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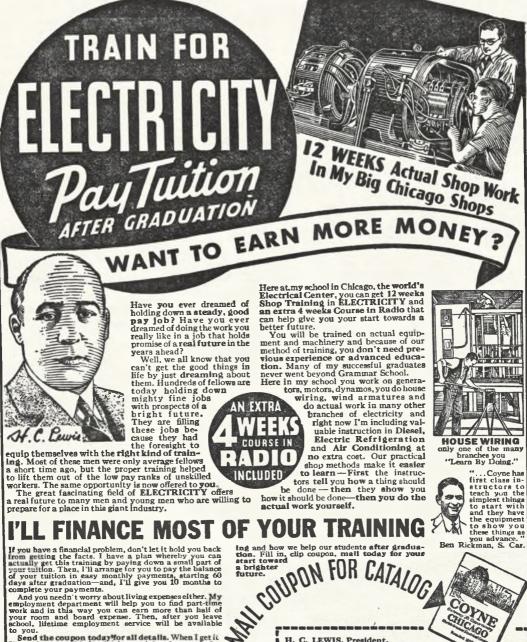




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EDITORAMBLINGS

BEFORE anything else, thanks a lot for your swell letters of criticism and advice. The deluge of mail that poured in on the first Astonishing Stories has almost swamped your editor. We wish we could answer every note personally—but we can't. There are too many of them. So we take this opportunity of making a graceful acknowledgment of your displayed interest and enthusiasm in Astonishing Stories, "The first (though probably not the last) dime science fiction magazine."

Speaking of letters, what do you all think of the suggestions outlined in the current "Viewpoints"? There are dozens of them, proposing everything from fan illustrators (to which we have answered by employing Bok and Perri in this issue) to the publication of so-called "heavy science" stories. We've had a tendency to steer away from this type, believing that the readers ar more interested in good writing than in hyper-dimensional ray guns—but maybe you want

more science?

Taking another tip from the letters, we've slightly expanded our review section this month, adding another reviewer and including a list of forthcoming science fiction and weird movies (which every fan ought to paste on his study wall). The music review, which was popular, unfortunately had to be dropped for a very good reason: there just isn't any more material available to review. So if any of your readers have heard or hear of any new science fiction tunes, a note describing the tune and your reaction to it will be appreciated.

By now you've probably all heard of the science fiction club our companion magazine, Super Science Stories, is sponsoring. If not, you're missing one of the biggest things to hit science fiction in years. It's called The Science Fictioneers, and full details on how you can join it are available in Super Science Stories, which, in turn, is available at any newsstand. At the time of this writing, although the first issue of Super Science Stories, containing the news of its organization, has been on sale for less than a week, The Science Fictioneers already

has dozens of members from all over the United States, and even has four chapters chartered! It's science fiction's newest and biggest bandwagon—get on it!

The May Super Science Stories, incidentally, is crammed with some of the finest science fiction ever to get into print. To instance just one story, take the case of "Let There Be Light," by Lyle Monroe, a comparative newcomer. This is the story of a man who learns the secret of cold light: i.e., learns how to make one watt of electricity do the work that forty do now by eliminating the waste in the form of heat. Not exactly a brandnew conception, you say? No, not if you just leave it at that. But leave it at that is just what Author Monroe doesn't do: and the tale of what happens when his characters take that simple invention and stand it on its head will hold you engrossed through every page. And besides this sterling yarn, which every science fiction fan will place in his private gallery of immortals, there are stories by Ray Cummings, L. Sprague de Camp, P. Schuyler Miller, Raymond Z. Gallun, and others.

Editor's Report: Your letters have shown that the most popular stories in the last issue were the cover tale, Polton Cross' "Chameleon Planet," and "Half-Breed" by Isaac Asimov. These two were chosen tops in science fiction with only one dissenting vote apiece. Next most popular was Paul Edmonds' story of "The Lifestone," followed at a respectable distance by "Asteroid" (Lee Gregor), "After the Plague" (Martin Vaeth), and "White Land of Venus" (Frederic Arnold Kummer, Jr., in that order. The only story in the issue to receive more nay votes than ayes was Gabriel Barclay's "Elephant Earth."

