

**JUNE
1938**

**VOLUME 12
NUMBER 3**

AMAZING STORIES

contents

STORIES

	<i>Page</i>
The Man Who Ruled the World...by Robert Moore Williams	10
The Escape Through Space.....by Ross Rocklynne.....	30
The Master of Golden City.....by Polton Cross.....	44
The Vanishing Diamonds.....by Charles R. Tanner.....	72
A Summons From Mars.....by John Russell Fearn.....	82
The Space Pirate.....by Eando Binder.....	108
The Invisible Bomber.....by Lieut. John Pease.....	130

FEATURES

	<i>Page</i>		<i>Page</i>
Meet the Authors.....	6	Discussions.....	137
The Observatory.....	8	Science Quiz.....	140
Amazing Facts of Science.....	43	Questions and Answers.....	141
Mathematical Puzzles.....	106	Correspondence Corner.....	142
This Amazing Universe.....	107		

COVER Photograph by Horace Hime, Frank Lewis, Inc.

Copyright, 1938 ZIFF-DAVIS PUBLISHING COMPANY

Member of the Audit Bureau of Circulations

William B. Ziff, Publisher, B. G. Davis, Editor
Managing Editor, Raymond A. Palmer
Art Director, Herman R. Bollin

Associate Editor, A. F. Menie, POPULAR PHOTOGRAPHY, John B. Rathbun, POPULAR AVIATION, Karl A. Kopetzky, RADIO NEWS, Leonard A. Rosenblatt

PUBLISHED BI-MONTHLY BY
ZIFF-DAVIS PUBLISHING COMPANY
at 608 So. Dearborn St.
Chicago, Illinois

New York Office, 381 Fourth Avenue
New York City

CONTRIBUTIONS: Contributors are advised to retain a copy of their manuscripts and illustrations and to include return postage. Contributions will be handled with reasonable care, but this magazine assumes no responsibility for their safety. Any copy accepted is subject to revision or changes to meet the requirements of this publication. Payment for manuscripts and illustrations will be made at our current rates.

The names of all characters that are used in short stories, serials and sea-fiction articles that deal with types are fictitious. Use of a name which is the same as that of any living person is accidental.

SUBSCRIPTION RATES: \$1.20 per year (6 issues), foreign \$1.45; single copies 20 cents. Entry as Second-class matter applied for at the Post Office, Chicago, Ill., under the act of March 3, 1879.



Illustration by
Joy Jackson.

"We can't, we can't go
through that boiling zone!"



Escape Through Space

BY
ROSS ROCKLYNNE

The Martian dynasty overthrown, the ex-princess is exiled to Earth under escort of Larry Sharon. Pursued by treacherous revolutionists, the unhappy pair face the deadly "Boiling Zone" of the sun

CHAPTER I

Rebellion on Mars

LARRY SHARON strode through the waiting room of Inter-Planet Import Co., main office in the capital of Mars. He put a dime into the slot of a machine which shrieked out for prospective newspaper buyers the latest interplanetary news. A newspaper, which, in seven centuries had found no equal as a purveyor of detailed information, fell into his hand.

Taking off his hat, and running a hand back over a rebellious mop of coal-black hair, he swung past the secretary, and pushed open a door reading Justin Pringle, Pres.

"Hi, J. P.," he said casually, and J. P. nodded, but went on reading a letter. Larry dropped into a chair, surveyed the newspaper nonchalantly noting the headline: MARTIAN MONARCHY

OVERTHROWN.

"Well, the rebels ruz up and overthrew the reigning heads," he observed facetiously. "Looks like the kings get stepped on sooner or later on Mars as well as every place else."

"It happens." Justin Pringle dropped the letter and devoted his attention to his youngest buyer. He waved a scornful hand.

