He expected to see the floor strewn with a thousand glass splinters and shards. But miracle of miracles—the bottle was unbroken!

Bewildered, Benedictus got off the chair and picked up the bottle that had crashed to the floor. It was completely intact, but star-cracked inside like Bohemian crystal. Not a splinter of glass was detached from the bottle he had accidentally dislodged from the shelf. It was as though some secret genie inside the bottle had frozen the walls at the exact moment of impact, thus protecting its abode.

Benedictus studied the spider-webbed bottle, unable to account for the phenomenon that had preserved its shape. Then his scientific mind began to function. A few words on the bottle's label gave him all the clues he needed to arrive at a rational explanation for the miracle of its unbroken state.

Fifteen years before, in 1888, this bottle had contained a mixture of alcohol, ether, acetone, amyl acetate, and trinitrocellulose. Time had sped by and the mixture had completely evaporated, coating the inside with a celluloid-like enamel. It had been this strong interior support alone that had prevented the bottle from shattering. The genie of the bottle was merely a skin of cellulose nitrate!

Amused by the incident, Benedictus filed the facts away in his mind and the bottle in the cabinet, and rushed off to keep his date. The unbroken bottle was just another laboratory oddity. Interesting, but unimportant.

A few days later Edouard was strolling along the boulevard, watching the traffic go by, when his heart suddenly gave a great

(Concluded on page 129)

# CROSSROADS OF THE UNIVERSE

By **WILLIAM MORRISON**

*Author of "Plastic Pigskin Daze," "Bad Medicine," etc.*



McGovern grabbed a vase, hurled it at the hideous Djurn

**I**T was in the main Martian Pavilion that McGovern had seen the girl just before she disappeared. He had caught a single glimpse of the blond hair, the pretty oval face that he had imagined smiled at him, the trim figure. Then she had stepped around a corner and apparently ceased to exist.

When he had reached the same cor-

**All's Fun at the Interplanetary Fair—Until McGovern Uncovers an Exhibit that Spins Him Onto a Universal Merry-Go-Round!**

ner and looked for her, he had found nothing but gaping Mercurians and a heavy, slow-moving crowd from Jupiter.

He scowled. He was a tall man, with an Irishman's susceptibility to female beauty. Moreover, he had liked the looks of that girl. He cast a searching glance about, wondering where she had gone.

There was plenty to see in the main Martian exhibits, but McGovern no longer had eyes for them.

This second Universal Interplanetary Fair had taken a decade to prepare for. The results had been worth the effort, though. In view of the intense rivalry among the major planets for the honor of holding it, the Fair had been constructed on a new synthetic planet, Neonia. It had been made by lumping together the uninhabited planetoids, a useless satellite of Neptune, and a few million cubic miles of territory conceded by Uranus and Jupiter. The whole surface of Neonia was covered with exhibits.

McGovern turned away indifferently from a display of sulfur-dioxide-breathing Martian plants. His eyes began to scan the corridor again.

There had been an interval of perhaps ten seconds between the moment the girl had turned the corner and the moment he had discovered that she was gone. She had been walking slowly, so she could not have reached the end of the corridor. She might have turned off down one of the side doors, but these were distinctly marked "For Martians Only."

McGovern caught his breath. Perhaps she had not vanished voluntarily. Perhaps she had been kidnapped!

The Mercurians and the crowd from Jupiter were highly interested in the exhibits. Almost anything could happen in the corridor itself, practically in front of their eyes, without their being the wiser.

**M**CGOVERN made up his mind. He opened the door nearest the corner and stepped into the forbidden passage. He stood there hesitating a moment, and then his nostrils twitched.

A strange scent lingered in the air, the heavy catlike odor of Martians of

the Chaumuk type. They were much like Earthmen in form, but somewhat shorter, with tough, scale-covered, leathery skin and flat, almost browless skulls. They were short of brains, but physically powerful and quick to act. They must have waited in the corridor for several minutes for their odor to be still so strong.

McGovern began to walk soundlessly along the corridor. At a turning, he paused and his eyes fell on a shred of cloth. It had evidently been stepped on, torn from a piece of clothing by a careless foot. It was made of vegetable fiber. Only some of the Earth people still had a sentimental preference for vegetable fiber instead of plastics. The girl had been brought in this direction.

A Chaumuk came past him, looked at him without interest and vanished around a turn. The corridor was forbidden to Earthmen, but the Chaumuk's wits were too sluggish for him to remember that fact at the moment, or else he was indifferent. Now if McGovern were to make an appearance at a moment when the Chaumuks were holding their religious ceremony—

He shrugged. He would be torn to pieces. It was really for his own protection that he was forbidden to venture where he had now so boldly thrust himself.

Another Chaumuk came along from the same direction as the first one, stared at McGovern. He seemed on the point of saying something and then changed his mind.

McGovern began to walk toward the door from which the Chaumuk had emerged. The Chaumuk glared after him, and shouted something that McGovern by its harsh, forbidding sound, knew meant, "Forbidden!" At that moment the girl's scream reached his ears!

McGovern threw open the door and plunged into a huge, vaulted chamber. Directly ahead were six Chaumuks, staring at him as if paralyzed. One of them had been in the act of adjusting the girl's gag when it had slipped, and the girl had made use of the opportunity to scream.

A single glance showed McGovern that she was bound tightly, made helpless. But it was not the girl on whom



McGovern riveted his attention. He looked at the Djurn, whose cold, unwinking eyes cast their malignant rays at the intruder.

A soft, globular head was set at one end of a small, squashy, horizontal body. The body was lifted from the floor by numerous thin legs that resembled the flagellae of a protozoan more than they did the legs of a vertebrate. Four pairs of arms lay folded behind the head. Inside the head was a huge brain, quick, keen and remorseless. The Djurns were the real rulers of Mars, the Chaumuks only their servants.

**H**E tore his eyes away. He was unarmed and it was unsafe for him to stand that glance for too long. Already the Chaumuks were coming out of their momentary trance and advancing toward him.

He grabbed an ornamented vase that stood on a table at his right. His arm drew back and then lashed forward. The vase struck the Djurn square on the head and smashed with a clatter.

The Djurn uttered a hideous groan and collapsed, blood streaking down his face. The Chaumuks, their original purpose forgotten, hastened to him. They had been taught to attend to their master's wants from his childhood. Now they emitted hoarse cries of grief as they saw him lying wounded.

McGovern sprang toward the girl, seized her in his arms. He was running back the way he had come, toward the main hall of the Martian exhibit, before he heard a shout behind him. The Djurn had recovered from the first shock of pain and fright, and was giving frantic orders. The Chaumuks left him, came pattering swiftly after McGovern.

The weight of the girl was a handicap, but the sight of the Chaumuks behind him spurred him on. McGovern bounded ahead with huge strides. He almost reached the entrance to the main hall.

A savage dive by the leading Chaumuk sent the girl spinning from his arms. McGovern was flung reeling dizzily into the main hall. An astounded Venusian who had been inspecting the sulfur-dioxide plant display drew away hastily. Another Chaumuk caught the

girl before she fell and rushed back with her.

McGovern, his arms free, steadied himself against a wall and prepared to fight off the others. But there was a sharp, agitated command from the Djurn, who had followed his servants on unsteady flagellae. They all turned and moved silently back to the forbidden passage. The door closed behind them.

When McGovern tried it again, it was locked. He raged. The group from Jupiter was still there. With their vast, unwieldy strength, they could have turned the tide of battle. But they had been too slow-witted to understand what the fighting was about. A Neonian policeman, originally from Venus, made his appearance.

"What's been going on here?" he demanded.

"I've been giving an exhibition of tumbling," McGovern snapped. "And I'd like to see the chief of the Fair Interplanetary Police about it."

"He's busy," the policeman said doubtfully.

"He always is, but what I've got to say is important. Will you call a police plane?"

The policeman shrugged. "There's no harm in that."

He blew the ultra-sonic whistle he carried. The whistle's shriek was too high-pitched to be audible to human ears, but the headquarters response was immediate. A compact six-seater appeared, and McGovern got in.

**T**HE plane was electric-powered, like all the official planes at the Universal Fair, drawing its energy from a thin cable attached to a guide rail. It moved at an even height only a couple of hundred feet off the ground, along a path as definite as if tracks had been laid out for it in the air. Its speed was limited to a hundred miles an hour. Ten minutes later they reached police headquarters.

The chief of the Fair Interplanetary Police was a Mercurian, tall, shrewd and hard-boiled. He listened to what McGovern had to tell him without batting an eye.

"It's not the first kidnaping at the Fair," he admitted. "They've been go-

ing on at the rate of two or three a day for the past month. This is the first one in the main Martian Pavilion, though."

"What are the police doing about it?" McGovern demanded.

The chief looked irritated.

"There isn't much we can do. Almost all the people who have been snatched have been here by themselves for a vacation. Most of the time we don't know they're gone until two or three days after they've disappeared, when the hotel manager calls us up. You have no idea what a fine set-up this place is for a kidnaping gang. That girl's case is the earliest report we've ever had."

"You've certainly wasted plenty of time," said McGovern bitterly.

The chief shook his head and smiled.

"Not as much as you think. I had a couple of detectives near the Martian grounds listen in to our conversation at the start, without letting you know. They're off to the main pavilion right now. They're Earthmen, a couple of the best on my force, I don't think they'll do any good. Djurn and his Chaumuks must be pretty far away by now."

"They can't have gone far!" McGovern protested.

"That's where you're wrong. People have been disappearing all over Neonia. This is the first report to tie the gang up with the Martian Pavilion. You know they're moving exhibits all over the place. There wouldn't be any more trouble carting people around in crates."

"I suppose not. But what are these kidnapings for—ransom?"

The chief stopped smiling.

"I'm afraid not. Some of those who have disappeared were none too well off. No. I think it's more serious than that."

**M**CGOVERN could feel the sweat start on his forehead.

"You mean—"

"Experimental purposes. The victims have been all Earth people, mostly women. We've had information of a group on Mars using people for illegal experiments, but we've never had a hint of the ringleaders. Lately we heard that they had transferred operations to

some other planet. Jupiter's a big place, and most of the Jovians are slow and dull. It might be there, but we don't know."

"What are you doing about it?"

"Well, we can't search every space ship that lands on Neonia. There are too many. But we have been examining all those that go to Jupiter. No luck, so far."

"Then if they haven't succeeded in smuggling the people out—"

"The people who were kidnaped are still on the planet."

A light flickered on the desk. The chief nodded.

"We've searched the main Martian Pavilion and the neighboring pavilions," a voice squeaked. "No trace of the girl."

"Hear that?" said the chief. "We'll keep looking, but it's a slow business."

McGovern left. When he thought of the girl in the clutches of the Djurn and his Chaumuks, he felt sick. He wasn't acquainted with her, didn't know whether she came from Earth or from its colonies on the other planets. It shouldn't make so much difference to him.

But he couldn't put the picture of her out of his mind. To help himself forget, he wandered through the different exhibits surrounding the Lagoon of Planets. They had a forty-nine-hour day here on Neonia, and there were a great many hours yet before darkness. He examined exhibits of space ships, high-pressure exploring outfits for underground use, transparent animals. Finally he reached the section of Neonia allotted to Jupiter.

There was a gravity demonstration going on when he strolled into the Jupiter Hall of Science. It was intended to show the dwellers on smaller planets the effect of a higher gravitational pull on everyday life.

A huge gravity force machine had been installed, and at the moment was in operation. All the spectators in the hall felt the same gravitational pull as if they had been on Jupiter. Their bodies moved slowly and oppressively, and they had difficulty in breathing. Only the native Jovians appeared to feel at home.

Five minutes of high gravity at a

time was all that most people could stand. Then the lecturer signaled to an assistant at the end of the hall. The assistant threw a switch that returned the gravity to normal. Almost everyone sighed with relief. McGovern wandered out of the hall.

**T**HE Djurns were no fools, he realized. They must know that the space ships to Jupiter were being watched. Therefore it was certain that they would make no attempt to transport their prisoners there. On the other hand, most of the smaller planets were too crowded for their experiments to escape observation.

A freight plane passed him, the letters STB barely visible on its license. Space Terminal B. An exhibit was being crated up and returned to its source. As he watched it indifferently, he heard a snort of anger behind him.

He turned to see two Chaumuks who had been staring in his direction. He could never have recognized them, but they had identified him and had stupidly betrayed the fact. They were members of the kidnap gang!

One of them took a step toward him. The other held the impulsive Chaumuk back. After a second they sidled to a side door, slipped into the Hall of Science, which he had just left.

McGovern exulted. He hesitated, trying to decide whether to enter alone or to get aid from the chief of the Fair Police. Aid would take too long to reach him. He was probably crazy tackling the whole gang, yet he thought he had a chance.

He opened the side door and stepped back into the Hall of Science. This part of the building was only dimly lighted, and at first he had difficulty seeing. He moved forward slowly. The room became suddenly bright. A harsh voice shocked him.

"Welcome. We hoped you would visit us again."

Ten feet in front of him stood the Djurn, a transparent bandage on his horrible head, the clotted blood clearly visible. Four Chaumuks stood beside him. Two others barred the door through which McGovern had entered. He was trapped.

"You flatter me," McGovern said

slowly. "I hadn't realized my importance."

"You are the only person who has seen things we tried to keep absolutely secret. It becomes necessary, therefore, to make you accompany us on our little journey." His face contorted fearfully and McGovern guessed that he was smiling. "Please regard this purely as an experiment. You will, of course, have plenty of company."

"And your destination—" McGovern began.

"That is secret. You will kindly submit to being bound."

The Djurn nodded his head and two of the Chaumuks beside him advanced cautiously. But McGovern quickly moved first.

His hard fists shot out, and the two Chaumuks sprawled at the opposite end of the room. The Djurn smiled again. The Chaumuks had an inferior sense of balance. They also had no sensitive nerve endings in the outer skin. No matter how much they were hit, they could never be weakened or knocked out. McGovern's efforts to defend himself would end only in his own exhaustion.

The other two Chaumuks near the Djurn advanced, to be sent sprawling in turn. By then the first two were up again. The pair near the door simply watched without interest. They had their orders to guard the exit.

It was easy to knock the Chaumuks down, but it was impossible to keep them there. Five minutes of the struggle left McGovern panting. He knew as well as the Djurn did that the fight could end in only one way, if he kept using his fists. He had to try a different tactic. He had used it before, but there was no reason why it couldn't work twice.

A Chaumuk plunged at him. This time, instead of aiming a punch, McGovern caught the outstretched arm and pulled him off balance. Then he seized the flying Chaumuk around the middle, whirled him in an airplane spin and heaved. The Chaumuk landed squarely on the Djurn's badly wounded head.

The Djurn's shriek had the agony of torture in it. There was a horrified pause before the Chaumuks could make

up their minds to spring at McGovern again. In the few seconds given him, he leaped past the astonished group, and into the central part of the Hall of Science.

The Djurn wailed and howled behind him. All six Chaumuks started in pursuit. Frightened spectators scattered before them. The science lecturer ducked behind a statue.

McGovern reached the end of the hall five paces ahead of the nearest Chaumuk. He leaped for the gravity switch, pulled it desperately and dragged himself out of the hall. Behind him, as the intensified gravity hit the Chaumuks, the pursuit slumped almost into immobility.

It took McGovern five minutes to find a policeman and another five minutes to make the Venusian understand what he wanted. Several more minutes were wasted in collecting assistance.

When they got to the Hall of Science again, the gravity had been restored to normal. Naturally the Djurn and his Chaumuks were gone.

McGovern's anger almost blistered the policeman's ears. It was by a miracle of self-control that the outraged Venusian refrained from running him in for profanity.

Another freight plane winged by on its way to Space Terminal B. McGovern suddenly froze. Space Terminal B was usually a passenger terminal. Freight originally was shipped via the Central Space Terminal. But the Central Space Terminal was being watched—

**H**E hastened to a phone. A musical Mercurian female voice sang:

"This is Space Terminal Bee-hee."

"Are there any space ships scheduled to leave the terminal within the next hour?" he rapped out.

"Ship to Earth, Thirty-seven-oh-five. To Venus, Thirty-seven-thirty-two. To Jupiter, Thirty-seven-fifty-eight."

"Passenger or freight?" asked McGovern.

"Passenger only," sang the voice. "Do you wish to book passage? There are seats still available."

"Any freight ships?"

The voice paused. "No. These are regular Interplanetary Service vessels,

passenger only. But a special chartered ship is scheduled to leave at Thirty-seven-fifty, bound for Terreola."

McGovern gasped. That was it! Terreola, a small, deserted planet beyond Jupiter, would be just the place for the deviltries the Djurn and his Chaumuks had in mind. And he had about fifty minutes to get to the terminal.

"Do you wish to book passage on the regular ships?" the voice was inquiring. "There are seats still available."

"No, thanks." He hung up, then called another number. "Police Headquarters? I'd like to speak to the chief."

"He's out. Any message?"

"Let me speak to his assistant."

The assistant was out also. A special delegation from Earth was arriving, and the police were too busy arranging for a guard to bother with anything else.