On the features, it was shown conclusively that you thoroughly approved of "Viewpoints," the review columns, and "Fan Magazines," disliking only the science cartoon feature (which has accordingly ceased).

All in all, it seems to have been a pretty popular issue.

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By Clifford D. Simak

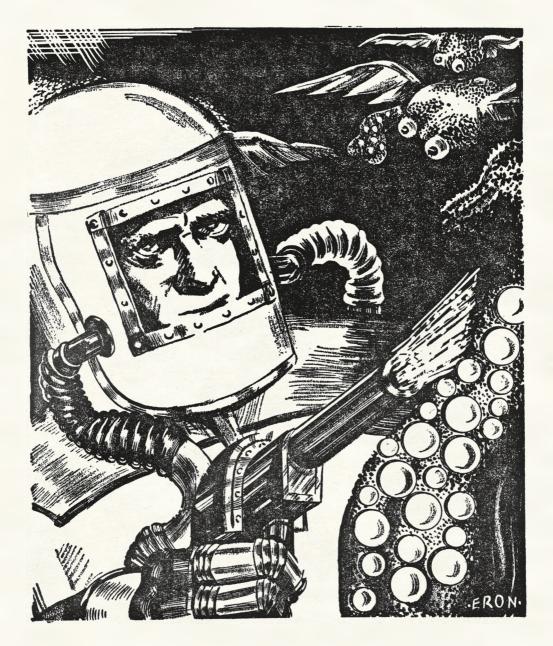
CHAPTER ONE

The Flame in Space

T WASN'T possible . . . but there it was! A thing that hung in space on shimmering wings of supernal light. Wings that had about them that same elusive suggestion of life and motion as one sees in the slow crawl of a mighty river. Wings that were veined with red

markings and flashed greenly in the rays of the distant Sun.

The body of the thing seemed to writhe with light and for a fleeting moment Captain Johnny Lodge caught sight of the incredible head . . . a head that was like nothing he had ever seen before. A head that had about it the look of unadulterated evil and primal cruelty.



He heard Karen Franklin, standing beside him, draw in her breath and hold it in her wonder.

"It's a Space Beast," said George Foster, assistant pilot. "It can't be anything else."

That was true. It couldn't be anything else. But it violated all rules of life and science. It was something that shouldn't have happened, a thing that was ruled out by the yardstick of science. Yet, there

it was, straight ahead of them, pacing the Karen, one of the solar system's finest rocket-ships, with seeming ease.

"It just seemed to come out of nowhere," said George. "I think it must have passed the ship. Flew over us and then dipped down. I can't imagine what those wings are for, because it travels on a rocket principle. See, there it blasts again."

A wisp of whitish gas floated in space

behind the winged beast and swiftly dissipated. The beast shot rapidly ahead, green wings glinting in the weak sunlight.

Karen Franklin moved closer to Captain Johnny Lodge. She looked up at him and there was something like fear in her deep blue eyes.

"That means." she said, "that those stories about the Belt are true. The stories the meteor miners tell."

Johnny nodded gravely. "They must be true," he said. "At least part of them."

He turned back to the vision port and watched the thing. A Space Beast! He had heard tales of Space Beasts, but had set them down as just one of those wild yarns which come from the far corners of the Solar System.

THE Asteroid Belt was one of those far corners. Practically a No-Man's Land. Dangerous to traverse, unfriendly to life, impossible to predict. Little was known about it, for space ships shunned it for good cause. The only ones who really did know it were the asteroid miners and they were a tribe almost apart from the rest of the men who ventured through the void.

The Space Beast was real. There was no denying that. Johnny rubbed his eyes and looked again. It was still there, dead ahead.