"There wasn't a monarchy left on Earth," he pointed out, "when Bursdell made the Moon; yet, within the next hundred years, every large expedition to land on a planet, went ahead and founded a monarchy. Kings and queens first. Dukes, lords, barons, after more settlers arrived. You wouldn't think it possible in a scientifically enlightened age—but that's man for you." As an afterthought, "Who is it this time? . . . Mars?" He appeared startled and

opened his eyes. "Well, the Mars business finishes up another one, and I suppose Titan will catch the fever too. . . . Details?" There was a worried look in his eye.

"Oh, nothing much. All reigning members of the Martian aristocracy killed—except a Princess Helen. They can't finish her off deliberately, now that the heat of the rebellion is over. Guess they'd like to, but they'd have the condemnation of every planet in the solar system. Oh, yes, Mars has gone socialistic."

He expertly skimmed over smaller headlines, dropping the Martian matter, as if it were of no concern to him. "A single member of the last Venerian expedition came back alive—the usual story. Venerians are inimical to everybody but themselves, and they've got senses that enable them to detect intruders at once. . . . New comet sighted this side of Pluto—terrific velocity—small, about half a million miles in diameter—will make perihelion passage in four months, about. Hmm. Must be a fast devil." He read the details, then threw the paper aside.

"What's on your mind, J. P.? What's that funny look on your face for?" he queried, dangling long legs over the arm of his chair.

Justin Pringle was grinning crookedly. "You don't seem to be paying much attention to the Martian business, Sharon. But that's where you're going."

Larry shrugged his shoulders. "Not surprised. Been in worse places than that."

"Well, I'd hate to have you run into trouble, Sharon. Last month they reported having found tritonite—large deposits, too. There hasn't been much danger of any other firm snagging their output, since we're the only ones know

how to use the stuff, but I've been letting it go too long, now. Mind running out, getting prices, and arranging for a shipping schedule?"

"Be glad to, J. P. I'd like some excitement for a change. I'll look up the Princess Helen," he added, his blue eyes mischievous.

"You're just the type for it," Justin Pringle growled. "You'll have to start in the morning, though."

Larry nodded, and tucking the paper under a muscular arm, rose to his feet, yawning, his jaundiced eye wandering to the window, catching glimpses of the web of bridges, cables, and catwalks that overhung the purring city two thousand feet below. Before he left, he cocked an eye at his superior. "How about your computer fixing me a decent curve this time—last time he had me playing tag with an asteroid belt, and there was a comet worrying my tail."

"Don't worry—we've never plotted you wrong yet. Send your course in the morning by vacuo. I'll be seeing you, Sharon—good luck."

In the administration building of the recently formed Union of Mars Socialist States, the newly elected Secretary of Foreign Affairs faced the manager of the newly discovered tritonite mines.

"I think I've got your man," the manager said quietly. "An American, of Earth. He represents the Inter-Planet Imports Co., commuting between here and his branch office on Earth. He has been making a deal with me for shipping tritonite to Earth. We get a nice price, and we've signed the papers. But he's just the type you need. Not overly intelligent, self-satisfied, Irish stupidity and devil-may care. And I'd say he was interested in money."

The secretary nodded musingly. "Offer him—no, ask him if he would like to earn a hundred thousand dol-

lars. And if he accepts make an appointment that is agreeable to him." He paused thoughtfully. "Oh, yes. Assure him there is nothing underhanded which he will be asked to participate in." He dismissed the other man.

So it was that Larry Sharon, as curious as he was interested in accumulating at one stroke what amounted to a medium-sized fortune, and decidedly suspicious at the same time, rode through the fine, broad thoroughfares of Mars City, seeing evidences of anarchy and horror rather than socialistic order, and finally entered the centrally located administration building. A courteous aide led him with dispatch to the Secretary of Foreign Affairs, who, with numerous other members of the swiftly formed cabinet, stood or sat around.

The Secretary was small, cruel-eyed, mustached. He wore the conventional flaring trousers, and his waist coat had a touch too much of color. Sharon didn't like him. His bold eyes underwent no effort in meeting the other man's eyes.

"Did you want to see me—something about a hundred thousand dollars?" he inquired politely but with directness.