McGovern gave himself fifteen seconds to express his opinion of the police and hung up with a bang. He would have to stop the ship himself. But how?

There was a Crime Exhibit near the telephone station and that suggested weapons. Unarmed, he would certainly be no match for the Djurn's crew. He almost ran to the exhibit in his eagerness. In one of the first cases he looked at, he found what he wanted.

It was a beautifully compact hot-electron gun, guaranteed to produce a temperature of three thousand degrees Centigrade at a thousand yards in a tenth of a second, and good for three hours of continuous operation. But there was a guard watching the case in which it lay.

McGovern took a handful of heavy coins from his pocket and flung them at a display window on the opposite side of the building. As the window crashed, the guard leaped forward. McGovern had the hot-electron gun in his pocket and was out of the building before the puzzled guard could figure out what was going on.

He hailed a taxi helicopter.

"Space Terminal B," he ordered, and sank back in his seat.

The driver, a Mercurian, slammed the door and started forward. They inched ahead for half a mile, then

they came to an abrupt stop.

"What's wrong?" McGovern asked.

"Nothing wrong. Red light."

"How high up do traffic signals go?"

"About two thousand feet," estimated the driver.

"Well, can't you go above them?"

**T**HE light changed before he could get an answer. They started again. The driver shouted back:

"Above two thousand feet we'd get bumped off by a space ship. We stay where we are."

"I'll give you twenty," offered McGovern.

The driver looked at him angrily.

"What do you want me to do, lose my license? I don't go up any two thousand feet."

They were stopped at every traffic light. Each time they halted, McGovern cursed. But when he looked at his watch, he realized they were not making such bad time. They would get to the Space Terminal at 37:40.

McGovern threw a bill to the driver and dashed out on the field. There were three space ships moored at landing stations. Two of them had the words "Interplanetary Passenger Service" neatly blazoned across them. McGovern turned his attention to the third.

A Terminal employee came by with a wagonload of pet transparent mammals.

"Where's that ship bound for?" McGovern asked.

"Special ship," the man grunted.

"No passengers."

"What are they closing the door for?"

"It's leaving."

"But it isn't scheduled to go for ten minutes yet," protested McGovern.

The man shrugged. "It's a private ship. It goes when the captain gets his orders."

The door swung shut. The motors purred quietly. McGovern took aim with his electron gun, squeezed the trigger. A square patch of metal in the upper part of the ship began to glow. As the piece of metal fell to the ground, he could hear the compressed air hissing from the ship. The ship would not be taking off now.

The captain came rushing out to inspect the damage. McGovern casually made his way to the entry port. A Chaumuk stuck his head out and gave a cry of recognition. McGovern casually drilled him with the gun, searing a neat hole through his middle. The Chaumuk fell and this time did not bounce.

McGovern clambered into the ship. Two Chaumuks rushed him, but the gun dropped them before they came close. The other three flattened themselves on the floor of the ship in terror and raised their hands high above their heads.

"Where is your master, the Djurn?" McGovern demanded.

They shook their heads. Even in their fright they refused to betray the Djurn.

"Tell me, or I shoot."

They shook their heads again. Abruptly the whole ship seemed to collapse upon McGovern's skull! The Djurn had hit him from above.

The gun leaped from McGovern's fingers and the three Chaumuks flung themselves on it.

They wasted a precious half-second while each one tried to grab it for himself. McGovern staggered. His hands reached up above his head to grasp the Djurn's squashy body. The Djurn screeched in agony as McGovern seized him and threw him into the midst of the eager Chaumuks.

The gun flew to one side. The electron beam caught the Djurn across the face. His screams died away with frightening suddenness. One Chaumuk stumbled into the path of the beam and fell, to rise no more. The others scurried away.

McGovern stepped over to the gun, picked it up carefully and shut off the catch. A voice from the port of the ship cried:

"Drop that, or I'll blast you!"

It was the captain of the ship with a squad of police. McGovern threw the gun to the floor of the ship. They all tramped in.

"Well, Captain," McGovern said. "You're a little too late to do much good, either to me or to your kidnaping friends."

*(Concluded on page 128)*

# THE MAN-BEAST OF TOREE

By RALPH T. JONES

## FOREWORD

**I**T is two years since the world was mystified by the appearance of that strange creature called, by the newspapers, the "Man Animal." The document now made public tells for the first time the terrible life story of this unfortunate being.

In the early summer of 1948 a Texas farmer, hunting some stray cattle, was startled by the sight of a completely nude man running toward him from behind a small hill. The Texan stopped his automobile and the man, with a queer throaty cry, flung himself to the ground in a suppliant posture. To his finder's questions, the man could give no coherent answer. He mumbled unintelligibly, with a few words that sounded like "Earth," "Tom," and "Home" recurring several times. He appeared to be utterly harmless, almost timid.

After some effort the farmer induced the creature to get into the car and they drove to the ranchhouse. When food was placed before the stranger he ate greedily, like an animal, gobbling it directly into his mouth from the dish. Having eaten, he walked to a corner of the room, curled up on the floor and promptly went to sleep.

The man was not only devoid of clothing, but his skin was completely hairless,

except for his head and his eyelashes. He was deeply tanned, as though he had been exposed to the rays of a warm sun for many years, but was evidently of Caucasian origin. He was slightly over six feet in height and of remarkably fine physique, with smooth muscular development denoting unusual stamina.

In his nose was a metal ring, inserted in the septum. It must have been there a long time, for there was no sign of recent wound where the metal pierced the flesh. Both his thumbs were missing, amputated at the second joint. Where scars should have shown, the skin was perfectly smooth, with no remaining trace of operation.

One peculiarity noted by all who saw the creature was the beautiful condition of his skin. It was of a deep tan color, thicker and stronger than usual, and had a strange polished sheen. The hair of his head was long, twisted into a short, thick plait that hung below his shoulders.

Needless to say, the "Man Animal" was a nine-day sensation in the press of the world. Scientists admitted they could not account for his condition. The man was unable to make himself understood, though he tried hard enough to talk intelligibly, constantly pointing at the stars. Some reporter wrote a story to show he must be a visitor from another world. Such a theory, however, was so far-fetched and inconceivable, even for the advanced thinkers and scientists of our day, that little credence was placed in it save by the imaginative romancers.

Finally public interest died away.

**A**S chief alienist for a large institution for the mentally diseased, I had been intensely interested in the case. When I offered to keep the "Man Animal" at my sanitarium, the proper officials gladly consented. His lack of thumbs made it impossible for him to take care of himself. It was more trouble and expense than they wished to assume, to provide personal attendants for the creature.

After installing him in comfortable quarters in my hospital, I sat out to discover, if possible, the history of my strange patient. We used the recently perfected hypnosis method, turning the pa-

## EDITOR'S NOTE

Some stories are forgotten almost as soon as they are printed. Others stand the test of time.

Because "The Man-Beast of Torea," by Ralph T. Jones, has stood this test, one of the prominent figures in the field of fantasy fiction, Mr. James V. Taurasi, has nominated it for SCIENTIFUNCTION'S HALL OF FAME.

In each issue, for several forthcoming numbers, we will reprint one of the most outstanding fantasy classics of all time, as selected by our readers.

We hope in this way to bring a new permanence to the science fiction gems of yesterday and to perform a real service to the science fiction devotees of today and tomorrow.

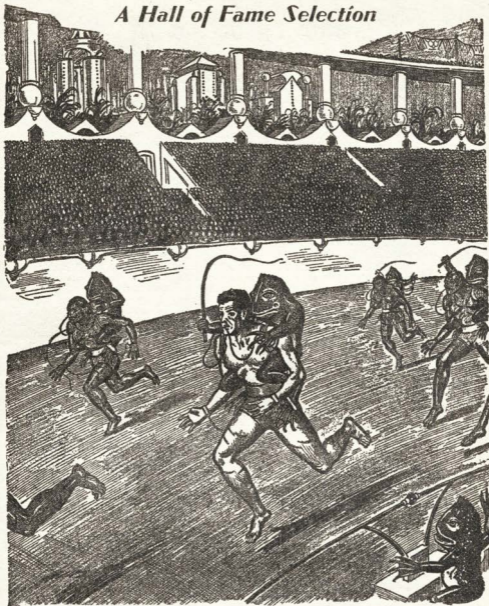


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## Man Needs All Ten Fingers to Climb

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## A Hall of Fame Selection



in his right paw he held the whip, and I felt it descend, in a cruel stinging sweep, across my straining legs

tient's mind back by the power of suggestion to earlier periods of his life. We restored the power of coherent speech and the patient's memory seems to function perfectly over the later period of his life. But of his origin, his childhood and his early youth, we learned practically nothing.

His memory seems to stop at the time of the kidnaping, which inaugurated that astonishing experience through which he passed—an experience so terrible that his

senses probably were blunted by suffering and fear. Even had we been able to identify him fully, we might not have made our discovery public. Some parts of his experience are so shocking that it would seem kinder to let his family, if he has any, continue to think him dead.

I should say that the events herein recorded cover a period of about ten Earth years. He admits, however, that he lost practically all conception of time during the long periods of his monotonous exist-

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## the Long Ladder to Civilization!

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ence and the elapsed times he refers to in his story are mere guesses. It should also be remembered that time is relative. It is possible that, measured by Earthly standards, his life on Toree covers either much more than ten years or much less.

The story here told is just as it came from "Tomman," which is the name he gives himself. With the invaluable aid of my friend and associate, Dr. Fischer, the story has been transcribed as he told it, with no change except the necessary clothing of the facts in easily understood language. The thumbless hands, of course, prevent Tomman from writing, while his ability to read is as yet rudimentary.

Before relating the actual story of Tomman, I would like to say I am convinced it is true. I say this with the full realization that it will probably be disbelieved by scientists generally. Yet, having heard it from the lips of the man himself—at first in halting phrases and then more easily as the tongue, long unused to English, regained some of its fluency—I cannot doubt the main facts of the story. If it is not true, if it is a piece of fiction or the product of a disordered brain, how can we account for the condition of Tomman when he was found two years ago? Why should he invent such a story, with all its verifying detail?

I must also remind my readers that evolution of man to the overlordship of Earth, instead of some other of the myriad forms of life, seems to have been nothing but an accident. On some other world, the accident may have assisted an entirely different form of living being to supremacy.

## CHAPTER I

### *The Coming of the Creatures*

**I** REMEMBER that the day was warm and sunny. I was lying alone on green grass on the top of a small hill. I think I had been on a holiday or pleasure trip of some kind. I must have fallen asleep in the sunshine, for suddenly I awoke. When I tried to move, I felt a cord around my ankles, tying my feet together. As I struggled to lift myself to a sitting posture, another rope suddenly tightened around my body, pulling me backward. I was trussed so effectively that I was entirely helpless.

I turned my head and saw, for the first time, a group of those creatures in whose power I was doomed to pass so many years. A surge of hopeless terror swept over me as I stared at the things. My emotion was instinctive and I think any human being would experience the same sensation of fright and utter helplessness on first seeing my captors.

They were not men, though they stood upright upon two legs. They were short, the tallest barely three feet in height and the average several inches less. Their bodies were slender, with legs and arms that were disproportionately long, though I soon discovered they possessed surprising strength. Their heads were large, two or three times the proper size for their bodies, according to human standards. They

seemed to lack necks entirely.

Their movements were slow and deliberate, their walk clumsy, the thin, crooked legs striding in long, uncertain steps. For short movements they had a habit of hopping and were thus able to jump easily for a distance of six or eight feet, or to heights of four or five feet. I don't think they were able to run at all. At least I never saw one move faster than that uneven walk or the hops by which they negotiated lesser distances.

It was their features, however, which were most surprising and which aroused that feeling of repulsion and fear that, through all the years I lived among them, I never overcame. The skin was mottled, blue and green and brown. It was quite smooth, with no trace of hair on head or face and had a wet, glistening, clammy appearance. Their eyes were large and protruded from lidless sockets in a shockingly unnatural manner. As they stared at me, I found myself unable to look into their eyes. Some superior power seemed to emanate from those great orbs and involuntarily I turned my glance aside.

The things had no noses. Small openings on either side of the wide mouths apparently served for breathing. Their mouths, though, were even more horrible, so large that they almost bisected the lower half of the head. They had thin, bloodless lips and long rows of tiny, sharp-pointed teeth, like the serrated edge of a bony saw rather than the separated teeth of men. When they opened their mouths, they revealed a mass of hateful, dough-colored flesh. I had the feeling that food would be sucked down the narrow throats and absorbed in the noisome gullets, instead of being swallowed in human fashion.

The closest comparison I can make with any Earthly creature is the frog. If you can imagine slender frogs, a little less than three feet high, walking upright and with large, pop-eyed heads protruding above tuniclike garments, you can most nearly imagine the things I saw for the first time when I awoke that day so long ago.

**I** SPOKE to the things, but they paid no attention to my voice. I shouted and finally screamed in terror as they lifted me from the ground. No longer trying to reach their indifferent ears, I was yelling desperately for help. But no help came and I was borne rapidly downhill. I was bound so tightly that I could not resist and they paid no more attention to my cries than we would to the scream of a wild rabbit caught in a trap.

At the foot of the hill, beside a little clump of woods, they carried me to a strange vehicle. It had a form of fuselage completely enclosed and I saw no wings nor motor, but I had no time to notice details. I was pushed inside and laid, still bound, upon the metallic floor at the rear of the craft. The frog things entered after me, closed and sealed the door and I felt the machine rise smoothly upward. I was starting on an adventure stranger than any man had experienced before, completely in the power of beings that might be



friendly or deadly inimical.

As I felt the speed of the air vessel rapidly accelerate, I tried to compose my thoughts, struggling to regard my position as one which many men might envy. I was certainly enjoying, if that be the word, a unique experience. I sought to steady my whirling brain and prepare myself to accept, quietly and resignedly, whatever might be the outcome.

I have a recollection of the passage of a long time before I felt the ship land. The creatures became intensely active, in their slow, deliberate way. Our ship seemed to be anchored to some solid body outside and I saw a double door open. I was again lifted and carried into what was evidently a much larger vessel. Later I learned it was a space ship, capable of cruising at terrific speed through the tre-

There was a space, about two inches wide, between the top of the walls and the roof. Through this opening, fresh air and a faint light entered. Across one end of the cell was a sort of shelf, an empty trough, of the same hard metal as the walls.

On the floor was a pile of some kind of dried moss, unlike anything I had seen on Earth. I decided I might as well be as comfortable as circumstances permitted and lay down upon this stuff.

Outside my cell, in the space ship, I could hear sounds of activity, the hum of powerful machinery and a slight throbbing through the floor. In a little while I felt a violent rocking to and fro, which soon settled into a steady swing, like that of a great ship at sea. Finally this passed away and I could feel no motion save the

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## Why "The Man-Beast of Torea" Is My Favorite

By JAMES V. TAURASI



James V. Taurasi

**A** NUMBER of years ago, while attending High School, studying Architectural Drafting, I injured the thumb of my right hand. This made it impossible for me to draw for a few weeks.

The handicap started me to conjecturing. I wondered what a civilization would be like if its people had no thumbs.

Would they be like animals because, without the needed thumb, they could do no constructive work? Or would their brains enable them to invent some means of overcoming this physical obstacle?

It was shortly after my hand got better that I picked up the Fall, 1931, issue of *WONDER STORIES QUARTERLY* and read Ralph T. Jones' stimulating story, "The Man-Beast of Torea."

There, coincidentally, was the answer to the problem I had posed for myself. And developed rather dramatically too, in the form of a satire.

Besides having my own personal reason for considering "The Man-Beast of Torea" an effective sciencefiction story, I think it ranks on its intrinsic merit as a masterpiece of fantasy literature. In fact, it is among the classics dear to the heart of every true sciencefiction follower.

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mendous distances of space to the world of Torea. That is what they call their planet. I never knew it by any other name and cannot identify it by its astronomical term.

I was carried down a corridor and pushed into a small, dark room. There were no windows or furnishings and only the one small door. I was unbound. My captors withdrew and I was left alone.

As my eyes grew accustomed to the dim light and my cramped limbs regained their powers, I examined my prison. The door was tightly fastened from the outside. The room was about eight feet long and four feet wide. My head came within three inches of the ceiling. The walls and roof were of metal. I tried to scratch the surface with my pocket knife, but could make no impression upon it.

constant, slight tremor.

**A**FTER what seemed like hours the door to the cell opened and two of the frog things peered in. I half-rose, tempted to try to escape. But again, as I looked into their eyes, that feeling of fright and helplessness seized me. One of them had what I took to be a weapon in its paw, or hand. It was a small, tube-like affair and as I moved he pointed it at me.

I subsided quietly and the other entered and dumped a quantity of a dry material into the trough out of a small sack he carried. A metal dish of water was placed on the floor near my head. Then the things withdrew. I heard the lock click into place as the door closed.

I was thirsty and drank some of the

water. Later I examined the stuff in the trough. It was not unlike dark-colored, broken scraps of bread. Tentatively I nibbled at a small piece. It had a pleasant, appetizing flavor. Deciding it could not be harmful, I discovered I was hungry and ate with relish.