Protoplasm couldn't live out there. It was too cold and there was no atmosphere. Protoplasm . . . that was the stumbling block. All known life was based on protoplasm, but did it necessarily follow that life must be based on protoplasm? Protoplasm, of itself, wasn't life. Life was something else, a complex phenomenon of change and motion. Life was a secret thing, hard to come at. Scientists, pushing back the barriers to their knowledge, had come very close to it and yet it always managed to elude

them. They had found and defined that misty borderline one side of which was life, the other side where life had not as yet occurred. That borderline was the determining point, the little hypothetical area where life took shape and form and motion. But just because in the so-far known Solar System it had always expressed itself in protoplasm, did it necessarily mean it must always express itself in protoplasm?

He watched the metallic glitter of an asteroid off their port. It was only a few miles distant and it would pass well over them, but the sight of the thing gave him the creeps. Those barren rocks reflected little light. Hard to see, they rushed through space on erratic orbits and at smashing speeds. At times one could locate them only by the blotting out of stars.

"Karen," he said, "maybe we should turn back. It was foolish of us to try. Your Dad won't blame us. I don't like the looks of things." He swept his hand out toward the soaring Space Beast.

She shook her head, obstinately. "Dad would have come himself, long ago, if it hadn't been for the accident. He'd be with us now if the doctors would let him take to space again." She looked into Johnny's face solemnly. "We mustn't let him down," she said.

"But rumors!" Johnny cried. "We've been chasing rumors. Rumors that have sent us to the far corners of the system. To Io and to Titan and even in close to the Sun seeking a mythical planet."

"Johnny," she asked, "you aren't afraid, are you?"

He was silent for a time but finally, he said: "For you and for the boys back there."

She didn't answer, but turned back to the vision plate again, staring out into the velvet black of space, watching the Space Beast and the shimmer of nearby rocks, the debris of the Belt. He growled in his throat, watching the Beast, his brain a mad whirl of thoughts.

Metal Seven had started the whole thing. Five years ago old Jim Franklin, one of the system's most intrepid explorers and space adventurers, had found Metal Seven on Ganymede . . . just one little pocket of it, enough for half a dozen space ships. Search had failed to reveal more. Five years of hectic search throughout the system had not unearthed a single pound of the precious mineral.

Its value lay in its resistance to the radiations that poured through space. Space ships coated with a thin plating of Metal Seven acquired an effective radiation screen.

BUT few ships had such a screen . . . because Jim Franklin had found only enough for a few ships. The Karen had it, for the Karen was Franklin's ship, named after his only daughter. A millionaire back on Mars had paid a million dollars for enough to plate his pleasure yacht. One big passenger line had bought enough of the original find to plate two ships, but one of these had been lost and only one remained. The Terrestrial government had acquired the rest of the metal and locked it in well guarded vaults against possible need or use.

The sale of the mineral had made Jim Franklin a rich man, but a large portion of the money had been invested in the search for more extensive deposits of Metal Seven.

Two years ago Franklin, on one of his rare returns to Earth from space, had visited a rocket factory to watch some tests. A rocket tube exploded. Three men were killed . . . Jim Franklin was saved only by a miracle of surgery. But he was Earth-bound, his body twisted and broken. His physicians had warned him that he would die if he ever took to space again.

So today his daughter, Karen Frank-

lin, carried on the Franklin tradition and the Franklin search for Metal Seven. A search that had taken the sturdy little ship far in toward the Sun, that had landed it on the surface of unexplored Titan, had driven it, creaking and protesting against the tremendous drag of Jupiter's gravity, down to little Io, until then unvisited by any rocket-ship. A search that was now taking it into the heart of the Asteroid Belt, following the trail pointed by the mad tale of a leering little man who had talked to Karen Franklin at the Martian port of Sandebar.

It might have been an accident... just that one little pocket of Metal Seven found on Ganymede. There might be no more in the solar system. Special conditions, some extraordinary set of circumstances might have deposited just enough for half a dozen ships.