The man smiled, and rose to his feet. "Yes," he said precisely, and with a slight touch of patronage, "about a hundred thousand dollars. You are doubtless aware of the political turnover on Mars, Sharon," he went on. "We have routed the royalist element, for the most part eliminated the aristocracy which was draining the lifeblood of the—"

"Spare me," begged Sharon. "They used the same line three centuries ago on Earth. Do you mind?"

"Not at all," coldly. His eyes glinted. In one swift movement he crossed the room. He flung open a handsomely carved door that was

marred only by the deep ax-gash some vandal had cut into it. He beckoned to Sharon, who with slight misgivings followed him into the room beyond the door.

It was a small room, with a single window that apparently overlooked a courtyard. It was barely furnished. In the middle of the room was a table. Seated at the table, reading by the light of a small lamp, sat a girl. Her head was raised, startled. She rose to her feet. She was garbed in the filmiest of materials, caught about the slim waist with a single purple sash. Her hair was black and flowing, and her face was beautiful with a creamy, flawless simplicity. But her eyes were strained from much suffering.

Staring at her, Larry hardly heard the Secretary of Foreign Affairs speak.

"Princess Helen," he waved a small hand, "Mr. Larry Sharon, whom we have engaged to transport you to your friends on Earth."

The expression on her face hardly changed, save that her eyes became a little more hopeless. She simply inclined her head.

"Blue blood," the secretary said in tones vicious with contempt. "She doesn't deign to speak to her inferiors." His manner changed, as Larry turned to stare at him.

"Yes, Sharon. We'll give you a hundred thousand dollars if you can get her to Earth safely. She is the last member of the royal family, and of course cannot remain on Mars."

Larry glanced at him coldly. He didn't like the way the man spoke of the princess—as if she were some inanimate object. "Why 'safely'?"

"She has enemies, Sharon."

"Naturally. But why choose me, of all people? Why not some one you know?"

The secretary shook his head smilingly. "Do you think there is anyone on this planet we could trust? The royal family stirred up a lot of bitterness here, Sharon—"

"I realize that, too. But why not call for an escort, from Earth, from Ganymede, a large enough force to protect the princess from possible attack? Why assign one man to the job?"

"Because," impatiently, "we must get the princess off Mars immediately! We haven't the time to call for help in the matter. There are mutterings even now that the Princess be executed. So," he shrugged, "we learned of your arrival, looked into your character a bit, and are satisfied you are qualified for the assignment." His manner became at once stiff and haughty. "We'll take your answer now, Sharon. If not—" He let the sentence hang.

Sharon's eyes bored into those of the other man, as if trying to read exactly what was in his mind. Then he slowly turned his head toward the princess, who stood with pallid, hopeless face across the room. She seemed so royally remote from these calculating men that he felt it'd be a bold affront to touch the hem of her gown. He smiled a little ironically. "I accept," he said quietly.

CHAPTER II

A Tough Job

WITH a single movement the Secretary of Foreign Affairs reached into an inside pocket and produced a roll of papers. "Your instructions, Sharon."

Sharon unrolled the scroll, glanced at them. Leave at a certain time, down to the second. Use maximum acceleration after a certain point. He nodded to himself—the course they had plotted out seemed sensible.

"This will take me just outside the boiling zone?" * he inquired.

"Yes—as near as you can possibly get to the Sun. Earth, when you arrive there, will be in direct line with the Sun and the point in space which Mars now occupies. We have given you the shortest possible route to Earth; it is imperative that you make haste. You noted the time of your departure—the morning?"

Sharon nodded, and placed the instructions in a pocket. "I'll use my own ship, of course," he said matter-of-factly.

"I'm sorry. That will be quite impossible. We will furnish you with a ship." The man's eyes were cold.

"Well, certainly there's no harm in using my own ship," Sharon began angrily.

"There is, Sharon!" sharply. "When your ship leaves, there will be immediate suspicion fastened onto it. We must take every precaution in the matter of the Princess Helen's safety—it isn't an idle matter with us. We have our prestige as a nation—"

"What make do I use then?" Sharon broke in, with a narrowing of the eyes.