Save for their periodic visits to replenish the food and water, I was left alone for a long time. I think it must have been at least twenty-four hours. At last, however, a change came. My door opened and half a dozen of the creatures entered. Two of them seized my legs.

Though I offered a brief, futile resistance, they quickly hobbled my ankles so that I could step only about six inches at a stride. My hands were tied behind me and with pushes and proddings they signified I was to step out of my narrow prison. I was directed down several long corridors and at last they roughly shoved me into another room.

This was a far different place from the cell I had just left. Great glass retorts and intricate machinery lined the walls. In the center there was a low table, less than two feet high. One of the things who appeared to be in charge signified that I was to lie down on this bench. Dreading unimaginable things, I hobbled over and lay down.

At a signal from the leader, the things untied me and cut away my clothing. They stripped me completely nude and, for a few minutes, punched my sides and legs and pinched my flesh. One pulled my mouth open with his cold paws and felt my teeth. They seemed particularly interested in my thumbs. As they pawed and pulled them, they carried on a low guttural conversation in their own tongue.

The leader spoke and the others hopped back. He approached me and began an examination. I cannot describe the many instruments he used, but one I recall was a sort of X-ray with which he examined me inside as well as out. He took blood samples and pried beneath my fingernails and toenails. He prodded and thumped me and all the time he talked, in that croaking voice, with the others in the room.

Two of them wheeled up a complicated piece of machinery. A metal pad was clamped tightly at the base of my skull, just above the back of my neck. Another was fixed against my spine, below the shoulders. Still another pressed against the extreme lower tip of my spine.

There was a soft humming noise. A shock, like the sudden impinging of a mild charge of electricity, passed through my body and then everything went dark.

**WHEN I** regained my senses, the frog things had all left the room except one. He evidently saw me move for he came close to the table where I lay. He spoke and, to my utter astonishment, I could understand! It was still that hoarse, croaking sound, but the word he used was unmistakably meant for "hello."

It was some little time before I answered the thing standing beside me as I

lay on that low table. Surprise and fear held me speechless.

"Don't move," it croaked. "Drink this."

He passed me a vessel containing a dark fluid and I felt a warm, revivifying glow spread over me as I drank. At last I forced myself to speak.

"Who are you? Where am I? What does it all mean?" The questions tumbled haltingly from my lips.

"I am Soran," he croaked. "I am a scientist of Toree. You are on a space ship, being taken to our world."

"Where is Toree?" I asked dazedly.

"It is far distant from your world," he replied. "I do not know how you would name it."

I thought slowly. My mind was confused and I could not realize the full import of the situation at first. Then a slow anger grew within me. What right had these animated horrors, these intelligent freaks, to treat me as they had without consulting me first? Why had they seized me, like some laboratory specimen, and hurried me away from everything I knew without so much as asking my consent? When I spoke again to the thing that stood regarding me with great, serious eyes, it was anger that prompted my words.

"Why have you done this to me?" I demanded. "Take me back to Earth. You have no right to hold me prisoner. I don't want to go to your Toree, or any other place, but home!"

I raved in that manner for several minutes and all the time the thing stood and gazed at me with his unblinking eyes. Gradually the futility of my outburst became apparent, even to my irate mind. That old sensation of helplessness and fear crept back. My voice sank to a whisper and finally stopped altogether, in the middle of a sentence. Then, I think, I whimpered a little.

As I stared at the utterly unmoved creature, I knew that I was irrevocably in the power of the things, and not only by my physical bonds and my hopeless situation. I was held even more helpless by the sense of mental servitude and inferiority that seized my very spirit whenever they were near.

"That sort of rebellion will do no good," the thing said, after my violent tirade had fallen to a hopeless whimper. "We wanted you and we took you. It is not our fault that you are unable to resist."

**A**GAIN there was silence in the room for a minute or two. When I spoke again, it was quietly, with utter, hopeless resignation to my fate. I asked the thing how he was able to speak and understand English. He told me that, through an invention of his people, he had read my mind, absorbed all the knowledge in my brain by means of that strange instrument they had fastened to my head and spine. I found there was nothing I could tell him that he did not already know. But there was much I wanted to ask. Patiently he answered my questions.

His race—Imbos, they are called—are the dominant beings on Toree. As evi-

denced by the strange instruments in the laboratory and by the space ship itself, they are as far in advance of man in science and invention. They are evolved from amphibians, similar to the frogs of Earth, with which I had mentally compared them.

## CHAPTER II

### *Explanation*

**T**HE Torean space ship had made a voyage of exploration to several planets. I gathered that it must have possessed the power of invisibility, for Soran said it had remained hidden throughout their stay on Earth. I learned that they had conducted quite extensive scientific investigations of our world.

He intimated that one of the chief objects of their interstellar voyage was to discover a rare metal which the Toreans value highly. They had found none of this metal on Earth, though they had come across some small deposits on one of the other planets they had visited. Now they were returning to their home on Toree.

At length I asked a question that had had been lurking in the back of my mind all through the conversation.

"Are there men like me on Toree?"

He hesitated before replying.

"Yes," he said at last. "There are creatures like you on Toree, though we don't call them men. They are Thuts."

He seemed reluctant to go on. But under the urging of my curiosity, he told me something of the condition of the human beings, or Thuts, on Toree. They had not developed mentally in pace with the Imbos. Physically he described them as almost perfect, though he said they were somewhat smaller than men on Earth. They were not intelligent beings at all, he told me, and were classed simply as animals. They were kept mostly in a form of slavery to the Imbos, though he did not go into detail.

It was only later that I learned, by painful experience, how abject this slavery is and how animal-like are the lives of those poor human beings of that distant world. Strangely enough, it never occurred to me while Soran talked that on Toree I would myself be considered nothing but an animal.

Then he began talking about the Imbos again. He described their society, their economic conditions, in which there was a strange similarity to that of civilized men on Earth. He told me that most of the Imbos passed their lives in a keen, competitive struggle for wealth. Though they have advanced far beyond mankind in their science and the material comforts of their civilization, they are still burdened with a cumbersome economic system under which some gain great wealth and others have little more than the bare necessities of life.

Power, he explained, was in the hands of the wealthy and he seemed to consider this unfortunate.

"There is an Imbo named Bokal," he said, "one of the richest of our race. It was he who arranged and financed this journey through space. He wanted to add to his wealth by discovering more of our precious metals. Also, I believe, to add to his fame among his fellows. Of course it was necessary that he employ many inventors and scientists to perfect the space ship and to solve the problems involved in the undertaking.

"That is why I am here. There are others on the ship who are among the greatest of Torean inventors, engineers and scientific experts. But it is Bokal and his crude kind who really control the ship, its journey and all that we do. They have little consideration for science unless it can add to their wealth or can provide for their amusement."

"Is Bokal on the ship?" I asked.

"No. But we are all under his orders and must obey his officers." Again he paused. Then, looking queerly at me, he said: "Bokal owns a great many Thuts. Some of them he keeps because they are fast runners. Races between Thuts are a popular amusement on Toree. Bokal thought that on one of the other planets there might be Thuts of sturdier or faster build than those of Toree.

"He ordered his officers on this ship to capture one of these stronger Thuts, if they saw any, and bring it to him. He hoped it would be faster than the Torean Thuts and thus win races for him. You happen to be the one kidnaped for that purpose."

When the full import of his words penetrated to my mind, I turned a horrified gaze upon the calm Soran.

"But-but," I stammered, "I'm not a Thut. I'm no animal. I'm an intelligent being, a man. They can't do this to me!"

I could see no sympathy in the eyes of Soran.

"I think, as a scientist," he said, "you'd be worth more to us if Bokal would give you to me for study and experiment. But he won't, not at present, anyway. It's no use your struggling. You may be what you call a 'man' on Earth, but on Toree you're a Thut. Really, if you can run, Bokal and his keepers will treat you quite well. A fast Thut is a valuable piece of property."

Then he opened the door and a number of the other Imbos entered. The last thing he said to me was:

"I see, man, your Earth name is Tom. I'll tell your new owners to call you 'Tomman'."

When Soran turned away, the other Imbos engaged in a long conversation. As they croaked their queer language, I lay in my utter nudity, nothing but a piece of animated flesh, as impersonal an object to them as any horse or steer to us. At last they seemed to decide upon a course of action. They grasped my limbs and, with strong straps, fastened me to the table. Then one stood over me.

**W**HILE fear clutched me and cold sweat stood out upon my face, I saw

he held a thin, bright-bladed knife in one paw. While others held my right hand, he quickly carved away my thumb. My cries of pain they completely ignored.

After the thumb was amputated, they dipped the bleeding wound in some strange liquid. There was an intolerable stinging for a few minutes, but when my hand was lifted out of the metal dish, the bleeding had stopped and a coating of fresh skin appeared to have already covered the wound.

The way in which they ignored my cries and protests was as though they had not heard them. Later I decided that Imbos ears usually are not attuned to the tones of human voices. In all my life among them, Soran was the only one who ever acted as though he heard me speak. Possibly he had used some artificial aid, or perhaps he could read my thoughts independently of what my lips said. I realized, during my life as a Thut, the true meaning of that early expression, "dumb animal."

My left thumb was amputated like the right. Then they forced a hole through my nose, in the fleshy wall between the nostrils. They treated these wounds with more of the magical healing fluid and then left me alone.

In about an hour they returned and examined my hands and nose. The wounds were completely healed. From that day to this, it has been as though I had never had thumbs and the hole between my nostrils had always been there.

They forced a thin metal rod through my nose and joined the ends, forming a circle of the polished, steel-like metal. A light strong chain was fastened to this nose ring. I was unstrapped from the table.

Though my limbs trembled and I felt almost too weak to walk, I was led back through the corridors to my prison cell. When I hung back, they brutally jerked the chain of the nose ring and I could do nothing but stumble along.

Then followed days of deadly monotony and mental anguish. I had nothing whatever to do but stand or lie in that restricted space, sleep as I could and spend my waking hours in fruitless thought. The chain from that hated ring passed through a small hole near the floor of my cell and was fastened outside. There was sufficient play to allow me to stand up or lie down, but little more.

I suppose I could have twisted the chain around my neck until I died, but I lacked the courage to kill myself. Besides, I was possessed of an intense curiosity about the strange world to which I was being hurried. I knew I faced inevitably painful experiences, but they were experiences such as Earthly man had never dreamed before. Had I known all I was to pass through, I think I would have killed myself immediately.

A factor that partially accounts for my resignation to my strange fate was my physical condition. Though denied all exercise and kept under circumstances that would be expected to be fateful to a normal civilized man, there was a steady im-

provement in my general health and physique. Always strong and athletic, I rapidly gained a high degree of physical perfection.

**F**OR the first few days the Imbos, each time they brought my food, injected a liquid into my veins. Whatever this was, it gave me an intense desire for food. I felt such hunger that I quickly forgot, each time I saw my trough replenished, the half-formed resolution to starve myself to death.

Daily one of the Imbos spent an hour or more massaging my legs and giving me other bodily treatments. He would rub and knead and pinch the muscles until I could feel new strength growing in my thighs and calves. My arms he ignored, seeming quite unconcerned about them.

He used, early in my life as an animal, a strange paste. Rubbed over my body, it removed every vestige of hair, leaving the skin smooth and shining. Daily he polished me all over, using soft rags and an ointment with a rather pleasant, pungent odor. The hair on my head he treated with a heavy grease. As it grew longer, he worked it into a short plait that hung down the nape of my neck.

Whatever it was they fed me, injected into my veins and did to me in other ways, they must have cleared my body of all Earthly ills. As the days passed I felt a constantly increasing flow of glowing, throbbing health filling my body. The Imbos have far greater knowledge of health and food values and the physical being than we of Earth. Despite my forced inactivity and unnatural mode of life, I enjoyed finer health, I believe, than any Earthly man has ever known. I was physically approaching that state of perfection man has always sought but never attained.

Save for the feeding and massaging and other attentions—grooming is the proper word—I passed apparently endless days of frightful loneliness. The ghastly monotony of the life nearly drove me insane, but I forced my brain into a sort of dull apathy. I taught myself, in some degree at least, not to think. Only by this forced inactivity of mind could the endless days be made endurable.

I grew accustomed to my nudity. It was the natural thing, to the Imbos, for a Thut to be naked. I felt no more embarrassment before them, though they wore clothes themselves, than I would before a dog or any other creature of different race. They regarded me as a dumb brute. If this was to be my fate, a dumb brute I resolved to be.

So the long days passed. Regularly I was fed and watered and groomed. Regularly my cell—or stable—was cleaned out and fresh, dry moss thrown in. In everything save size and form I was a horse, the property of those who fed and kept me and, if they willed, could beat or kill me.

**B**Y the stopping of the machinery, I knew when the space ship reached

Toree. Shortly afterward a group of strange Imbos entered my cell.

By the attitude of deference with which the others treated him, I guessed that one must be Bokal, my owner. He hopped to my side and felt my muscles. He punched my stomach and ran his paw along my legs, clutching the sinews and rubbing the skin. I remember, in my early days as a Thut, that always when an Imbo would feel my limbs and body I would be seized with nervous trembling. Gradually I became used to the trick, until I accepted it as a matter of course.

I was taken out of the cell, through the long corridors and past big doors into the open. As the bright sunlight struck my eyes, long accustomed to the gloom of the space ship, I turned around dazedly.

An Imbo stood behind me with a short whip, or quirt, in its paw. For the first time I felt the lash. As I turned he struck again, a succession of cutting, cruel blows. For a moment I tensed my muscles to fight. The Imbo holding the chain gave it a sharp jerk and the nose ring pulled my head around to the front. Smothering my anger under the realization that resistance could only bring more punishment, I stepped quietly outside with my fantastic masters.

I was led across a wide, open space. Hundreds of Imbos gazed curiously as I passed. I was pushed into a closed, vanlike vehicle which immediately moved away at rapid speed. When the vehicle stopped and I was pulled out, I saw a long, low building. As I was led across the threshold a strong odor assailed my nostrils.

I did not recognize it at first, but it was the smell of human beings, or Thuts, kept as animals in a stable.

I was led into a stall, about eight feet square. My chain was fastened, food and water were placed before me and I was left alone. I could hear movement all around me. I had seen that the building contained many stalls such as the one I occupied, but I had been hurried in too quickly to notice their occupants. Now I heard the rattle of a chain in the stall to my left.

The dividing wall was low, less than five feet, and I looked over.

There, nude and chained like myself, stood a woman, a female Thut!

The woman had her head turned away when I first saw her. She was smaller than I, not over five feet tall. Like me, she was devoid of hair, save for the heavy, short pigtail that grew from her head. She was slender and glorious in physical beauty.

Her skin, bright and shining, was of a light, golden hue.

Her body and legs were exquisite in their smooth shapeliness and she stood or moved with a grace that Earthly human beings have never known. This beauty of form and grace of movement is typical of the Thuts, though I always thought this particular female more beautiful and perfect in every way than any other I ever saw, on Earth or Toree.

SHE turned and looked at me. So utterly unconscious of shame were the eyes that stared curiously into mine that I soon overcame my own tendency to look away. For a long minute or more we stared at each other.

Her head was well shaped, though there were minor peculiarities, compared with Earthly standards, in her features. The eyes were large, of a soft, liquid brown and the nose stood out from the face, giving it a sharp, pointed effect. Her mouth was large, with full lips and the chin was well formed. Her hair, which grew to a point just above and between the eyes, was drawn tightly back into its rear knot. In her nose was the inevitable ring with the chain attached.

She gazed at me with eyes devoid of expression, save for a mild curiosity. I remembered that Soran had said these Torean humans were nothing but animals. It was the look of a resigned, gentle beast that gazed from my lovely neighbor's eyes, yet far in their depths I glimpsed a hint of intelligence.

A splendid animal she undoubtedly was. Her physique would have been the despair of any woman who ever walked the Earth. Her grace never ceased to fill me with wonder. She couldn't step across her stall without creating a poem of motion. No Earthly dancer ever displayed the beauty she showed in every move.

Later I saw Thuts that were gross and ungainly creatures, but in the racing stables of Bokal all were magnificent specimens of physical perfection. No other, it is true, was so lovely as she, in form, in glowing beauty of skin, or in grace of movement. But I truly believe the poorest among them surpassed in loveliness the Greek gods and goddesses.

This gorgeous creature into whose eyes I stared finally made sounds with her lips that were evidently the tones of speech. Of course I was unable to understand, but her voice was soft and low and musical. Eventually I realized she was telling me her name was Thopus.

In the long days that followed I learned the language of the Thuts, with this girl as my teacher. Their tongue is simple and one word must serve to express many meanings. But it is sufficient for the interchange of simple thoughts and I quickly learned to converse with Thopus and others. I grew to know her well during the months we lived in adjoining stalls. From her I learned nearly all I ever knew of the Thuts and their history, and she was the one real friend I had during my life on Toree.

The days in the stable of Bokal were, insofar as food and grooming went, the same as on the space ship. There was one Imbo whose duty it was to care for me. He devoted many hours to polishing my skin and otherwise caring for my body. My food was varied sometimes and I always ate with keen appetite.