But it didn't seem right. Somewhere in the system, on some frigid rock of space, there must be more of Metal Seven, enough to protect every ship that plowed through space. A magic metal, screening out the vicious radiations that continually streamed through space without rhyme or reason, eliminating the menace of those deadly little swarms of radioactive meteors which swooped down out of nowhere to engulf a ship and leave it a drifting hulk filled with dead and dying.

Karen's voice roused him from his thoughts, "Johnny, I thought I saw a light. Could that be possible? Would there be any lights out here?"

Johnny started, saying nothing, staring through the vision plate.

"There it goes!" cried George. "I saw it."

"I saw it again, too," said Karen. "Like a blue streak way ahead of us."

A TREMULOUS voice spoke from the doorway of the control room. "Is it a light you are seeing, Johnny?"

Johnny swung around and saw Old Ben Ramsey. He was clad in a bulky work suit and his twisted face and gnarled hands were grease-streaked.

"Yes, Ben," said Johnny. "There's something out ahead."

Ben wagged his head. "Strange things I've heard about the Belt. Mighty strange things. The Flame That Burns in Space and the Space Beasts and the haunts that screech and laugh and dance in glee when a rock comes whizzing down and cracks a shell wide open."

He dragged his slow way across the room, his feet scraping heartbreakingly, hunching and hobbling forward, a shamble rather than a walk.

Johnny watched him and dull pity flamed within his heart. Radiations had done that to Old Ben. The only man left alive after his ship hit a swarm of radioactive meteors. Metal Seven could have saved him . . . if there had been any Metal Seven then. Metal Seven, the wonder metal that screened out the death that moved between the planets.

"I saw it again!" yelled George. "Just a flash, like a blue light blinking."

"It's the Flame that burns in space," Old Ben said, his bright eyes glowing with excitement. "I've heard wild tales about the Flame and Space Beasts, but I never really did believe them."

"Start believing in them, then," said Johnny grimly. "because there's a Space Beast out there, too."

Old Ben's face twisted and he fumbled his greasy cap with misshapen, greasy hands. "You don't say, Johnny?"

Johnny nodded. "That's right, Ben." The old man stood silent for a moment, shuffling his feet.

"I forgot, Johnny. I came up to report. I loaded the fuel chambers and checked everything, like you told me to. Everything is ship-shape."

"We're going deeper into the Belt," said Johnny. "Into a sector that is taboo

to the miners. You couldn't hire one of them to come in here. So be sure everything is ready for prompt action."

Ben mumbled a reply, shuffling away. But at the door he stopped and turned around.

"You know that contraption I picked up at the sale in Sandebar?" he said. "That thing I bought sight unseen?"

Johnny nodded. It was one of the jokes of the ship. Old Ben had bought it in the famous Martian market, bought it because of the weird carvings on the box which enclosed it. Somehow or other, those carvings had intrigued the old man, touched some responsive chord of wonder deep in his soul. But the machine inside the box was even more weird . . . an assembly of discs and flaring pipes, an apparatus that had no conceivable purpose or function. Old Ben claimed it was a musical instrument of unknown origin and despite the friendly jibes and bickering of the other crew members he stuck to that theory.

"I was just thinking," said Old Ben. "Maybe that danged thing plays by radiations."

Johnny grinned. "Maybe it does at that."

The old man turned and shuffled out.

CHAPTER TWO

Attack!

THE ship careened and bucked as George blasted with port tubes to duck a wicked chunk of rock that suddenly loomed in their path. Johnny saw the needle-like spires as the asteroid swung below them, spires that would have sheered the ship as a knife cuts cheese.

There was no doubt now that the flash they had sighted actually was a light. They could see it, a streak of blue that arced briefly across the vision port, lending its surroundings a bluish tint. "It's an asteroid," declared George, 'and our little friend is heading right for it."

What he said was true. The Space Beast had gained on them but was still almost directly ahead, apparently moving in toward the distant light.

The Karen drove on with flaming tubes. The meteoric screens flared again and again, in short flashes and long ripples, as tiny debris of the Belt struck like speeding bullets and were blasted into harmless gas.