"Hispano-Suiza."

"Model?"

"2422." Nonchalantly.

Sharon sprang forward, murder in his eyes. Almost as if by magic two men grasped him from behind.

"You can't do that!" he shouted. "Of all the modern ships, you have to pick one a Hispano-Suiza '22. They build up slow. What if some of these often al-

* The boiling zone is that area surrounding the sun which Space Navigators shun, because of the extreme heat, which literally "boils" alive the occupants of a space ship incautious enough to pass through it. It is also a region frequently filled with outflung incandescent material hurled from the surface by the tremendous explosions in the sun itself.—Ed.

luded to 'enemies' should show up in a late model ship—they could outrun us ten times over, and that's one whale of a lot over long distances!"

The Secretary of Foreign Affairs quietly waited until Sharon had finished. He made a motion, at which he was released.

"Please understand, Sharon." He became deliberately patient. "We choose a Hispano because it is an old ship—inconspicuous. No one could possibly suspect—"

"—that the princess was aboard!" Sharon finished cuttingly. "All right. I waive all objections. Give me the money and I'll get the Princess to Earth."

He was disgusted with the whole proceedings. There was something wrong, he couldn't figure exactly what. But whatever it was—Lord, how could a

man turn down the chance of helping that girl over there? When she sensed his looking at her she let him see, in one movement of the eyes, all the hopeless misery and despair that fate of the past and future had held, and would hold, for her.

When the Secretary of Foreign Affairs politely handed him a check drawn on a New York bank, Sharon as promptly and politely handed it back.

"I'll take cash, in platinum," he said coldly.

There was a moment of tense silence. The secretary drew back and conferred in hurried whispers with his colleagues. Finally he nodded.

"We'll deliver it to your ship in the morning," he announced.

"Fair enough. But there'll be no takeoff if I don't get the money."

An attendant came forward. "I'll

show you your quarters, Mr. Sharon."

Sharon nodded, but before he left, he met the eyes of the girl again—she couldn't have been more than nineteen. He tried to put as much assurance in his glance as he could, but he supposed it didn't register, for her eyes remained distant, and her lips were tight except for a slight tremble. Sharon followed the attendant.

Under cover of darkness that morning, Sharon was smuggled into the ship. He didn't even have the opportunity to examine it—but he knew the Hispano-Suiza '22s. Heavier in the stern than in the stem, when anybody could see it should be otherwise, if you didn't want to run the danger of looping loops in mid-space. Jets, less than a square millimeter of firing surface for every square meter of the ship's area. But the fuel was good, and there seemed to be plenty, though of course the combustion system was practically barbaric.

"Where's the Princess?" he whispered to his guide, who was made ghoulish in the faint light of two moons.

"She is aboard," came the whisper. "Your money will be here shortly."

Sharon waited. The moment of the take-off was nearing.

A shadow was coming toward the ship, a man with a heavy satchel flung across his shoulders. Sharon's guide took it, hoisted it up to him. Sharon closed the outer valve, and then the inner valve, sealing himself within the ship.

Grimly he started to count out the money, by the simple process of throwing the dull platinum cartwheels into a corner. All were there. He looked at his watch and started forward. Thinking better of it, he went aft.

He knocked on a door beneath which shone a crack of light.

"Princess?" he whispered.

"Yes." The voice was low, frigid.

"I wanted to make sure you were safe. Will you please come forward later on? I've some things we have to talk about."

"I'd like to be alone for a few days," the princess made answer, still with that icy tone. "After that, I suppose I'll need companionship, and I'll have to find it where I can."

Larry emitted a gurgling sound. Wow! If ever a princess had used a royal tone, that was it! He staggered forward, and blasted off. But he found himself smiling a little.

He rocketed along until Mars had dwindled to a red speck a million miles astern. At that point, following instructions, he drove into maximum acceleration, setting his nose on the parabolic curve necessary. He went back and put his eye to the 16-inch, photo-amplifying refractor. As soon as he saw what he expected to see, he was going to consign those damnably accurate instructions to Hades, and follow whatever course he wanted to.