**I**N one thing, however, there was a change. The day after my arrival my keeper began a period of training, with daily exercises. There was a circular track outside the stable. Each morning, held by a long chain in my nose ring, I was made to run around it until I almost dropped from weariness.

I think the gravity of Toree, or the atmosphere, or some other condition made it easier for me to run than I ever could on Earth. True, my physical condition was superb, but that alone could not account for the ease with which my muscles responded and the remarkable speed I was able to achieve. Especially by comparison with the deliberate hops and movements of the Imbos, my running was astonishingly fast.

Each day the Imbo extended the length of my running period. When I hesitated and, seeking rest, would slow down, the sharp flick of his whip across my legs or back urged me on. At last, after weeks of this, I could circle that track untiringly for apparently indefinite periods.

Thopus told me the Thuts of Bokal were the most famous racers on Toree. She could not understand when I tried to tell her of the world from which I came and its human beings. To her I was only another Thut, bigger and stronger than others, and with a strangely colored skin such as she had never seen before. Most important, she expected me to be faster than any other.

She herself, she told me, had won many races. Her mother had been a famous racer before her. Of a father she knew nothing. Indeed the idea of fatherhood seemed entirely strange to her.

Thopus said she had heard that, many generations before, all Thuts had been wild, free things. In fact, free Thuts were still to be found in the wilder parts of Toree. But she had never seen any and knew this only by hearsay.

One strange thing she told me was that all Torean Thuts were born with only four fingers. When I told her of the thumbs the Imbos had cut from me, she couldn't understand and, I believe, thought I had been deformed at birth. Perhaps the lack of thumbs, so essential to man in his use of weapons and tools, explains in part the failure of the human race on Toree to develop beyond the status of an animal.

One day, as I stood talking with Thopus, an Imbo entered her stall and placed a set of harness upon her. I had never seen this before and watched curiously.

First he fastened two straps around her thighs. A simple arrangement was slipped over her shoulders, with a belt that buckled around her waist. The entire gear was held firmly in position by hooks to the thigh straps. Light reins, for guidance, were hooked to her nose ring and passed through other rings attached to the shoulder straps. Chains connected her wrists to the thigh straps, allowing freedom for her arms to swing, but preventing her from raising them above the waist. There was a small leather loop on each side of the waist-belt.

**A**S I watched, the Imbo quickly hopped to her shoulders and placed a foot in either loop, or stirrup. His thin, crooked legs half encircled her body and their grip helped to hold him in position. His great, fantastic head rose behind and above hers. In one paw he held the nose reins and in the other he carried the inevitable riding whip.

He turned her and, to my surprise, rode her into my stall. He hooked my nose chain to her harness and drove us both out to the running track. Then, with Thopus behind or beside me, the daily exercise began. Despite the weight of the Imbo on her back she ran strongly, steadily, fast and beautifully.

A day or two later a set of harness was fitted to me. I had sense enough to submit quietly and patiently, and to allow the Imbo to hop into his place on my back. I felt a pull at the nose ring. Understanding, I turned and walked out.

The added weight did not seem to offset the difference in gravity pull between Earth and Toree. At first I found it hard to run at my best with that thing perched upon my back, but I gradually grew accustomed to it and found the best posture in which to stand and to run. I also found it better to sink my own intelligence and allow myself to be started, stopped and guided solely by the pulls on the nose ring and the flicks of the whip.

Thopus always advised me, when my racing days began, to exert myself to the utmost to win. She said winners were more valuable to our Imbo owners and were given better treatment.

"If you can't win," she said, "they'll send you away to the Oms, or even to the Subers."

A look of terror momentarily filled her eyes as she spoke, but she wouldn't explain further, apparently finding the subject distasteful.

One morning a strange Imbo came to my stall. He was smaller than most of the others I had seen. I was harnessed and led outside. The stranger mounted to my back and I felt a cruel cut from the whip. I jumped forward and the nose ring savagely jerked me back. Then he walked me to the track. Thopus and other Thuts were waiting and they ran us in a trial race.

I won, but only after I had received the worst lashing with that cutting, relentless whip I had yet known. My rider knew no mercy. He seemed to think it necessary to use the whip to get the utmost out of my flying legs.

When the race was over, I stood laboring for breath, perspiration covering me. Thin rivulets of blood were trickling from my thighs, where the knotted whip had cut and torn the skin.

That night, in the stable, Thopus told me I had outrun the fastest of all Bokal's Thuts and that I would undoubtedly win many races. My keeper used lotions that miraculously healed my wounds. He gave me an extra amount of hot food that I ate while he massaged my tired muscles and polished my glistening skin anew.

**T**HE races were run in a huge building. There was an oval track about a quarter of a mile around. Vast tiers of seats lined the track on both sides for the Imbo spectators.

A few days before we raced, we were taken to stables in the lower part of this building. On this journey I saw how great and advanced is the civilization of the Imbos. We walked for miles through a great city. Vehicles of all sorts darted along the roadways and overhead I saw many great flying machines. The buildings were of a sort of shining stone and the architecture, though unlike anything on Earth, was of unusual beauty.

Once in our stables in the basement of the racing place, we were subjected to more grooming than ever. We were liberally fed and continually cleaned and polished. Many Imbos came to look at us and talk in that croaking tongue I never learned to understand.

Thopus again occupied the stall next to mine and my friendship for the girl grew daily. It was not the affection of man for a woman. Our life as mere animals made that impossible. But it was real liking and I believe that under happier conditions, I could have loved her.

She was beautiful, gentle and kind in everything she said or did. I know she must be dead now, but I still dream of her and see her glorious form just as she used to stand beside me in that stable, completely unconscious of the perfect picture of female loveliness she made.

The sense of excitement that filled the stables as the day for the first races came inevitably affected all of us Thuts, as well as our masters and keepers, the Imbos. I was scrupulously groomed for the ordeal. My harness was fitted with utmost care.

At last the rider I had carried before hopped to his place behind my shoulders. His grotesque, froglike head rose above mine. His long, thin legs tightly gripped my body, below the armpits, as we were walked out in single file into the noise and glare of the great track.

Thopus did not run in that first race. There were ten of us, including myself. As they arranged us in line for the start, I stared down the track and saw the thousands of Imbos who waited for their sport to begin.

Four of the nine Thuts who raced with me were women. Shorter than I and more slender, their bodies showed perfect training. Their muscular yet shapely legs promised great speed. Each racer carried a rider and each was harnessed as I.

I was the only one with a white skin. The others were either of that golden hue like Thopus, or blue, or purple in varying shade. I never saw a white Thut. The blue tints, with less frequent golden hues, were the commonest colors among them.

**A** REMNANT of shame at my nakedness swept over me as we stood there, fully exposed before that great crowd of weird onlookers and before each other. The feeling was only momentary and once again I realized I could be nothing but

a dumb brute among my kind.

The race was four laps around the track. At the start I ran behind most of my companions. Seeing the speed they maintained, I feared I could not win. As the final lap began, the thing perched on my back suddenly leaned forward, throwing its weight against my shoulders. The change in balance almost threw me off my stride for a moment, but forced me to lengthen and quicken my pace. At the same time my rider dropped the nose reins and threw his left arm across my shoulder, slapping vigorously at my breast with his paw, or hand.

In the right paw he held the whip and I felt it descend, in one stinging, cruel sweep, across the rear of my straining legs. From that point on he flailed as hard as he could with the cutting lash. Slowly I drew alongside the leading Thut. My rider hit more savagely than ever. When the race ended, I was the winner by several yards.

One race was typical of all the others. I never ran more than once a day. Each night my stable keeper, with that magic lotion, healed the wounds the whip had made. Nearly always I won, though two or three times I came in second or third.

We must have been racing this way for about two weeks when one day they led Thopus and me out together. There were no others in this race, so I think it was an important test between us. Thopus had been winning nearly all her races and I think she was the fastest of all the Thuts on Torea. It was the only time we raced against each other.

She was ahead of me as we neared the finish, when my rider began that terrific lashing and urging forward. Her rider was treating her the same way and I could see the whip descending upon her legs and hips. I glimpsed the red weals where it fell and saw drops of blood spattering her thighs. I could have passed her, but something made me hold back. Despite that dreadful punishment from my rider's whip, I allowed her to cross the finishing line first.

That night Thopus told me she knew I had purposely allowed her to win and said I was foolish to do it.

"It makes no difference to me," she explained, "and the Imbos won't treat you as well if you don't win for them."

## CHAPTER IV

### *The House of Death*

**F**OR what I imagine was about two years, we lived without change in our circumstances. Racing periods came and went. Between times we were kept in our stables, exercised sufficiently to retain our strength and speed and cared for with utmost watchfulness. With the companionship of Thopus, who always occupied the stall next to mine, the life was not so bad as might be thought. It was monotonous and hopeless, but physically it seemed glorious because of the bounding health that pulsed through my being.

At the end of this time, Thopus told me one night of a rumor that Bokal planned to sell many of his Thuts. The enslaved human beings, of course, knew nothing of their masters' affairs, but rumor was almost continuously rampant in the stables. This time it was believed that Bokal had lost much of his wealth and could not afford to keep us all.

The rumor proved true. Fully half of the stalls were empty after the day when many strange Imbos came to our stable. They carefully inspected us and debated long among themselves before each stall. When the day ended I remained still the property of Bokal, but Thopus and many others had been led away to new ownership and new surroundings. I saw Thopus once again, for a little while, years afterward.

Another year must have passed away before a change came in my life. I had raced many times since Thopus left and was still as fast and strong as ever, but I was lonely and sad without the girl beside me. I welcomed the prospect of anything new in my condition.

It was the young male who occupied what had been Thopus' stall who first told me I had been sold.

"I think they are to take you to the Oms," he said.

I remembered how Thopus had refused to describe this place to me and tried to find out from my neighbor what it was. But he wouldn't talk.

The following day a score of us were led from our stable. All were females except me. We were linked together by our nose chains and, as Imbos mounted on other Thuts wielded long whips, we were driven away.

We walked for miles, leaving the city behind and passing down rural pathways. Queer trees and vegetation covered the land, which was inclosed and evidently in a state of cultivation. The road was hot and dusty and I suffered intensely from thirst.

At last we turned from the main road down a by-path. Fenced fields on either side of us contained many of the Thuts, standing idly around or lying on the ground. There is no grass on Toree, but the fields are covered with that mossy growth which was dried and used for our bedding. On it grew fruity pods that I found later were good to eat.

The Thuts in the fields were all women, except for some young with their mothers. They were not so graceful as those I had seen in the racing stables, though many of them could yet be called extremely beautiful. They were not as slender as the racers. Their limbs were not so firm and round and their bodies were fleshier and softer. They had not received the same careful attention and their skins, though still hairless, had lost that bright, polished appearance. The plaits had been cut from the heads of many of them and the short, uneven hair gave them a wild look.

**F**INALLY we came to a group of buildings. I was led away alone to one of these, while my women companions of the journey were driven through a gateway

into a nearby field.

My new stable was not as clean as the others I had known. The moss had not been changed for many days and everything was soiled and dusty. There were a dozen stalls and in each was a male Thut. Slow, lethargic men creatures, most of them were standing or lying dumbly in their places.

In the stall next to mine there was a heavy, gross Thut. Fat covered his body in thick layers and he spent most of his time lying apathetically upon the flooring. That night I spoke to him and after a time he condescended to answer some of my questions. I asked him what the place was and why I had been brought there.

"It's the Oms," he said, "the place where the new generations are produced. We keep the race going."

Then he told me many things about the Oms. One of the queerest things he said, which I afterward saw was quite true, was that the young of the Thuts complete their physical growth rapidly. They reach their maturity in about one year of Earth time. I imagine it is this fact, together with their lack of thumbs, that explains the failure of the human race on Toree to develop into intelligent beings. No race could advance mentally if its individuals have no period of youth in which to learn.

"What becomes of all the Thuts?" I asked. "They can't keep so many for the races."

"Only the best and fleetest are kept for the races," he answered. "The others are sent to the Subers as soon as they are grown, except those they keep for breeding purposes."

"What are the Subers?" I asked again.

He lowered his voice as he replied and I could barely understand his words.

"It is where we all go at the end. It is where the Imbos kill us."

I didn't understand.

"Why should they raise so many, just to kill us?" I asked.

"Why," he said in surprise, "has no one ever told you? They kill us for our flesh, which they eat."

**N**O Earthly man can realize the sensation of sickening horror that filled my mind after this disclosure. Through days of terror and nights of sleepless despair, I thought wretchedly of my fate. I racked my brain for way of escape, but no feasible plan suggested itself.

I think my years of complete subservience to the Imbos had sapped my will power. Perhaps, also, those Imbos have stronger mentalities than we men of Earth, just as their civilization is so much farther advanced than ours. Whatever the reason, I could not summon the courage to attempt flight.

In addition, to deter me further from thoughts of escape, were those terrible creatures kept by the Imbos to guard against the Thuts running away and to hunt them down in the rare event that they did. They fill the roles that watchdogs and hunting hounds play on Earth. They belong to the cat family, a little larger than



common Earthly cats. They have long, sharp fangs and claws that rip and tear when they are allowed, by their Imbo masters, to work their will upon some unfortunate Thut. There were many of them around the Oms.

I pictured these cats, hunting me. In my imagination I saw packs of them catching me, as I ran in terror, and pulling me down while their fierce teeth tore at my throat. I saw excited groups of Imbos, hot with the chase, exultantly urging their creatures on as I fled hopelessly, as a chased deer or rabbit flees on Earth.

I don't know how many years I spent in the breeding stables of the Oms. I lost track of time. I was well fed, though my stable was poorly kept. I grew accustomed to the filth, wallowing unashamed in my bed of dirty moss, and to my duty to perpetuate the race of Thuts for the Imbo racing stables.

Sometimes I was turned loose in a field, or moss pasture, where I stood or lay idly about, eating the fruity pods. I had almost forgotten how to think and I lived as nearly like the dumb, apathetic brute my masters thought me as human man could. With lack of exercise my muscles softened and I became fat and flabby. I no longer even dreamed of escape.

For several weeks I was left alone in my stable, apparently forgotten except when food and water were brought to me. I was not even taken to the fields. Greater quantities of food than I had been given before were placed before me. I ate it all. As I lay and lolled in my little stall, I grew fatter. I might have guessed the fate that loomed so close, but I had almost lost the capacity for the simplest of logical thinking.

**E**ARLY one morning an Imbo led me from the stable into a large field, where several hundred Thuts already waited. They were almost all young things, barely grown, though all were heavy with fat. Considering their fate of growth, they could not have averaged much more than a year in age. I had found that only the older Thuts learned even the simplest words of their own language. These young things could make only meaningless, animal sounds.

Soon after I had entered the field, I saw a dozen large vehicles ranged along a roadway near us. One of these backed up to an opening in our fence. It was really nothing but a huge cage on wheels. An opening in the rear was let down. With long whips, a dozen Imbos drove Thuts inside until the cage was packed tight with their young bodies. Then the entrance was closed and fastened and the vehicle moved away while an empty one took its place.

I hung back until the last of the wheeled cages was filling. Then the Imbos drove me in among the Thuts with pitiless blows. Inside we were packed so tightly that we could not lie down. We stood there, hot, sweating bodies pressed together, like so many chickens in a coop.

The vehicles drove rapidly down many

roads for several hours. It was agony to stand in that press of bodies. Throats parched and dry, we were thrown this way and that as our conveyance swayed from side to side. Nearly all of us were cut by the whips or bruised by contact with each other or the bars of our cage. Half a dozen of the Thuts broke their legs during the journey.

At last, at one side of the road down which we sped, a large, factory-like building appeared. Our drivers turned in and swung around one end. There was an open doorway. Our vehicle stopped here for some time, waiting for those ahead to unload. From where I stood, I saw a frightful thing.

On a sort of loading platform was piled a heap of wet, glistening objects. I did not recognize what they were for a moment, but I turned cold with dread as my staring eyes identified them.

They were the stiff, dismembered bodies of dead men and women! Headless and legless, they were stacked there like the carcasses of hogs or cattle, waiting for conveyances to take them away.

I think I fainted. The truck backed up to a door in a high wall and we were released from our prison into a great yard. It was a rectangle, with the building on one side and stone walls forming the other three. It was crowded with Thuts, helpless human creatures.

I had not long to wait for the next act in our tragedy. A door in the building opened. Staring through it, I saw a place so horrible that I cannot describe the utter fear and horror that seized me. It was the slaughter house, the shambles where I was doomed to die, so Imbos might eat my poor flesh.

**A**GROUP of Imbos descended into the yard among us. None of the Thuts resisted them, seeming to accept their approaching fate as inevitable. The only sounds that came from their human lips were sudden cries of fear and pain as the Imbos roughly prepared them for the slaughter.

Each Thut was thrown to the ground and its ankles tied together with short, strong cords. The wrists were likewise tied, the wrist cords passing between the bonds around the ankles. I don't believe this hobbling of legs and arms is to prevent possible resistance, but is merely for the convenience of the Imbo butchers.