"Johnny," asked George, "what are we going to do?"

"Keep going," said Johnny. "Head for the blue light. We want to see what it is if we can. But be ready to sheer off and give it all you've got at the first sign of danger."

He looked at Karen for confirmation of the decision. She nodded at him with a half-smile, her eyes bright . . . the kind of brightness that had shown in the eyes of old Jim Franklin when his fists knotted around the controls as his ship thundered down toward new terrain or nosed outward into unexplored space.

Hours later they were within a few miles of the asteroid. Minutes before the weird Space Beast had dived for the surface, was roosting on one of the rocky spires that hemmed in the little valley where the light flamed in blue intensity.

Speechless, Johnny stared down at the scene. The flame was not a flame at all. Not a flame in the sense that it burned. Rather it was a glowing crown that hovered over a massive pyramid.

But it was not the flame, nor the roosting Beast of Space, nor even the fact that here was an old tale come to life which held Johnny's attention. It was the pyramid. For a pyramid is something which never occurs naturally. Nature has never achieved a straight line and a pyramid is all straight lines.

"It's uncanny," he whispered.

"Johnny," came George's hoarse whisper, "look over that highest peak. Just above it."

Johnny lined his vision over the peak, saw something flash dully. A shimmering flash that looked like steel reflecting light.

He squinted his eyes, trying to force his sight just a little farther out into the black. For an instant, just a fleeting instant, he saw what it was.

"A SHIP!" he shouted.

George nodded, his face grim.

"There's two or three out there," he declared. "I saw them a minute ago. See, there's one of them now."

He pointed and Johnny saw the ship. For a moment it seemed to roll, catching the shine from the blue light atop the pyramid.

Johnny's lips compressed tightly. The skin seemed to stretch, like dry parchment, over his face.

"Derelicts." he said, and George nodded.

Karen had turned from the vision plate and was staring at them. For the first time there was terror on her face. Her cheeks were white and her lips bloodless. Her words were little more than a whisper: "Derelicts! That means..."

Johnny nodded, finishing the sentence: "Something happened."

A nameless dread reached out and struck at them. Alien fear creeping in from the mysterious reaches of the Asteroid Belt.

"Johnny," said George quietly, "we better be getting out of here."

Karen screamed even as Johnny leaped for the controls.

Through the panel he saw what had frightened her. Another Space Beast had swept across their vision . . . and another . . . and another. Suddenly the void seemed to be filled with them.

Mad thoughts hammered in his brain

as he reached for the levers. Something had happened to those other ships! Something that had left them drifting hulks, derelicts that had taken up an orbit around the asteroid with its flametopped pyramid. This was an evil place with its derelicts and its Space Beasts and its flaming stones. No wonder the miners shunned it!

His right hand shoved the lever far over and the rockets thundered. The ship was shaking, as if it was being tossed about by winds in space, as if something had it in its teeth and was worrying it.

Johnny felt the blood drain from his face. For an instant his heart seemed to stand stock still.

There was something wrong. Something was happening to the ship!

He heard the screech of shearing metal, the shriek of suddenly released atmosphere, the crunching of stubborn beams and girders.

His straining ears caught the thud of emergency bulkheads automatically slamming into place.

The rocket motors no longer responded and he snatched his eyes away from the control panel to glance through the vision plate.

The ship was falling toward the asteroid! Directly below loomed the little valley of the pyramid. From where he stood he could look straight down into the glare of the blue light.

A great wing, a wing of writhing flame, swept quarteringly across the vision plate. For a moment the cabin was lighted with a weird green and blue . . . the gleaming instruments reflecting the light from the wing and the pyramid flame. Weird shadows danced and crawled over the walls, over the whiteness of the watching faces.

THE Space Beast veered off, volpaning down toward the flame. Johnny caught his breath. The Beast was mon-

strous! Cold shivers raced up and down his spine. His flesh crawled.