On the fifth day, the Sun visibly increased in angular diameter, but still more than one-hundred-thirty million miles distant, he heard a sound behind him. It was the princess.

"Oh—good afternoon, or whatever it is," he said coldly, but his pulse began to pound a little faster. She didn't look too much like a princess standing there—she was all girl. She studied his features a single moment and then subsided into a chair. She smiled.

"Are you a fool?" she asked presently.

"I don't think I'm qualified to answer the question," he replied tartly.

"I heard you counting your money," she complacently continued. "A hundred thousand dollars. That's the price

you ask for your life. I think you will never spend it."

"I don't intend to spend it," he answered flatly. He relaxed. "That's what you're driving at, princess—my cupidity overcame my common sense?"

She nodded expectantly.

"Well, it didn't. *You* overcame my common sense." He turned angrily away. "I couldn't leave you in the hands of those vultures. As for the money—that's yours, if you'll take it. I don't suppose the revolution left you much."

She was silent. She presently said, in a voice she must have fought to keep from shaking, "Thank you."

Sharon devoted himself to correcting small errors on their ship's course. After awhile the princess said, "Of course, we both realize I am not supposed to arrive safely on Earth."

He turned to her slowly. "I'm glad you understand that, princess. No, they very likely wouldn't want a single member of the aristocracy alive. You might leave descendants, one of whom would secure backing to fight for the throne."

"You were very angry when they gave you a Hispano," she told him, her eyes twinkling. "But of course, they didn't care whether or not you escaped my 'enemies.'" She added mournfully, "But of course, they are my only enemies. All the people loved me. I know they did. They slaughtered my parents, but they would not touch me."

He remained silent. She met his eyes again. "It was brave of you to help me, Larry Sharon. But I think you have thrown your life away."

"Not if I can help it!" he exclaimed. "I'll give them a fight—" Then he stopped, laughing at himself. "But that's just talk, of course. Imagine a Hispano giving fight!"

They both laughed. "I am glad we are friends," she said naively. "I like you quite a lot."

He grimaced. "I like you, too—more than is going to be good for me."

"Why?" she demanded innocently. "I am only a woman, Sharon. Some day I will marry a man, not a prince." She smiled, added frankly, "You are nice—I may fall in love with you. Perhaps it would be a privilege. I did not love the heir to the Ganymedan throne, yet I was to marry him when I became of age." And instead of allowing him to become either surprised or discomfited at the unconventional statement, she said:

"Do you think there is much chance of escape?"

"Very little princess." He became grave. "You see, we can't outrun anybody. We're now following the shortest route to Earth, a curve that comes within fifteen million miles of the Sun, the nearest any ship can get without running into the boiling zone. That's the picture. Suppose there should be a ship waiting—no, they won't have a ship waiting, come to think of it. We'll smash past perihelion at enormous velocity, and they'd have to have a speed matching ours." He snapped his fingers.

"I'm beginning to get the plot, now," he ruminated. "They gave us this old model—slow. Now what if they had their figures computed down to the second and the mile. They could start after we did, and catch up with us exactly over the Sun, at our velocity. Training a heater on us seven seconds, the bulkheads of the ship would collapse. After that, it'd be easy to nudge us into the Sun, and no one would be the wiser."

Her face was expressive in its registration of horror. "That is why they

gave you such detailed instructions," she exclaimed.

He tapped a finger on the instrument panel, thoughtfully. "We have to follow that course, though," he muttered. "We can't turn back to Mars—the ship that follows us, or is going to follow us, will certainly sight us, and rather than run the risk of losing us altogether, will blast us then and there. There are three superior planets this side of the Sun—" He abruptly took pencil and paper, made some calculations. "We couldn't make them on the fuel we've got. Venus is inimical, although accessible. To escape them at all," he went on, elevating his brows at the princess, who had been listening with great attention, "we'd have to go right through the boiling zone!"

"That would be suicide. Oh, Sharon," she weakened, "what else is there for us." Then she began to cry, softly, regally.