I struggled briefly and ineffectually when my turn came, but I soon found myself lying tied with all the others. I was at one side of the yard, having been among the last to enter that anteroom of death. My back was pressed against the closed door through which we had entered. From where I lay, I could see inside the building.

As soon as we were tied, lying helpless in that dirty yard so close together that in some places the poor Thuts were piled two deep upon each other, I saw a sort of conveyor come out of the doorway. It ran along a rail which extended for some distance over the yard. From it hung a

hooked chain. Quickly the Imbos placed one of these hooks through the cords that bound a Thut's feet together. The chain shortened and the hapless Thut was lifted feet first into the air.

It was a young female, that first one. One sharp cry, like a smothered woman, broke from her lips as she hung head down, swaying above us. The carrier quickly swung her into the doorway.

There, as I watched, sick yet unable to turn my fascinated gaze away, a stream of water played briefly over her body, washing away the dirt of the yard. This took only an instant. Then I saw the quick, ruthless murder of a human being on Toree. An Imbo hopped to the side of the hanging girl. In one paw he grasped her throat. With a thin, keen blade, he severed her jugular vein with one deft stroke.

As he struck, she screamed horribly, her voice dying away in a gurgling, choking sob. The blood spurting from the wound and the dangling body was drawn away into the dark, mysterious recesses of the building. At the same time another victim swung under the hose and faced the dripping blade of the butcher's weapon.

In the yard, Imbos with hooked poles dragged the helpless Thuts into convenient position for the dangling hooks. One by one they were swung up, carried into that dread doorway and killed. There were only a few of us left, perhaps two score, and one of the Imbos was coming to drag me under the hooked conveyor, when suddenly the work stopped.

I don't know whether their workday had reached its end, or whether they had killed all they required for the time. The empty conveyors ran inside. The door of death closed and we were left, still bound and helpless, alone.

## CHAPTER V

### *The Fight for Life*

**N**O food or water was brought to us and we lay in the sodden dirt of the yard, so many lumps of breathing flesh, to wait through the night for the simple transition into lifeless meat. The cords hurt my wrists and ankles. Seeking relief for my cramped limbs, I worked at my bonds. They were carelessly tied and it was not difficult to free my hands. Clumsily, because of my lack of thumbs, I slipped the cords from around my ankles.

Even then I had no idea of escape. I was hopelessly resigned to my fate and sought only the temporary easing of my tortured limbs. I merely hoped that death by the butcher's knife would not be too painful and that it would be mercifully quick. What they did with my body, how many Imbos it fed, I didn't care.

It was accident that freed me from the prison yard. I was lying with my back to the outer gate, which must have been insecurely fastened. As I moved, I felt it give behind me. I pushed my back against it and it gave a little more. A sudden hard heave and the fastening gave way. The door swung open and I fell a foot or

more to the ground outside.

Frightened, I lay motionless for some time. The night was dark and I heard no unusual sound. At last, nervous and tense, I stood up and stared around me. Before me stretched the roadway. At its end, where it turned into the main road, I could see a growth of tall, strange Torean vegetation. Silently I ran down the road and into the shade of the great plants.

All through the night I struggled to put as great a distance as possible between me and that awful place of death. Through dense vegetation and across open, cultivated fields I stumbled and ran. I avoided all places showing signs of habitation, seeking only to hide myself from the Imbos.

Just as dawn was breaking I came to a stream of considerable width. I found a hollow place beneath the bank end. With the water lapping at my feet, I crawled under. I lay hidden there all day.

The next night I stopped the pangs of hunger by eating from a field of podded moss. Then, refreshed, I waded and swam across that stream and pushed still farther across the country. I was leaving the more thickly populated places and getting into a strange, wild land. There were no trees like those of Earth, but tall, fronded growths rose thickly in many places. Huge, bright-colored flowers, three and four feet across, swayed in the wind and heavy, sweet odors filled my nostrils.

**I** THINK it was the fifth day after my escape when I met the wild Thuts. There were about twenty of them, eight or ten women, one man and the rest young children. I came upon them in an open place in the forest as they fed on the strange fruits with which the place abounded. A little pool of water glittered in the Sun and they stood or lay upon the mossy bank beside it.

They crowded curiously around me as I approached. One of them hesitantly stretched out its four-fingered hand and touched my nose ring. I caught enough words as they chattered together to know they recognized me as an escaped captive, or domesticated Thut. That night I stayed with them.

In some respects, they were like the captive Thuts among whom I had lived, though wilder, more unkempt and marked with the independence of all free things. The male told me there were many of them, in similar groups, scattered through the forests. He also told me that sometimes the Imbos penetrated to their territory and hunted them with the cat animals.

Early the next morning the male Thut told me I could not stay with them. It was the law of the group that it could maintain one adult male. If I wished to fight him for leadership of the group and possession of the women, he was quite ready for battle to the death. I desired none of his women and I did not want to fight.

I turned away from them and slipped back into the forest. As I looked over my shoulder, I saw an unmistakable glance of scorn in the eyes of several of the women.

I must have lived for weeks alone in the forest, subsisting on the wild fruits and drinking from the countless streams and pools of clear cool water. Each night I slept wherever I found myself and was never molested.

As far as I could discover, there are no dangerous animals, venomous reptiles or insects upon Toree. I saw several groups of the wild Thuts at a distance, but always kept away from them. The hard, open life removed the fat from my body and I regained a large part of that physical well being and bodily strength I had known in my days as a racing Thut.

One day, late in the afternoon, I heard sounds of hurrying things in the forest near me. A group of Thuts, running desperately, dashed across the little glade in which I stood. I didn't know from what they were running, but they were obviously frantic with fear.

I ran after them.

Behind me I could hear sounds of pursuit. After a long time, when my labored lungs felt at the point of bursting and my legs seemed unable to sustain me any longer, I came to a wide river. I plunged in and hid in a patch of water vegetation. Only my head poked up above the water and it was well hidden behind the fronded leaves.

**A**S I peeped at the river bank, a few feet away, I saw a young male Thut racing along the water edge. Behind him sped three of those cat animals. Further behind, two Imbos rode into view, mounted on tame Thuts.

Just as the fleeing man, terror staring from his eyes, came opposite my hiding place, one of the cats leaped to his shoulders. The man screamed and attempted to knock the beast away with his hands, but it clung there. Twisting its head quickly round his neck, it ripped with long, sharp fangs at his throat. He stumbled and fell in a quivering heap, not ten feet from where I stood hidden in the water. The other cats leaped on him and for a minute their furry bodies half-covered the writhing, twisting mass of human body, arms and legs.

Then the Imbos rode up and drove their cats away with guttural cries of command. The wretched man's throat was torn to shreds. His head and shoulders were a mass of bleeding wounds where teeth and claws had ripped and slashed the soft flesh.

The Imbos stood beside the body for awhile, arguing. Then they tied ropes to the carcass and fastened them to their riding Thuts. A throaty command and a slash from the whip, and the straining man things slowly dragged the body of their dead fellow away through the undergrowth.

I stayed in the water for what seemed to be an eternity. Long after it had turned dark, I crept out cautiously. Dreading the Imbo hunters who might still be in the neighborhood, I decided to try to cross the wide river before me. I struck out from the shore and slowly swam into the unknown depths.

After a long while I saw the outline of the further shore before me. My feet touched bottom and I dragged my weary body up the bank. I rested.

Then, as dawn was breaking, I warily slipped away from the river, seeking some place to hide.

I had not gone far before I realized I was close to Imbo habitations. I crept along the edges of cultivated fields and passed many of their homes, yet no one saw me.

I pushed on, hardly caring what became of me, but seeking some hiding place in which to pass the daylight hours.

I came at length to a large open space and paused in the edge of the vegetation. In the center of this space, perhaps two hundred feet from where I stood, I saw something that made me rub my eyes in astonishment.

As I gazed upon the vast bulk, I recognized the huge machine for what it was—a space ship like the one that had brought me from Earth so long ago. There were no Imbos in sight as I ran across the intervening space.

**I** DIDN'T quite realize what I was doing. It was just an accident, instinct, or perhaps Providence, that led my feet inside and down the long corridors.

I was not familiar with the interior arrangement of the ship, even if it was the same on which I had traveled from Earth, of which I was by no means sure. Yet something guided my feet straight to a little room, a cell or stall similar to that in which I had first been forced from civilized manhood into the condition and status of an animal. The door was open and I stepped inside and pulled it to behind me. I fell to the hard metal floor. In a few minutes, sleep answered the demands of my worn and weary body.

The space ship was in motion when I awoke. Several Imbos stood in my room, staring at me where I lay. I imagine their expressions denoted astonishment, according to the Imbo conception of emotions. None molested me and they quickly withdrew, shutting and fastening the door as they left.

It was about an hour later when one of the Imbos returned. He touched my head gently and made signs that he meant me no harm. Then I recognized him. It was Soran, the scientist who had first told me about Toree after he had read my mind and learned the English tongue with the brain-reader!

For the second time I heard him try, in halting, croaklike tones, to form the sounds of my own language. I discovered that the words, after all my years of slavery, were strange to me, too. If Soran found it hard to talk, I found it equally difficult to make my brain understand.

He told me that when his companions first found me on their ship, they thought some friend had sent them an additional supply of fresh meat for their larder. They were on another expedition to the distant planets, he said, but this time their objects were purely scientific. They had been able

to finance their journey without appealing to Bokal or his kind. Then, he said, he had recognized me as that Thut of Earth he had seen captured on the earlier voyage, years before.

"We could not guess how you got on our ship," he said, "but I told them you were Tomman, the man of Earth. We all decided that your presence here was a good omen for the success of our venture. We felt that it would augur success if we treated you as kindly and as well as possible. We have decided to take you with us, to feed you and care for you to the best of our ability. We had not planned to visit your Earth again, yet it will not be far out of our planned route. We will swing to your planet and stop long enough to set you down upon its surface."

**T**HAT is all there is to my story. On the space ship I was still stabled and fed and cared for as an animal, but it was the finest imaginable treatment a stabled creature could have. I had unlimited supplies of the best of foods, clean, soft moss fresh each day and gentle, careful grooming.

One night I was led from my stall and placed on board the small auxiliary air vessel in which I had first been kidnaped. We dropped from the space ship to Earth. I was pushed through the door onto that great plain where I was found the following day.

I saw the Imbo airship leap upward and disappear in the dark skies. I hope no Earthly man will ever see it again.

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LOOK FORWARD TO  
NEXT ISSUE'S HALL OF FAME SELECTION!

## DEATH FROM THE STARS

A Gripping Drama of Universal Mysteries and a  
Desperate Struggle for Existence

By A. ROWLEY HILLIARD



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A BIG O.K. FROM U.S.A.

**PEPSI-COLA**  
THE GREAT TASTE

Pepsi-Cola is made only by Pepsi-Cola Company, Long Island City, N. Y. Bottled locally by authorized bottlers.



**A**N old man, bent with age, totters into a scientist's laboratory. "I want to be young again," he croaks feebly to a man seated before a desk.

The scientist seated before the glass-topped desk eyes his elderly visitor curiously.

"How old are you now?"

"Ninety."

The scientist nods, is silent for a moment. Then he asks:

"How old would you want me to make you?"

The aged visitor's rheumy eyes brighten. "I'd like to be thirty again. I'll be young, strong—in the prime of my life. Yes, I want to be thirty again!"

The scientist nods his head again.

"All right, I'll do it. But that will be sixty thousand dollars—payable in advance."

The old man staggers in surprise. "Sixty thousand dollars? Why, that's robbery."

"Sixty years—sixty thousand dollars. That's my price—a thousand dollars a year. Take it or leave it. And you'd better take it, you old fool—for you can't take it with you!"

### Elixir of Life

The secret of eternal youth—in the hands of one man. And the quest for that strange secret leads another man to a domain on Earth never before explored by civilization—to a sunken world far below the sea-level of our planet. A submarine land that lies at—**THE BOTTOM OF THE WORLD!**

**THE BOTTOM OF THE WORLD**, the featured book-length novel in the next issue of **STARTLING STORIES**, is written by one of the most popular writing teams of fantasy fiction—John Coleman Burroughs and Hulbert Burroughs!

Yes, they're the sons of Edgar Rice Burroughs, following in the footsteps of their famous father. Those of you that have read their "Man Without a World" series

**THE ETHER VIBRATES**—with the letters sent in by loyal followers of science fiction. Add your voice! This department is a public forum devoted to your opinions, suggestions and comments—and we're anxious to hear from you. Remember, this is **YOUR** magazine and is planned to fulfill all your requirements. Let us know which stories and departments you like—and which fall to creak with you. A knock's as welcome as a boost—speak right up and we'll print as many of your letters as possible. We cannot undertake to enter into private correspondence. Address **THE ETHER VIBRATES**, **STARTLING STORIES**, 10 East 40th St., New York, N. Y.

in our companion magazine, **THRILLING WONDER STORIES**, know what to anticipate. As for the others—**THE BOTTOM OF THE WORLD** will make an excellent introduction.

### Hall of Fame Classic

Number six in our fantasy hit parade of the revival of the fittest is **DEATH FROM THE STARS**, by A. Rowley Hilliard. Fantasy fan Robert W. Lowndes did the selecting, and a wise choice it is.

**DEATH FROM THE STARS** is a story of the profound mysteries of the Universe. About an infinity of possible life-forms of whose properties we know nothing of. It's a gripping story of a gigantic struggle for existence, the human race battling against a terrible unknown enemy.

Extra short stories in the big September issue of **STARTLING STORIES**, plus all our regular features. More highlights of science and invention in **THRILLS IN SCIENCE**, a new mental workout for devotees of the **SCIENTIFIC CROSSWORD PUZZLE**, and many other famous fantasy features.

### LETTERS FROM READERS

Come on in, space-rangers, and park your Heavisides. The stratosphere's fine and this rocket-can of ours just got a new coat of paint. Yeah, it was the atom-blasts you space-waddies loosed at me last trip that peeled the tar from the plates.

It took my bankroll to cough up the requisite pecuniary resources to pay the space mechanics. So easy on the blasts this time, boys, or I'll pass the helmet around and you'll have to kick in. Otherwise I'll kick somebody's molars in.

Speaking of molars and plates, sink your teeth into this spacegram from Pilot Lynn Bridges. He's got a mouthful for us.

## FROM TOP TO BOTTOM

By Lynn Bridges

I've never written you, before in regards to STARTLING STORIES, although we did exchange words in T.W.S. once. On that occasion I discovered that the Sarge could not only take it, but could dish it out as well. But maybe this time things will be different, as I liked "The Water World."

The story is hardly one that could be called a "classic," but it is an enjoyable bit of writing, and recommended for whiling away a couple of hours. Ofhand I can't recall a short by Friend which I liked, but both his novels for you have been good.

Since sending in lists of your stories has become the pastime of your readers, I may as well give you mine.

1. "The Black Flame"—Weinbaum
  2. "Twice in Time"—Wellman
  3. "Glean from Eternity"—Wellman
  4. "The Kid from Mars"—Friend
  5. "The Impossible World"—Binder
  6. "The Water World"—Friend
  7. "The Fortress of Utopia"—Williamson
  8. "Sojarr of Titan"—Wellman
  9. "Five Steps to Tomorrow"—Binder
  10. "The Teen Planeteers"—Hamilton
  11. "The Prisoner of Mars"—Hamilton
  12. "A Million Years to Conquer"—Kuttner
  13. "A Yank at Valhalla"—Hamilton
  14. "The Bridge to Earth"—Williams
  15. "When New York Vanished"—Kuttner
- A suggestion: with so many lists on hand, why not put them together and find the consensus of opinion? The results should be interesting.

I usually leave the art department to those better qualified to comment on it, but I couldn't help comparing Orban's illustrations to those Wesso would've drawn for the same scene. The comparison wasn't especially favorable to Orban.

That's enough for now. See you in a couple of months.—Lynn Bridges, Detroit, Michigan.

Certainly the Sarge can take it! If you've ever seen the excess avoirdupois that surrounds his spinal column you'd realize that his carbon components are built to absorb electronic shocks as well as vats of Xenon brew. Sure I'm fat. So what? Put a gravity-nullifier on my belt and I'll play leap-stad on Pluto with the best of you. And if you don't believe me, go sit on your axis. Yes sir, your old Sarge doesn't pull his paunches.

So you orb'd the Orban sketches and didn't like it? Well, Pilot Bridges, that's gratitude. Here our art ed tries to give you variety by introducing a new brush-slinger. And what do you do but yammer so loud they can hear you on Ganymede. What do you expect, anyway? If we gave you a free space ship with every issue of S.S. you peelotus would still ask why we didn't fill it up with fuel and put a radio in it.

And now a letter from a cupcake by the name of Vida Claire Schneider of the type that keeps us from inhaling carbon monoxide. Plug in your radiophones, space-buckaroos.

## CALLING ALL AUTHORS

By Vida Claire Schneider

I picked up my March copy of STARTLING STORIES, opened up to the first story and came smack up against a book-length novel! I groaned dismally as I noted that it took up nearly all the book.

"I hate them darned book-length novels," I growled.