From the creature's beak hung a mass of twisted steel, bent and mangled girders ripped from the *Karen's* frame. Gripped in its talons, or what should have been its talons, was an entire rocket assembly.

The Karen was plunging now, streaking down toward the asteroid, headed straight for the pyramid.

In the brief second before the crash Johnny recreated what had happened. Like a swift motion picture it ran across his brain. The Beast had attacked the ship, had ripped its rear assembly apart. had torn out the rocket tubes, had plucked out braces and girders as if they had been straws. The Karen was falling to destruction. It would pile up down in that little valley, a useless mass of wreckage. It would mark where its crew had died. For most of the others back there must be dead already . . . and only seconds of life remained for him and the other two.

The ship struck the pyramid's side a glancing blow, metal howling against the stone. The *Karen* looped, end over end, struck its shattered tail on the rocky valley floor and toppled.

Johnny picked himself out of the corner where he had been thrown by the impact. He was dazed and blood was flowing into his eyes from a cut across his forehead. Half blinded, he groped his way across the tilted floor.

He was alive! The thought sang across his consciousness and left him weak with wonder. No man could have hoped to live through that crash, but he was still alive . . . alive and able to claw his way across the slanting floor.

He listened for the hiss of escaping air, but there was no hiss. The cabin was still air-tight.

Hands reached out and hoisted him to his feet. He grasped the back of the anchored pilot's chair and hung on tightly. Through the red mist that swam before his eyes he saw George's face. The lips shaped words:

"How are you, Johnny?"

"I'm all right," Johnny mumbled. "Never mind about me. Karen!"

"She's okay," said George.

Johnny wiped his forehead and gazed around. Karen was leaning against a canted locker.

She spoke softly, almost as if she were talking to herself.

"We won't get out of here. We can't possibly. We're here to stay. And back on Earth, and on Mars and Venus, they will wonder what happened to Karen Franklin and Captain Johnny Lodge."

Johnny let go of the chair back and skated dizzily across the floor to where she leaned against the locker. He shook her roughly by the shoulder.

"Snap out of it," he urged. "We got to make a try."

Her eyes met his.

BOB: Thanks for the tip, pal! I tried Ex-Lax and it's great stuff!

"You think we have a chance?"

He smiled, a feeble smile.

"What do you think?" he challenged. She shook her head. "We're stuck here. We'll never leave."

"Maybe," he agreed. "but we aren't

giving up before we try. Let's get into suits and go out. There are radiations out there, but we'll be safe. There's Metal Seven in those suits and Metal Seven seems to be screening it out in here all right."

Karen jerked her head toward the rear of the ship.

"The men back there," she said.

Iohnny shook his head. "Not a chance," he told her.

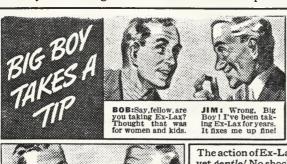
George was opening another locker and taking out suits. He stopped now and looked at Johnny.

"You say there's radiations out there," he said. "You mean the Flame is radiation?"

"It couldn't be anything else," said Johnny. "How else could you explain it?"

"That's what happened to those other ships," declared George. "They couldn't screen out the radiation. It killed the crews and the ships took up an orbit around the asteroid. We were all right because we had the Metal Seven screen. But the Beast came along and ruined us. So here we are."

Johnny stiffened, struck by a thought. "Those ships out there," he said, speaking slowly, his voice cold with sup-



JIM: What did I tell

you! It's the only laxative we ever use in our family.



pressed excitement. "Some of them might be undamaged, might be made to operate."

George stared.

"Don't get your hopes up, Johnny," he cautioned. "They're probably riddled with meteors."

"We could patch them up," said Johnny. "Seal off the pilot room and stay there. We'd be safe in the suits until we got it fixed."

CHAPTER THREE

Beasts of the Pyramid

THE valley of the Pyramid was a nightmare place. A place of alien beauty, lit by the blue radiations that lapped, flame-like, around the tip of the massive monument of masonry. Weird and eerie, with a quality that set one's teeth on edge.