"We can't, we can't go through that boiling zone!" she exclaimed.

Acting on sudden impulse, Sharon took her hands in his. Since she didn't resist, he continued to hold them and look at them. They were small. They were white and delicate. They were the hands of a princess and the hands of a lovely, troubled girl at the same time. His eyes traveled to her face. Her eyes were deep and blue as a Terrestrial sky, as steady as the Earth itself.

"I am afraid I've fallen in love, princess," he said humbly.

She smiled frankly, but withdrew her hands. "There is nothing to be afraid of, Sharon," she told him sincerely. "I am glad you love me. I have met many men—I do not like any of them as well as you. If we arrive on Earth, I will need a man to show me its many wonders. It is very probable that I too will fall in love with you."

"That's a promise," he said quietly, and she nodded brightly.

CHAPTER III

Into the Heat!

THREE weeks after the little Hispano-Suiza had fled upward, fighting the gravitational hands of Mars, two other ships had put out from Deimos, one of the two moons of the red planet. They immediately assumed maximum acceleration.

Aboard those ships, there were, collectively, six men, and they were all high officials in the Martian state. Each of these ships had different courses, for, although they seemed at first to have the same course, they slowly but steadily diverged. One of the ships was following Sharon's course—the other was heading for the opposite side of the boiling zone, to take care of any lapses in the American's instructions.

On the ship that followed Sharon, the pilot asked of his superior, "Do you think Sharon will follow any other course than the one outlined?"

"Possible," the other nodded. "Even probable. But no matter what course he does follow, he can't escape. You see," he said easily, with quiet assurance in his statements, "if he lags, we'll catch up with him. If he goes around the Sun any other way, either myself or Goren, in the other ship, will note it. Since the inhabitants of Venus kill intruders without compunction, they can't land there.

"Mercury? On the other side of the Sun, same as Earth. No," he yawned, "only way they could elude us now would be by going through the boiling zone."

His subordinate laughed heartily at the witticism.

Meanwhile Sharon was contemplating his almost hopeless chances. Suppose that some miracle enabled them to pass through the boiling zone? Within two or three million miles of the Sun. On their present course, the distance from Mars to Earth would be 253,202,000 miles, and by cutting in three million miles away from the Sun, they'd shave off about 20,000,000 miles from their flight, and save more than a week doing it! And they'd get to Earth in plenty of time, safe! Absurd speculations! It was quite impossible.

Sharon caught sight of two ships astern, and noted their diverging courses, and guessed the significance. They were going to approach from both sides!

More and more he sensed his impotence. What course, other than the one outlined, could they follow?

The dread crept up behind them. Each day they felt the growing intensity. At their present course, under maximum acceleration, they could make Earth in seventy-eight days. Nice of them to figure that far ahead.

"I don't mind dying, Sharon," the Princess Helen insisted. "I have been happy, for the first time in many months. But, of course, it would be so much nicer if we could continue to live." She added, laughingly mournful, "If only there were something to give us shade from the Sun, to protect us from the blistering heat."

Larry started to laugh with her. Abruptly he stopped laughing. He looked at her so long in absent-minded wonder that she was alarmed.

"Is anything wrong?" she queried, putting a hand on his arm.

"Jehosaphat!" he exploded, jumping as if sleep. "Wrong? No! Great Jove!" He was blubbering to himself. "But that can't be!" he continued to

blubber. "There ain't no more miracles. Things like this don't happen to me, not to little Larry Sharon!"

Without a word of explanation, he went away. He ran up a companion-way, emerged into the observatory. For an hour he trained his eye into the telescope. Watching, breathless. Three times he turned and made calculations. Three times he whispered, "Good!"

He left the observatory, ran down to the control room. Without a moment's hesitation, he began to change their course, going at it gently, for a sudden swerve at this velocity would provide an unendurable acceleration sidewise.