Ah, but have patience—I sighed resignedly and started to read. And here's where I give Manly Wade Wellman a great big hand. That story held my interest from beginning to end.

I might add that I like THAT kind of a book-length novel. I liked the way Wellman handled his characters. Thought that was clever, thinking up that name "Sojarr" for soldier. It has that other world sound about it and yet it tugs at your heart strings. You keep seeing that babe bravely saying: "I am Sojarr. More power to you, Mr. Wellman!" And now, Mr. Robert Arthur, I want to thank you for your most entertaining story, "The Eternal Moment." Can I say more? Watch me! Suspended animation really seems to be man's only chance of ever traveling into the future. I firmly believe big things can come from work in that field. Your story held me enthralled when, after centuries, the three characters were discovered still in the act of killing each other. To them, they were alive in the midst of drama, but to the onlookers they were motionless and deathlike. I can't get that story out of my mind, and as a would-be author to a darn good professional, may I extend a mention?

And now Mr. Stanton A. Coblenz. I haven't finished your story yet, but methinks you took nations and made Unverses out of them. And bless me if you haven't got our old friend L'erhitum—(Hitler) to you, lording it over creation. That lad does get around! Just goes to show you, sir, that bird a inch and he takes the whole darned Universe.

Oh, hello, Mr. Editor, sort of forgot you for a moment, didn't I? Now I want to thank YOU for putting out such a swell magazine with such a dandy bunch of writers.

(Sigh.) Guess that will make it just twice as bad for me to break through your ranks.—47 North Bleacher Street, Mount Vernon, New York.

We can hardly talk we are so choked up, Vida. We know you will be a pal of ours for keeps. You're not like the rest of the leering lackeys that find fault with everything about our ship, the *Jolly S.S.*, from a rivet nut to a cyclotron engine. Send us your picture one of these moons, Vida. Ah, if I were twenty years younger and fifty pounds slihter. . . .

I'm sure happy to learn that you're trying your hand at batting the verbiage around, girl. Writing is as easy as picking up a globule of mercury from a gyroscopic turntable with a pair of space-gloves. All you got to do is make black marks on white paper. Then send your manuscripts into editors until you go broke from paying postage. Save your rejection slips. When you have twelve you'll have a dozen.

Comes now a taxpayer by the name of Edward C. Connor. He's lined up a list of his favorite novels, in order. And quite a list it is! If those stories were laid end to end they'd reach into the fourth dimension. Where some of them belong, no doubt! (Nix, ed, I was only foolin'. Of course all our novels are good.)

## FIVE OF A KIND

By Edward C. Connor

Of the fourteen novels you have published so far, only five are outstanding. "The Black Flame" undoubtedly heads the list. That story sold me on your magazine, and I have not missed a copy since.

In second place is "The Fortress of Utopia." Third—"A Yank at Valhalla," which is truly a masterpiece. Certainly it is the best tale Edmond Hamilton has ever produced. Incidentally, he is one writer who turns out consistently good work. Seldom have I disliked any of his stories.

Fourth—"Twice in Time." Nearly as good as number three. Wellman made a hit here, but his yarn in the March '41 issue was not so hot.

Fifth—"Five Steps to Tomorrow." Two failures were "The Kid from Mars," and "Sojarr of Titan."

Now, here is a list of the fourteen novels,

in order of their merit, with the points being a method of comparing one with another. 1st place, 23 points; 2nd, 20; 3rd, 18; 4th, 17.5; 5th, 16. Then:

6th—"When New York Vanished".....	13.5
7th—"The Three Planeteters".....	13
8th—"The Prisoner of Mars".....	12
8th—"The Impossible World".....	11.5
10th—"A Million Years to Conquer".....	11
11th—"Giants from Eternity".....	8
12th—"The Bridge to Earth".....	7.5
13th—"Sojarr of Titan".....	4
14th—"The Kid from Mars".....	2.5

Lastly, among those of all other science-fiction magazines, your feature, "Thrills in Science," by Weisinger, is tops.—929 Butler St., Peoria, Ill.

Sun-imps of Mercury, lad, but that's a keen list you've got there. And I see that you can count, too. We're dumb. We don't even know how to spell two and two.

So you're relegating lowly last place to Oscar J. Friend? Oscar now has fourteen good reasons for hating you. Oh, well, he's a cluck. He should have sent that story to the Saturday Evening Post, where it would have been appreciated—at a dollar a word. Mark my words, you space-butns, your old Sarge expects great things of Mr. Friend. If you've ever read any of his mystery novels, penned under his pseudonym, Owen Fox Jerome, you'll realize that that boy can write! What did you think of his recent "The Water World," by the way? Yes sir, Oscar can write rings around Saturn.

And now a spacegram from a guy who's pretty busy dodging missiles these days. Just like me.

## BINDER FOR BRITAIN

By R. D. Chittock

Although I have been reading science fiction for several years this is the first time I've ever written to a magazine, being content to read them and then holding my own counsel. Well, to get down to the first point.

I congratulate you on two really fine magazines, STARTLING STORIES and THRILLING WONDER STORIES.

My own opinion is that the introduction of STARTLING STORIES was splendid idea. Even better than running a monthly, as both mags have separate identities, which one mag cannot possibly achieve.

Being an English reader I probably appreciate it more than your American readers, who live in a land of plenty, at least as far as fantasy is concerned.

Since the capitulation of France, last year, fantasy has become more than scarce here.

As I am (until required by armed forces) a cinema operator, even the movies do not provide relaxation for me and so I rely on *s-f* which stimulates the imagination and presents knowledge to you in the form of real entertainment.

I like most types of science fiction stories, and still think that Eando Binder is the most consistently good author in the field.

Although writers such as E. E. Smith, the late Stanley G. Weinbaum and several others have turned out better stories, no one does so with such amazing regularity as the brothers seem able to do. Of course, that is only my personal opinion.—(Address missing.)

Thanks for the note from overseas, lad. You can blame the mustached moron in Berlin for the shortage of *s-f* mags in England, son. If I had my hands on that bent prop I would break his undercarriage, fuselage, drop some eggs on his hangar, and blow up his supply dump. I would put sand in his motor, the sour puss.

Glad you take to the Binder boys like a Martian *skitar* takes to jellybeans. They're on deck for a forthcoming issue of

THRILLING WONDER STORIES with a complete novel, "Via Jupiter." Drop a billet to our subscription department and reserve your copy now.

There is British moxey for you, space-waddies! This bird doesn't get enough thrills with all those bombers overhead. He has to get more of 'em from scientific!

And now an etherflash from Pilot Bill Adams. He didn't like the Weinbaum yarn!!!

## A BOUQUET FOR BELARSKI

By Bill Adams

I have just finished the May issue of STARTLING STORIES, and would like to make a few comments on it and the March issue.

Starting with the March issue, I find my old favorite Wellman with the feature novel. I may say here that I never possess any qualms when I start a story by Wellman. I know I will enjoy it. Therefore I approached "Sojarr of Titan" and devoured him at one sitting. Wellman has here presented a very logical story, and, while it is not likely that things ever will happen just as he has told, it remains that it is quite possible that things could happen just so. After all, stories are just suppositions.

Anyway, I enjoyed "Sojarr of Titan" immensely, but I frankly do not believe Wellman will never reach the high level again that he set with "Twice in Time." Not that he is slipping, but a story any better than "Twice in Time" is a very rare occurrence indeed. I believe "Twice in Time" is the best story I have ever read in *S.S.* and I have read every issue since September, '39. Suffice to say, "Sojarr" passed my expectations, and I always expect a lot from Wellman. You may gather from what has gone before that I have a slight craving for Wellman.

To go to the short stories in the March issue, I found "The Worlds of If" a disappointment. It is the worst I believe I have ever read. It seemed to me that Weinbaum ruined the opportunity for a really good, thought-provoking story here. I can hardly believe that it was written by the same man who wrote that masterpiece of all short stories, "A Martian Odyssey." May I say here that I want to thank the editors of *S.S.* for giving me the opportunity to read all those masterful shorts that were published before I became a fan.

I am glad to note the trend *S.S.* is taking to make really good stories out of the shorts they use to fill space with. All too often you have published tripe in the back of your mag to fill space. "The Eternal Moment" rises above this level. A really good story it was. As for "Over the Space-Ways," it was just another common space-filler. No plot to it, no nothin'. To say it's punk could be putting it mildly.

Departments—all excellent. Really educational features.

To progress to the May issue. The cover attracted me first. I remember Belarski's paintings from the covers of his *I* used to see on air-war mags. In spite of the difference in subject matter, I recognized his painting right off the back of his old airplane paintings and overlooked it. The only real objection I have is the Dick Powellish looking hero on the front. I much prefer Orban's picturization of Jeff Reade on page 17. That carefully waved hair slays me.

He has accurately depicted the scene in the story, and while the weapons are reminiscent of a Spandau machine-gun, I attribute this to a throwback of his old airplane paintings and overlook it. The only real objection I have is the Dick Powellish looking hero on the front. I much prefer Orban's picturization of Jeff Reade on page 17. That carefully waved hair slays me.

As to "The Water World," I approach Friend's stories with the same confidence that I approach Wellman's, although in a somewhat less degree, as I have read some stories by Friend that I didn't particularly like. "The Water World," however, is one of Friend's better efforts, and completely surpasses "The Kid from Mars." Like Wellman, Friend has given

himself something to shoot at. "Roar of the Rocket" is, I might say, nearly the best story I have ever read, and Friend will have to go some to beat it.

As to "Superhuman," by Fearn, it is readable, but I regret the flood of Big Man stories that are flooding the market. Another space-filler, I might say of it.

Miss Brackett surpasses her usual self in "Interplanetary Reporter," but I am getting weary of present-day themes set to science-fiction, with no change except in locale.

"The Literary Corkscrew" was a thoroughly enjoyable short, with a happy ending which was unusual for its type. Understand, I don't extol "and they lived happily ever after" type all the time, but I don't like stark tragedy in abundance, either. You're doing all right with your story endings. Keep it up.

Here is a question that I have often wondered about and I would like to see it answered in your "Science Question Box." Has there ever, to anyone's knowledge, been an attempted flight to the Moon, either comparatively recently or in the past? If so, I would like to read a detailed answer via the "Science Question Box." Thanks.—P. O. Box 115, Santa Anna, Texas.

Well, Bill, all the other customers liked the Weinbaum story. Did you know that "The Worlds of If" was one of the few short stories reprinted in the Weinbaum Memorial Anthology? Read it again, lad, then let me know if you still don't think it a clever variation of the usual time-traveling story.

Rudy Belarski is here to stay. He's one of the best canvas-daubers in the business, and you can boil him in his own oils if he doesn't come up with an ace of a cover every time.

Regarding your lunar query, the only guy that ever tried a hop to the Moon was a little sawed-off runt by the name of Sir Edgar Ray Merritt Kline. He left Earth in a battered ashecan called *The Bronx Express*. When the goof was fifteen miles up he suddenly remembered that he had forgotten to turn off his radio in his parlor. So he stepped out—and they picked him up in Bombay with a blotter.

Seriously speaking, no one has ever made the attempt. Science hasn't invented a fuel yet that's powerful enough to impart an escape velocity of seven miles per second to a space ship. Some of the boys in San Quentin are working on it, though. Here's hoping they forge ahead.

Comes now an 'epistle from a kiwi. He's got his eye on Wesso's art.

## HAMILTON'S TRIUMPH

By Jim McDonough

Believe it or not, but this is my first communication to any science or other type of magazine. But after reading Edmond Hamilton's "A Yank At Valhalla" I just felt the urge to sit down and tell you how swell I thought it was. I am a student of Journalism in a college in Worcester, Mass., and as I read I try to pick faults if I can—an almost unconscious habit.

This story was tops in sentence construction and description. I could feel myself fighting against the Jottiers with Thor and Masters. "A Yank at Valhalla" is easily Hamilton's best work to date.

The illustrations were good except for one little discrepancy; i.e., on page 26 it states that Odin's left eye was missing due to a battle injury—and then on page 27 an illustration of Odin shows him with two good eyes. Or did he have a glass eye? (Sarcasm)

But all in all this story was a great success, and I hope that Hamilton will continue in the same vein.

Congratulations to E. K. Bergey. Although one of the Jotuns on the front cover illustration seems to have blond hair! How come? A good job, however!

"The Hyper Sense" was what I thought it was—a fill-in. The illustration was terrible.

"The City of Singing Flame"—here, I was disappointed. The same ending has been used over and over again. Honestly, I could foresee the outcome before I was halfway through. His choice of words is splendid, however.

"The Demons of Darkside"—Enjoyed it, and would like more of Leigh Brackett.

Finally, give us more of Edmond Hamilton. Congrats on having a swell mag.—39 Spring Street, Fairhaven, Mass.

A handful of Venusian fire-rubies to you from Ed Hamilton, sir! That typewriter topper thanks you and all the other citizens for the nice words. He'll be dropping in at your spaceport any day now to take you for a spin to Pluto's Pleasure Palaces by way of showing his gratitude.

The mystery of the monocular Odin was discussed freely aboard this ship in the last issue. So pipe down and cut your jets. You're the tenth peelo to go hunting for Wesso's scalp. But don't say we didn't warn you—he's bald. Yep, his noggin would make a fine mirror for any babe that ever danced in a 'vision chorus.

And now an announcement of serious interest to all fantasy fans:

## WORLD SCIENCE FICTION

### CONVENTION

By Olon F. Wiggins—Lew Martin—Roy Hunt (Denvention Committee)

Dear Science Fiction Fans:

As most of you know, the World Science Fiction Convention is going to be held in Denver, Colorado, July 4th, 5th, and 6th, sponsored by the Colorado Fantasy Society. The convention committee fervently hopes that all readers and fans of science fiction will make this convention if possible. Following is the last minute pertinent information pertaining to this gala event of science and fantasy fiction.

It will be held at Denver's fashionable hotel, the Shirley-Savoy, in the Colorado and Centennial Rooms. The rates of this hotel are extremely reasonable, more reasonable in fact than any of the other larger hotels in town, including the YW and YMCA, and we'd appreciate it if all of you that will, room here, for if a hundred delegates put up here we will be able to get the hall free, and consequently having more funds for elaborate preparations and entertainment.

All fans who write ahead will be met at the bus station or depot and driven to the hotel. If your arrival is unheralded you may get in touch with us by calling CHERRY 1087 (Roy Hunt). The opening session will begin promptly at 9 A. M. Friday the 4th. The program has not as yet been worked out in too fine a detail before this issue goes to press, but we are more or less certain of the following.

Friday morning from 9 to 12 will be an informal gathering where old acquaintances are renewed, new ones made, and autographs exchanged. Here you will meet many of the editors, authors, and fans that you have seen in the various science and fantasy magazines, and above all, Denvention's honor guest, Robert A. Heinlein. Orlin Tremaine, incidentally, is offering a \$25 cash award to the fan who overcomes the greatest obstacles in making the Denvention. Authors E. E. Smith, Robert Heinlein, Willard E. Hawkins, D. E. Thompson, A. E. Van Vogt, Ross Rocklynne, A. G. Birch, Ralph Milne Farley, R. R. Winterbotham, S. D. Gottesman, Charles Tanner, and many others are expected. Such famous fans as Ackerman, Tucker, Madie, Widner, Morajo, Freehafer, Reinsberg, Shroyer, Dikty, Gilbert,



Korshak, Bronson, Wright, Fortier, Tullis, Yerke, Knight, and countless others from all parts of the continent will be present.

In the afternoon there will be speeches pertaining to various phases of fantasy by leading science fictionists. That evening there will be the traditional costume party where everyone that can, dresses as some science fictional character. Punch, beer, and wine will be free. After the party, the equally traditional auction will be held, Korshak presiding, where the delegates may buy the original cover paintings and interior illustrations of your favorite fantasy artists, and numerous other collectors' items to grace your den and collection.

Saturday (5th) will be a meeting of the Colorado Fantasy Society limited to members only. Incidentally, all of you fans and readers, whether you plan to attend or not, and who wish to further the cause of science, fantasy, and weird fiction should send us your fifty cents membership fee, for which you will receive a beautiful modernistic membership card, a number of booster stickers for your letters, and the official CFS publication, the CFS Review.

The afternoon will be an open business meeting of fandom discussing various problems paramount to fans, such as where the next convention will be held. The rest of the program is not yet decided upon, although within the realm of possibility is a comical science fiction play written and produced by the pro science fiction author, Willard E. Hawkins, and a feature length sciencefiction movie, if possible either E. Rider Haggard's SHE or Jules Verne's THE MYSTERIOUS ISLAND. Sunday evening the Denvention will officially terminate with a banquet in honor of Robert A. Heinlein.

Anyone requiring further information should contact Lew Martin at 1258 Race Street, Denver. Memberships may also be sent to this address in either cash or money orders. No checks or stamps, please.

Let's all pull together and make this, the Denvention, the most successful convention ever, and one to be remembered far into the future.

There she is, folks, the BIG 1941 science-fiction convention! We'll be there if you can ever save up enough paydirt to buy rocket gas. At the rate these birds move West every year with their conventions the 1945 one should be held somewhere in the Pacific.