Finally, he swung around, and with pure enthusiasm grabbed the small hands of the princess again. This time, she did not object. "We're going through the boiling zone!" he announced. "1,200,000 miles from the Sun—but we're not going to boil. The new comet will take care of that!"

Larry gripped the arm of the Princess. "It's the new comet. A hyperbolic orbit, which means that it was drawn in toward the Sun from the space beyond the orbit of Pluto, even. Probably it'll vanish in the same way, for it has a tremendous velocity. But in the meantime, there it is! Our escort around the Sun, protecting our ship from the heat."

The comet fiercely paralleled the course of the Hispano; it was not large, being but a half-million miles in diameter. But its tail, under the fierce, repelling light of the Sun on its rare constituents, spread backward in a steadily widening fan-shape that must have been ten millions of miles long.*

* Astronomically, this is considered a small tail, since many attain lengths of hundreds of millions of miles.—Ed.

Far ahead was the nucleus, seemingly rushing straight at the Sun. The nucleus was small, emitted a bright light which it imparted to the envelope of tenuous gases surrounding it.

The Princess looked up at Sharon thoughtfully. "But," she spoke up, showing some little knowledge of astronomy, "a comet is—tenuous. Why, even on Mars they can see stars right through the nucleus."

"Which doesn't mean that there mightn't be chunks of matter large enough to berth this small ship—does it?" he asked.*

There's no scientific proof that a comet's nucleus, in many cases, might not be either solid all the way through, or composed of a more or less tight pack of smaller masses. I read an account of this in the news just before I left Earth—and from all reports it apparently has a small but substantial nucleus.

She shook her head and he went on: "Now this is a fast comet—faster than any previously discovered. It's going to cut close to the Sun—I only know of one that cut closer.**

"The great velocity of this comet is responsible for its close passage—the Sun doesn't move out of its way fast enough to arrange for less crowded quarters. But it's our salvation."

He began to make more changes in the ship's trajectory. The gloriously radiant tail of the comet—shining by the Sun's reflected light only—became more parallel to their own course. Now, by jockeying the ship in at an

angle, Sharon could envelope it in the tail, and by following the path it presented, he could ease into the shade of the nucleus, just before it passed the outside limits of the boiling zone.

The glare of the Sun was becoming intolerable. They had to close all ports, and they put the refrigeration system on full force. Whoever had calculated the limits of the boiling zone had shaved a hair close.

Meanwhile the Martian pursuers drove deeper and faster into the celestial night.

The high commander, eye fixed to the eye-piece of the fore telescope, was puzzled.

"I don't understand this at all," he muttered to his subordinate. "There can't be any doubt that Sharon discovered our trap—he's changed his course entirely." He moved away from the eye-piece. "Take a look."

His subordinate frowned in incredulity. "He must be a fool. He's heading right into the boiling zone. It's suicide—"

The other shook his head. "From what I saw of Sharon, he isn't the kind to commit suicide. He's up to some trick," he grated. "Keep your eye on that ship, and the minute anything untoward happens—let me know!"

Two days later, he was called to the 'scope. "Look at that," the watcher said with tense calm. The commander looked once, then raised his head.

He slumped into a chair. "This may ruin our plans," he said. "They're right on the edge of the boiling zone, and they're headed right into it."

He jumped to his feet, face savage. "Put some power in those rockets. Get around the Sun as quick as you can and head for Earth. If we can overtake them—"

His subordinate shook his head

* Sir James Jeans holds that comets are probably composed of meteors held together by mutual attraction. If one were to collide with Earth, there would be no danger, just a magnificent meteoric display.—Ed.

** Sharon undoubtedly refers to the comet of 1860, which approached the sun within 1/163rd of Earth's orbit—less than a half-million miles.—Ed.

doubtfully. "No, there is not a chance. They'll never get through that boiling zone. We might as well abandon the chase. We have forced them into a flaming death."

But the chase was not to be abandoned. Operating the rockets at full blasts, the Martian ship headed towards the earth, skirting the dangerous Boiling Zone.