So start saving your pennies now instead of squandering them on gumdrops and make the trip. It should be fantasy fun in more ways than one. If you have any queries, contact head man Lew Martin for full particulars.

And now, rocket rookies, the time has come to brake ships and cut the exhaust. Which is a break for you guys—because I'm exhausted.

So see you next issue. Remember to torpedo me some ethergrams right away. And don't send 'em postage due, you terrestrial twerps, or I'll call you from Pluto and reverse the charges.

—SERGEANT SATURN,  
The old space-dog.

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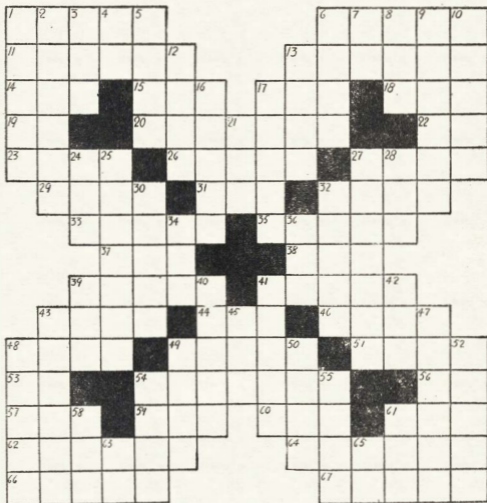
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# SCIENTIFIC CROSSWORD PUZZLE



## HORIZONTAL

1. Water in the form of vapor.
6. A point of an eccentric orbit that is nearest to or farthest from the center of attraction
11. Dorsal
13. Famous American inventor
14. Ovum
15. Membranous pouch
17. Natural substance containing metal
18. First name of inventor of the cotton-gin
19. Printer's measure
20. Next to oxygen the most abundant element
22. Interplanetary Police (abbr.)
23. Device for concentrating or dispersing radiation by refraction
26. Oblong, sweet, fleshy fruits enclosing a single hard seed
27. The measure of a thing, by its relation to a standard
29. Number of planets
31. Great body of salt water covering the larger portion of the Earth's surface
32. River in Northern France
33. Bulbous plant bearing variously colored bell-shaped flowers
35. Points where the orbits of heavenly bodies intersect the ecliptic
37. White greasy, easily melted compound, found in animal or vegetable tissues
38. The male of various animals, especially the cat
39. Following in time
41. Calcareous skeleton secreted in or by the tissues of various marine zoophytes
43. Bitter viscid fluid secreted by the liver
44. Self
46. Cut with a short, light stroke of scissors
48. Minute interstice between the molecules of a body
49. Relating to or being in or near the cheek
51. The tide occurring one or two days after the first and third quarters of the moon
53. Gold
54. Pertaining to the liver
56. Southeast (abbr.)
57. Retardation of magnetization in respect of a magnetizing force.
59. Long-eared equine quadruped
60. Frozen water
61. Greek letter denoting 8
62. Irregularity in motor action through failure of muscular coordination
64. Sterile, elastic, spirally twisted filament associated with the spores
66. To exert force upon in such a manner as to increase or tend to increase the distance between the acting body and the body acted upon
67. Pale, yellowish clay forming deposits along river-valleys

## VERTICAL

1. Alloy of iron, chiefly with carbon
2. Covering or coat, as of a seed.
3. Unit of work and energy.
4. Chemical symbol for silver
5. Quantity of matter in a body
6. Seaport of Arabia
7. Relation of the circumference of a circle to its diameter
8. South-southeast (abbr.)
9. Vitreous, blue, transparent silicate, used as a gem
10. Game-bird
12. Covered with close, fine, parallel water-marked lines
13. Asteroid
14. Grasp firmly with the hand
17. Great body of salt water that covers about two-thirds of the earth's surface
21. Chemical suffix used to denote salts of an acid whose name ends in -ous
24. Egg of a louse
26. Breathe with difficulty and somewhat noisily through the nose
27. German mathematician
28. Quadruped of the same genus, but smaller than the average horse
30. Raise the spirits of
32. Volatile emanations that affect the organ of smell
34. Common suffix in anatomy, biology, mineralogy, etc.
36. Ear, combining forms
38. Mixture of gases that forms the apparent blue envelope of the earth
40. Cuts down and gathers in, as grain in harvesting
41. Raccoon-like animal with mobile snout and a long ringed tail
42. Lair of an animal
43. Salt of boric acid
45. Geographical Linesmen of America (abbr.)
47. Adhesive mixtures, usually of flour and water
48. Having or proceeding from a point of radiation
49. High, broad, and flat table-land
50. Annual cereal East-Indian grass, widely cultivated on wet land in warm climates
52. Juicy, edible fleshy fruits of a tree of the rose family
54. Frozen rain
55. Single element of a voltaic battery
58. Deep ravine in a mountain ridge
61. Electric Telegraph Engineer (abbr.)
63. Chemical symbol for Xenon
65. In a catalogue of stars of the southern hemisphere, the names of Argelander and his assistant Oeltzen (abbr.)

The solution is on Page 127—  
if you MUST look!

NEXT ISSUE'S NOVEL

# THE BOTTOM OF THE WORLD

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**REVIEW OF THE  
SCIENCE FICTION  
FAN PUBLICATIONS**

**SPACEWAYS.** Edited by Harry Warner, Jr., 303 Bryan Place, Hagerstown, Maryland.

Liveliest of this season's fan journals, with contributors informally commenting on various phases of scientific fiction. Although mimeographed, this bulletin is attractively presented and easily readable. See Bob Tucker's article, "Confidential Notes on Editors," for a laugh. Also worth investigating are articles by Larry B. Faraci and Frederik Pohl.

**NEPENTHE.** Edited by Earl Singleton at the M.I.T. Graduate House, Cambridge, Mass.

This is a beautifully hectographed amateur mag devoted to poetic fantasy and related subjects. Issue includes poetry by A. Merritt, John B. Michel, Robert W. Lowndes, Jack Chapman Miskel, and others. Word reaches us that Singleton, the editor, died recently. Various fan mags are dedicating issues to his memory.

**THE SCIENCE FICTION FAN.** Edited by Olon F. Wiggins, 3214 Champa Street, Denver, Colorado.

Best issue in a long time, with okay illustrations. Mag also announces news of forthcoming Denver Convention, to be known as the "Denvention." DAW's piece, "Fantasie Books," not bad.

**SCIENTI-COMICS.** Edited by Phil Bronson, 224 W. 6th Street, Hastings, Minn.

Scientific cartoons, fiction, and popularity poll results in current number. Mag is improving. Should abandon fiction and sprinkle around more fan stuff.

**VOICE OF THE IMAGINATION.** Edited by Forrest J. Ackerman and Morrojo. Box 6475, Metropolitan Station, Los Angeles, Calif.

Here's a mag for the inner circle of fandom's followers. Mag is all letters and candid comment from subscribers, with the scribes slingin' a language all their own. Editor Ackerman and staff have given the mag a shot in the arm as far as artistic decorations go and latest issue is pulchritudinous. Give it the o.o.

**ZEUS.** Edited by Ronald B. Levy, Bert F. Castellari, Roma M. Castellari, 18 Dudley Street, Coogee, N.S.W. Australia.

Enthusiastic staff and contributors here. Contains a humorous supplement and other miscellany. Next issue promises better things.

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**World Without Water**

By **JACK WILLIAMSON**

Author of "The Gateway to Paradise" and  
Many Other Scientific Yarns



**T**HE real beginning of this story happened last summer, when your editor and your art director came to Hollywood. One hot afternoon, with Art Barnes and Ed Hamilton, we were having a story conference on Santa Monica Beach. I woke up into the middle of a brilliantly somnolent dis-

ussion. Somebody—or else I dreamed it—had said something about the political question of isolation.

Well, why not?

The staunch isolationist, apparently, would like to build a Chinese wall around America. The Ring, in the story, is a modern scientific version of the Chinese wall—in the light of the new theories of space-time and matter and energy. I don't think it is too impossible.

The passing of the dark star would supply reason enough for the building of such a wall. That, unfortunately, isn't impossible, either. Non-luminous bodies are difficult to detect. If the Dwarf does pass, we won't have much warning.

But politics, in science fiction, shouldn't be taken too seriously. Those ideas were just a sort of gateway. They led me into a world of the future.

There I found the peaceful American Corporations, within the shelter of the Ring. And the dome-cities under the Black Star, their people grimly struggling to survive in the airless Outside.

Beyond that gateway, I found real people. Lieutenant Barry Shane, of the Ring Guard. Captain Glenn Clayton, the cool, daring Outsider. Lovely, skilful Dr. Della Rand. Beautiful Atlantis Lee, of the dome-city on the dry sea-floor.

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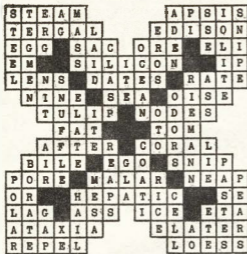
NEXT ISSUE'S  
HALL OF FAME SELECTION

**DEATH FROM THE STARS**

By

**A. ROWLEY HILLIARD**

ANSWER TO PUZZLE  
ON PAGE 122



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## EVERYDAY ASTROLOGY

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## CROSSROADS OF THE UNIVERSE

(Concluded from page 101)

He jerked his head at the dead Djurn. The captain blanched.

"Kidnapers? I thought all they had was a load of freight."

He sprang to one of the crates and ripped it open. Inside, piled up neatly like so many logs of wood, were the bodies of men and women. The captain leaned forward.

"Quick-frozen, so they wouldn't cause trouble. There won't be any difficulty about reviving them."

They spread the bodies out on the floor of the ship. The girl McGovern was looking for was not among them. But in the third crate he found her, motionless like the others.

**I**N the Fair Hospital, he waited until her temperature was back to normal. Then they allowed him to see her. She smiled.

"It's thanks to you that I'm here, isn't it?"

He nodded in embarrassment.

"From the moment I saw you, I knew I couldn't let you get away."

"But I am getting away. Tonight, I'm going home."

"I'll still find you. Whether you live on Earth, or on one of the colonies—"

"On Earth."

"North America?"

"U. S. A. New York City, to be exact. Ninety-four-twenty West Forty-fourth Street."

"Your apartment?" demanded McGovern excitedly.

"Nineteen A."

"I live on Twenty A—the floor above! And we had to come here to meet." He grinned. "It's a small Universe, isn't it?"

"Positively minute," she breathed.

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## THRILLS IN SCIENCE

(Concluded from page 94)

leap. Two taxicabs were in the act of colliding with each other, their drivers unable to avert a head-on smash. There was the rending, grinding crash of metal tearing metal, the screams of terror-stricken passengers, and the two cars telescoped into each other.

Benedictus hurried to the scene of the accident, eager to offer assistance. One driver had leaped to safety. The other was beyond help, his head almost shorn from his body. Behind him, a beautiful young girl lay unconscious in her seat, her face cruelly cut by the jagged edges of flying glass from the taxicab's windows.

"*Mon Dieu!*" cried a gendarme standing next to the chemist. "The glass from the window has killed the driver, mutilated the girl's face. Someone call an ambulance, vite!"

Grim-faced from the horrible scene he had just witnessed, Benedictus walked back to his laboratory. He could not erase from his mind the sight of that lovely girl, an innocent victim of the crash. If only the glass of the windows hadn't shattered—

Something clicked then and there in the chemist's mind. He ran now to his laboratory, one thought uppermost in his mind. Once inside his workshop, Edouard Benedictus reached immediately for the bottle that had crashed unbroken to the floor a few days ago. Grasping it firmly in both hands, he sat down in his chair, lost in thought.

Benedictus didn't get up for several hours. When he finally stood up, he had planned a complete program for himself. He would give the world a glass that was unbreakable, a glass that would protect people during automobile accidents and other hazards. The incident of the broken bottle had shown him the way.

Edouard had liberated the genie of the bottle in the service of humanity. Laminated safety glass—the first of its kind in all the world—was the outcome!

More

## THRILLS IN SCIENCE

Coming in the

Next Issue of

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30x-10-15	1.25	4.00x-6-16	1.25
32x-10-15	1.25	4.00x-6-17	1.25
34x-10-15	1.25	4.00x-6-18	1.25
36x-10-15	1.25	4.00x-6-19	1.25
38x-10-15	1.25	4.00x-6-20	1.25
40x-10-15	1.25	4.00x-6-21	1.25
42x-10-15	1.25	4.00x-6-22	1.25
44x-10-15	1.25	4.00x-6-23	1.25
46x-10-15	1.25	4.00x-6-24	1.25
48x-10-15	1.25	4.00x-6-25	1.25
50x-10-15	1.25	4.00x-6-26	1.25
52x-10-15	1.25	4.00x-6-27	1.25
54x-10-15	1.25	4.00x-6-28	1.25
56x-10-15	1.25	4.00x-6-29	1.25
58x-10-15	1.25	4.00x-6-30	1.25
60x-10-15	1.25	4.00x-6-31	1.25
62x-10-15	1.25	4.00x-6-32	1.25
64x-10-15	1.25	4.00x-6-33	1.25
66x-10-15	1.25	4.00x-6-34	1.25
68x-10-15	1.25	4.00x-6-35	1.25
70x-10-15	1.25	4.00x-6-36	1.25
72x-10-15	1.25	4.00x-6-37	1.25
74x-10-15	1.25	4.00x-6-38	1.25
76x-10-15	1.25	4.00x-6-39	1.25
78x-10-15	1.25	4.00x-6-40	1.25
80x-10-15	1.25	4.00x-6-41	1.25
82x-10-15	1.25	4.00x-6-42	1.25
84x-10-15	1.25	4.00x-6-43	1.25
86x-10-15	1.25	4.00x-6-44	1.25
88x-10-15	1.25	4.00x-6-45	1.25
90x-10-15	1.25	4.00x-6-46	1.25
92x-10-15	1.25	4.00x-6-47	1.25
94x-10-15	1.25	4.00x-6-48	1.25
96x-10-15	1.25	4.00x-6-49	1.25
98x-10-15	1.25	4.00x-6-50	1.25
100x-10-15	1.25	4.00x-6-51	1.25
102x-10-15	1.25	4.00x-6-52	1.25
104x-10-15	1.25	4.00x-6-53	1.25
106x-10-15	1.25	4.00x-6-54	1.25
108x-10-15	1.25	4.00x-6-55	1.25
110x-10-15	1.25	4.00x-6-56	1.25
112x-10-15	1.25	4.00x-6-57	1.25
114x-10-15	1.25	4.00x-6-58	1.25
116x-10-15	1.25	4.00x-6-59	1.25
118x-10-15	1.25	4.00x-6-60	1.25
120x-10-15	1.25	4.00x-6-61	1.25
122x-10-15	1.25	4.00x-6-62	1.25
124x-10-15	1.25	4.00x-6-63	1.25
126x-10-15	1.25	4.00x-6-64	1.25
128x-10-15	1.25	4.00x-6-65	1.25
130x-10-15	1.25	4.00x-6-66	1.25
132x-10-15	1.25	4.00x-6-67	1.25
134x-10-15	1.25	4.00x-6-68	1.25
136x-10-15	1.25	4.00x-6-69	1.25
138x-10-15	1.25	4.00x-6-70	1.25
140x-10-15	1.25	4.00x-6-71	1.25
142x-10-15	1.25	4.00x-6-72	1.25
144x-10-15	1.25	4.00x-6-73	1.25
146x-10-15	1.25	4.00x-6-74	1.25
148x-10-15	1.25	4.00x-6-75	1.25
150x-10-15	1.25	4.00x-6-76	1.25
152x-10-15	1.25	4.00x-6-77	1.25
154x-10-15	1.25	4.00x-6-78	1.25
156x-10-15	1.25	4.00x-6-79	1.25
158x-10-15	1.25	4.00x-6-80	1.25
160x-10-15	1.25	4.00x-6-81	1.25
162x-10-15	1.25	4.00x-6-82	1.25
164x-10-15	1.25	4.00x-6-83	1.25
166x-10-15	1.25	4.00x-6-84	1.25
168x-10-15	1.25	4.00x-6-85	1.25
170x-10-15	1.25	4.00x-6-86	1.25
172x-10-15	1.25	4.00x-6-87	1.25
174x-10-15	1.25	4.00x-6-88	1.25
176x-10-15	1.25	4.00x-6-89	1.25
178x-10-15	1.25	4.00x-6-90	1.25
180x-10-15	1.25	4.00x-6-91	1.25
182x-10-15	1.25	4.00x-6-92	1.25
184x-10-15	1.25	4.00x-6-93	1.25
186x-10-15	1.25	4.00x-6-94	1.25
188x-10-15	1.25	4.00x-6-95	1.25
190x-10-15	1.25	4.00x-6-96	1.25
192x-10-15	1.25	4.00x-6-97	1.25
194x-10-15	1.25	4.00x-6-98	1.25
196x-10-15	1.25	4.00x-6-99	1.25
198x-10-15	1.25	4.00x-6-100	1.25