All that day, Sharon sat at the controls, tense. He was within the tail, which, because it determinedly swung straight away from the Sun, necessitated a peculiar sidewise course down its length toward the comet's head. His problem was to equalize his velocity and acceleration to that of the comet.

And finally he made it, the boiling zone a mere half-million miles distant. The comet apparently came slowly drifting upward—and then stopped.

They saw its main mass now, shining with a cold phosphorescence. They saw huge masses slowly jostling back and forth, bumping, drifting back together again, but in general keeping a constant formation.

Through it, they saw more of the Sun than was concealed. Its glare and heat were still things to be dreaded. But in the lee of one of those masses there was safety.

Sharon brought the ship down gently onto a mass of matter that might have been no more than an exceptionally large meteorite, were it not for the phosphorescent motes that danced in an aura on its surface.

The Sun was blotted out, completely eclipsed.

To either side were the fantastic spangle of stars, the constantly swinging tail, the fuzzy halo of the comet, and an incredible number of tiny meteorites that at times rattled like hail against the ship.

They were safe, except for the danger presented by the constant internal movement of the nucleus, which was no more than two miles in circumference. Three times, the chunk they were riding threatened to penetrate into the middle portions of the comet's head. Four times, the masses they rode started to roll around the edge of the nucleus toward the Sunward side. Thus, seven times they nudged away and chose another resting place.

The comet penetrated deeper into the boiling zone, accelerating toward perihelion passage. Five days after entering the boiling zone, the comet came its closest to the Sun. During this time the two fugitives never once saw the Sun, nor were they affected by the awful heat the other side of the comet must have been experiencing.

They were now within the tail, which stretched straight away from the Sun they knew not how far. But it must have been an enormous distance; the length of the tail becomes greatest after a comet passes the Sun.

The comet began to emerge from the boiling zone. In four more days it was completely outside. Its course was straightening. The Sun had whipped it around like a small boy whips a stone on the end of a string, had given it a greater velocity than it previously possessed.

Far in the distance they sighted Earth.

"Great!" exulted Larry Sharon. "We're safe. Look at these figures. We cut off about 22,500,000 miles from the original course. We're safe!"

The glorious eyes of the Princess Helen sparkled. "And that is the Earth," she whispered, clasping her hands. "I have never been there. Larry," she laughed, "it was such a nice, obliging comet!"

The nice, obliging comet carried them a little farther, and then, hand in hand, they regretfully bid it goodbye. It went away, a great shining nebula 500,000 miles in diameter, its 10,000,000 mile tail swerving distastefully away from the Sun into whose proximity it had so closely ventured.

They turned the ship Earthward.

Three thousand miles from its security, they saw, in the stern telescope, a great ship that even now was braking its speed. It had come around the boiling zone, but as for catching those who had gone through it, they knew it couldn't be done now.

END

Meet the Authors

ROSS ROCKLYNNE

Author of

Escape Through Space

(Page 30)

I WAS born twenty-five years ago in Cincinnati. I am six feet two, weigh 170 lbs.

I lived in a boarding school from twelve to seventeen, after which time I lived with my family, finishing the last year of high-school, walking two miles up and down a hill a rocket ship couldn't navigate. After four years of spasmodic writing, I sold my first story. I write pretty rapidly when an idea is red hot. I wrote *ESCAPE THROUGH SPACE* during an afternoon, but preparing the final draft always proves arduous. When people ask me where I get my ideas, I place their dismembered bodies in a cavern excavated for the purpose.

The adventurous side of my life includes working in a department store, hitch-hiking, and walking seven blocks for a gallon of rusty water during the Great Flood of '37.

I read my first science-fiction story when I was eight; my father wrote it. I am fond of A. Merritt; Dr. Smith's first three stories are my favorites; next comes all of Weinbaum's—it was a shock to me when he died. I enjoyed Campbell's stories. I think Dr. Keller was the only consistent literateur in the pseudo-scientific field.

At present I am doing nothing, just writing. I am keenly interested in science-fiction, poker, travel, football, tennis, the outdoors, the indoors, the company of other people.—Ross Rocklynnæ.