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32x-10-15	1.25	4.00x-6-16	1.25
34x-10-15	1.25	4.00x-6-17	1.25
36x-10-15	1.25	4.00x-6-18	1.25
38x-10-15	1.25	4.00x-6-19	1.25
40x-10-15	1.25	4.00x-6-20	1.25
42x-10-15	1.25	4.00x-6-21	1.25
44x-10-15	1.25	4.00x-6-22	1.25
46x-10-15	1.25	4.00x-6-23	1.25
48x-10-15	1.25	4.00x-6-24	1.25
50x-10-15	1.25	4.00x-6-25	1.25
52x-10-15	1.25	4.00x-6-26	1.25
54x-10-15	1.25	4.00x-6-27	1.25
56x-10-15	1.25	4.00x-6-28	1.25
58x-10-15	1.25	4.00x-6-29	1.25
60x-10-15	1.25	4.00x-6-30	1.25
62x-10-15	1.25	4.00x-6-31	1.25
64x-10-15	1.25	4.00x-6-32	1.25
66x-10-15	1.25	4.00x-6-33	1.25
68x-10-15	1.25	4.00x-6-34	1.25
70x-10-15	1.25	4.00x-6-35	1.25
72x-10-15	1.25	4.00x-6-36	1.25
74x-10-15	1.25	4.00x-6-37	1.25
76x-10-15	1.25	4.00x-6-38	1.25
78x-10-15	1.25	4.00x-6-39	1.25
80x-10-15	1.25	4.00x-6-40	1.25
82x-10-15	1.25	4.00x-6-41	1.25
84x-10-15	1.25	4.00x-6-42	1.25
86x-10-15	1.25	4.00x-6-43	1.25
88x-10-15	1.25	4.00x-6-44	1.25
90x-10-15	1.25	4.00x-6-45	1.25
92x-10-15	1.25	4.00x-6-46	1.25
94x-10-15	1.25	4.00x-6-47	1.25
96x-10-15	1.25	4.00x-6-48	1.25
98x-10-15	1.25	4.00x-6-49	1.25
100x-10-15	1.25	4.00x-6-50	1.25
102x-10-15	1.25	4.00x-6-51	1.25
104x-10-15	1.25	4.00x-6-52	1.25
106x-10-15	1.25	4.00x-6-53	1.25
108x-10-15	1.25	4.00x-6-54	1.25
110x-10-15	1.25	4.00x-6-55	1.25
112x-10-15	1.25	4.00x-6-56	1.25
114x-10-15	1.25	4.00x-6-57	1.25
116x-10-15	1.25	4.00x-6-58	1.25
118x-10-15	1.25	4.00x-6-59	1.25
120x-10-15	1.25	4.00x-6-60	1.25
122x-10-15	1.25	4.00x-6-61	1.25
124x-10-15	1.25	4.00x-6-62	1.25
126x-10-15	1.25	4.00x-6-63	1.25
128x-10-15	1.25	4.00x-6-64	1.25
130x-10-15	1.25	4.00x-6-65	1.25
132x-10-15	1.25	4.00x-6-66	1.25
134x-10-15	1.25	4.00x-6-67	1.25
136x-10-15	1.25	4.00x-6-68	1.25
138x-10-15	1.25	4.00x-6-69	1.25
140x-10-15	1.25	4.00x-6-70	1.25
142x-10-15	1.25	4.00x-6-71	1.25
144x-10-15	1.25	4.00x-6-72	1.25
146x-10-15	1.25	4.00x-6-73	1.25
148x-10-15	1.25	4.00x-6-74	1.25
150x-10-15	1.25	4.00x-6-75	1.25
152x-10-15	1.25	4.00x-6-76	1.25
154x-10-15	1.25	4.00x-6-77	1.25
156x-10-15	1.25	4.00x-6-78	1.25
158x-10-15	1.25	4.00x-6-79	1.25
160x-10-15	1.25	4.00x-6-80	1.25
162x-10-15	1.25	4.00x-6-81	1.25
164x-10-15	1.25	4.00x-6-82	1.25
166x-10-15	1.25	4.00x-6-83	1.25
168x-10-15	1.25	4.00x-6-84	1.25
170x-10-15	1.25	4.00x-6-85	1.25
172x-10-15	1.25	4.00x-6-86	1.25
174x-10-15	1.25	4.00x-6-87	1.25
176x-10-15	1.25	4.00x-6-88	1.25
178x-10-15	1.25	4.00x-6-89	1.25
180x-10-15	1.25	4.00x-6-90	1.25
182x-10-15	1.25	4.00x-6-91	1.25
184x-10-15	1.25	4.00x-6-92	1.25
186x-10-15	1.25	4.00x-6-93	1.25
188x-10-15	1.25	4.00x-6-94	1.25
190x-10-15	1.25	4.00x-6-95	1.25
192x-10-15	1.25	4.00x-6-96	1.25
194x-10-15	1.25	4.00x-6-97	1.25
196x-10-15	1.25	4.00x-6-98	1.25
198x-10-15	1.25	4.00x-6-99	1.25
200x-10-15	1.25	4.00x-6-100	1.25

### ALL OTHER SIZES

DEALERS WANTED

SEND ONLY \$1.00 DEPOSIT on each tire ordered.

(\$1.00 on each Tube's Tire.) Weekly balance C. O. D.

Deduct \$ per cent if cash is sent in full with order. To

all order promptly we may substitute brands if necessary.

ALL TUBES BRAND NEW—GUARANTEED—

PERRY-FIELD TIRE & RUBBER CO.

1729 & Michigan Avenue, Dept. T-45, Chicago

### EVERY TIRE GUARANTEED

Our guarantee

Good across to

replace at a

price equal to the

best available

service. Excludes

repairs. Excludes

repairs. Excludes

# IF MEN WORE PRICE TAGS



## HOW WOULD YOU FEEL?

WHAT you make is an excellent barometer of your value! And a big factor in determining your value is—training!

For half a century the International Correspondence Schools have provided training for men who realized lack of it

was a handicap. The courses through which this training is acquired cost over \$5,000,000 to prepare. Written by leading authorities, they are constantly revised as conditions change. Serious-minded men are invited to mail this coupon.

### INTERNATIONAL CORRESPONDENCE SCHOOLS

CELEBRATE 50 YEARS OF SERVICE TO AMBITIOUS AMERICANS

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★ Without cost or obligation, please send me a copy of your booklet, "Who Wins and Why," and full particulars about the course *before* which I have marked X: ★

#### TECHNICAL AND INDUSTRIAL COURSES

- |   |   |   |   |  |
|---|---|---|---|--|
| <input type="checkbox"/> Agriculture              | <input type="checkbox"/> Air Brake                | <input type="checkbox"/> Cotton Manufacturing     | <input type="checkbox"/> Mfg. of Pulp and Paper   | <input type="checkbox"/> R. R. Section Foreman     |
| <input type="checkbox"/> Air Conditioning         | <input type="checkbox"/> Diesel Engines           | <input type="checkbox"/> Marine Engineering       | <input type="checkbox"/> Marine Engines           | <input type="checkbox"/> R. R. Signalman           |
| <input type="checkbox"/> Architectural Drafting   | <input type="checkbox"/> Electrical Drafting      | <input type="checkbox"/> Mechanical Drafting      | <input type="checkbox"/> Mechanical Drafting      | <input type="checkbox"/> Sanitary Engineering      |
| <input type="checkbox"/> Architecture             | <input type="checkbox"/> Electrical Engineering   | <input type="checkbox"/> Mine Foreman             | <input type="checkbox"/> Mine Foreman             | <input type="checkbox"/> Sheet Metal Work          |
| <input type="checkbox"/> Auto Engine Tune-up      | <input type="checkbox"/> Electric Lighting        | <input type="checkbox"/> Navigation               | <input type="checkbox"/> Navigation               | <input type="checkbox"/> Steam Electric            |
| <input type="checkbox"/> Auto Technician          | <input type="checkbox"/> Fire Boilers             | <input type="checkbox"/> Patternmaking            | <input type="checkbox"/> Patternmaking            | <input type="checkbox"/> Steam Engines             |
| <input type="checkbox"/> Aviation                 | <input type="checkbox"/> Foundry Work             | <input type="checkbox"/> Pharmacy                 | <input type="checkbox"/> Pharmacy                 | <input type="checkbox"/> Steam Fitting             |
| <input type="checkbox"/> Bridge Engineering       | <input type="checkbox"/> Fruit Growing            | <input type="checkbox"/> Plumbing                 | <input type="checkbox"/> Plumbing                 | <input type="checkbox"/> Structural Drafting       |
| <input type="checkbox"/> Building Estimating      | <input type="checkbox"/> Heat Treatment of Metals | <input type="checkbox"/> Public Works Engineering | <input type="checkbox"/> Public Works Engineering | <input type="checkbox"/> Structural Engineering    |
| <input type="checkbox"/> Chemistry                | <input type="checkbox"/> Highway Engineering      | <input type="checkbox"/> Radio, General           | <input type="checkbox"/> Radio, General           | <input type="checkbox"/> Surveying and Mapping     |
| <input type="checkbox"/> Civil Engineering        | <input type="checkbox"/> House Planning           | <input type="checkbox"/> Radio Operating          | <input type="checkbox"/> Radio Operating          | <input type="checkbox"/> Telegraph Engineering     |
| <input type="checkbox"/> Coal Mining              | <input type="checkbox"/> Locomotive Engineer      | <input type="checkbox"/> Radio Servicing          | <input type="checkbox"/> Radio Servicing          | <input type="checkbox"/> Textile Designing         |
| <input type="checkbox"/> Concrete Engineering     | <input type="checkbox"/> Machinist                |   |   | <input type="checkbox"/> Toolmaking                |
| <input type="checkbox"/> Contracting and Building | <input type="checkbox"/> Management of Inventions |   |   | <input type="checkbox"/> Welding, Electric and Gas |

#### BUSINESS COURSES

- |  |  |  |   |   |
|--|--|--|---|---|
| <input type="checkbox"/> Accounting          | <input type="checkbox"/> Advertising             | <input type="checkbox"/> College Preparatory | <input type="checkbox"/> Foremanship          | <input type="checkbox"/> Railway Postal Clerk |
| <input type="checkbox"/> Bookkeeping         | <input type="checkbox"/> Business Correspondence | <input type="checkbox"/> Commercial          | <input type="checkbox"/> French               | <input type="checkbox"/> Salesmanship         |
| <input type="checkbox"/> Business Management | <input type="checkbox"/> Business Management     | <input type="checkbox"/> Cost Accounting     | <input type="checkbox"/> High School          | <input type="checkbox"/> Secretarial          |
| <input type="checkbox"/> Cartooning          | <input type="checkbox"/> Civil Service           | <input type="checkbox"/> C. P. Accounting    | <input type="checkbox"/> Illustrating         | <input type="checkbox"/> Sign Lettering       |
|  |  | <input type="checkbox"/> First Year College  | <input type="checkbox"/> Lettering Show Cards | <input type="checkbox"/> Traffic Management   |
|  |  |  | <input type="checkbox"/> Managing Men at Work | <input type="checkbox"/> Spanish              |

#### HOME ECONOMICS COURSES

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Advanced Dressmaking | <input type="checkbox"/> Home Dressmaking                       | <input type="checkbox"/> The Room and Cafeteria Management, Catering |
| <input type="checkbox"/> Foods and Cookery    | <input type="checkbox"/> Professional Dressmaking and Designing |  |

Name..... Age..... Address.....

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Canadian residents send coupon to International Correspondence Schools Canadian, Limited, Montreal, Canada  
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# How Little Mistakes in Eating Can Keep You Half-Sick

**WHICH DO YOU SUFFER FROM?**



**Dietary Indigestion—Heartburn**

He is one of the countless people who suffers needlessly from dietary stomach disorders. Chapter 7 of Victor H. Lindlahr's great book shows a way to quick relief and prevention for thousands.



**Common Rheumatism and Arthritis**

He suffers from rheumatic pains largely because of simple mistakes in his diet. If he follows the suggestions on page eight of Victor H. Lindlahr's remarkable book he should get quick relief.



**Excess Weight**

She could reduce in no time, yet actually eat more food than she does now . . . if she only ate properly. "You Are What You Eat" would tell her how.



**Frequent Colds**

She is an easy victim of coughs and colds. Something vital is lacking in her diet. What? Read the first chapter of "You Are What You Eat" to see how easy it should be to put her on the road to strength and health.



## Learn How to Eat Your Way to Better Health

**H**ERE, AT LAST, is Victor H. Lindlahr's remarkable method of health through diet brought to you in a big, fascinating book—at a price so low everyone can own it! In just one evening, you can learn how to correct mistakes in eating that may have been keeping you below par . . . you may learn how to be healthier, happier by following the proven principles of health through diet in Victor H. Lindlahr's remarkable book, "You Are What You Eat."

Do you know how you may improve your complexion by a simple change in diet? Do you know what high-vitamin fruits and vegetables will help build you up when you are run-down? Do you know what foods often help promote sound, restful sleep? Do you know what methods of cooking destroy the chief value of certain foods? Do you know what vegetables can help in building better blood?

Let Victor H. Lindlahr help you and your family gain better health through diet. It has been done in thousands of cases. It is being done every day!

### Don't Let Little Mistakes in Eating Rob You of Good Health

Foods are medicine . . . and Victor H. Lindlahr knows that foods have the power that may give you freedom from many common symptoms. Out of the kitchen can come meals to help put an end to many of your distressing troubles. Yes, foods often possess a remarkable power for improving health—and now Victor H. Lindlahr shows you how to use this power!

Formerly \$250  
**NOW ONLY 98¢**  
 —send no money!

Just mail the coupon. You will receive Victor H. Lindlahr's book by return mail. When it comes pay the postman 98¢, plus a few cents postage. If at the end of 5 days you aren't thrilled—return the book and your money will be refunded without question. Mail the coupon NOW.



**ACT NOW!** Send this coupon —5-day free trial

JOURNAL OF LIVING PUB. CORP.  
 Dept. M-2, Carlton Ave., Jersey City, N. J.

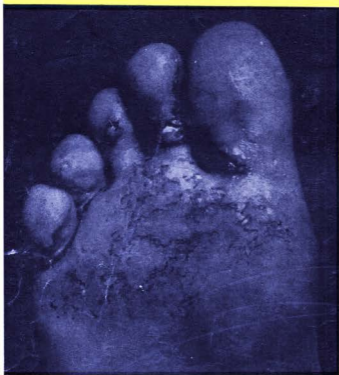
Send me Victor H. Lindlahr's Book, "You Are What You Eat," for only 98¢, plus a few cents postage. I understand that if not delighted I may return the book within 5 days and my money will be refunded.

Name.....  
 Address.....  
 City..... State.....

NOTE: If apt to be out when postman calls, send \$1.00 with coupon and save C.O.D. postage.

# FOOT ITCH

## ATHLETE'S FOOT



### WHY TAKE CHANCES?

The germ that causes the disease is known as *Tinea Trichophyton*. It buries itself deep in the tissues of the skin and is very hard to kill. A test made shows it takes 15 minutes of boiling to destroy the germ, whereas, upon contact, laboratory tests show that H. F. will kill the germ *Tinea Trichophyton* within 15 seconds.

H. F. was developed solely for the purpose of relieving Athlete's foot. It is a liquid that penetrates and dries quickly. You just paint the affected parts. H. F. gently peels the skin, which enables it to get to parasites which exist under the outer cuticle.

### ITCHING OFTEN RELIEVED QUICKLY

As soon as you apply H. F. you may find that the itching is relieved. You should paint the infected part with H. F. every night until your feet are better. Usually this takes from three to ten days.

H. F. should leave the skin soft and smooth. You may marvel at the quick way it brings you relief. It costs you nothing to try, so if you are troubled with Athlete's Foot why wait a day longer?

### H. F. SENT ON FREE TRIAL

Sign and mail the coupon, and a bottle of H. F. will be mailed you immediately. Don't send any money and don't pay the postman any money; don't pay anything any time unless H. F. is helping you. If it does help you, we know you will be glad to send us \$1 for the bottle at the end of ten days. That's how much faith we have in H. F. Read, sign and mail the coupon today.



## PAY NOTHING TILL RELIEVED

### Send Coupon

According to the Government Health Bulletin No. E-28 at least 50% of the adult population of the United States are being attacked by the disease known as Athlete's Foot.

Usually the disease starts between the toes. Little watery blisters form, and the skin cracks and peels. After a while, the itching becomes intense, and you feel as though you would like to scratch off all the skin.

## BEWARE OF IT SPREADING

Often the disease travels all over the bottom of the feet. The soles of your feet become red and swollen. The skin also cracks and peels, and the itching becomes worse and worse.

Get relief from this disease as quickly as possible, because it is very contagious, and it may go to your hands or even to the under arm or crotch of the legs.

**GORE PRODUCTS, Inc.** T. F. U.  
814 Perdido St., New Orleans, La.

Please send me immediately a bottle of H. F. for foot trouble as described above. I agree to use it according to directions. If at the end of 10 days my feet are getting better, I will send you \$1. If I am not entirely satisfied, I will return the unused portion of the bottle to you within 15 days from the time I receive it.

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