An outpost of hell, Johnny told himself. Lonely and forbidding, with the near horizon of jagged peaks and rocky pinnacles lancing against the black of space. A puddle of blue light holding back the emptiness and blackness of surrounding void. The rocks caught up the shine of the Flame and glowed softly, almost as if endowed with a brilliance of their own. The blue light caught and shattered into a million dancing motes against the drifts of eternally frozen gases, evidence of an ancient atmosphere. which lay in the rifts and gullies that traversed the peaks hemming in the valley.

Hunched things squatted on the peaks. Imps of space. Things that resembled nothing Man had ever seen before. The Beasts, no two alike, Squatting like malevolent demons keeping silent watch. Mind-shattering forms made even more horrible by the play of light and shadow, like devils circling the pit and speculating darkly upon the punishments to be meted out.

"It's pretty terrible, isn't it," said

Karen Franklin and her voice was none too steady.

One of the things spread its wings and lifted from a peak. They could see the cloud of whitish vapor which shot from the "rocket tubes" and lifted it into space. It soared toward the Flame, hovered for a moment above it and then dipped down, almost into the play of bluish light.

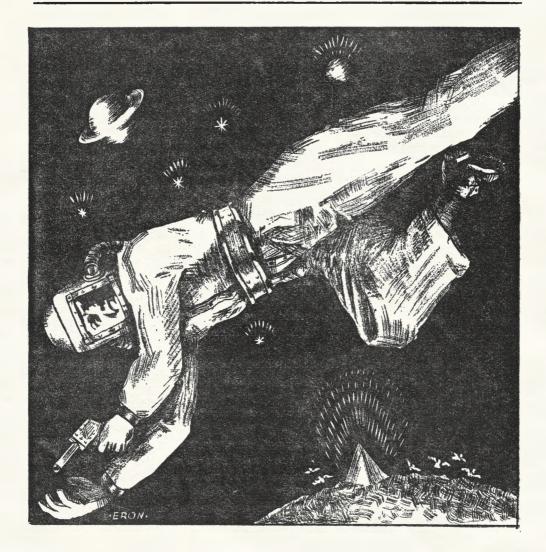
Karen cried out and Johnny stared. unbelieving. For the thing was changing! In the shifting light of the radiations it was actually taking on new form! Old features of its appearance dropped away and new ones appeared. The face of the Beast, seen clearly in the light, seemed to vanish like a snatched-off mask. For a moment it was faceless, featureless . . . and then the new features began to form. Features that were even more horrible than the ones before. Features that had cold fury and primal evil stamped upon them. The wings shimmered and changed and the body was undergoing metamorphosis.

"Mutation," Johnny said, his voice brittle with the terror of the moment. "The Flame mutates those things. A sort of re-birth. From all regions of Space they come to get new bodies, perhaps new vitality. The Flame is the feeding grounds, the source of nourishment, the place of rejuvenation for them."

Another Beast shot down from the blackness that crowded close over the valley, skimmed lightly for a peak and came to perch.

Thoughts banged against one another in Johnny's skull.

MUTATIONS! That meant then, the Flame was a source of life. That it held within its core a quality that could renew life . . . perhaps, a startling thought . . . even create life. Back on Earth men had experimented with radiations, had caused mutations in cer-



tain forms of life. This was the same thing, but on a greater scale.

"A solar Fountain of Youth," said George, almost echoing Johnny's thoughts.

The pyramid, then, had been built for a purpose. But who had built it? What hands had carried and carved and piled those stones? What brain had conceived the idea of planting here in space a flame that would burn through the watches of many millenia?

Surely not those things squatting on the peaks! Perhaps some strange race forgotten for a million years. Perhaps a people who were more than human beings.

And had it been built for the purpose for which it was now being used? Might it not be a beacon light placed to guide home a wandering tribe? Or a mighty monument to commemorate some deed or some event or some great personage?

"Look out!" shrieked George.

Automatically Johnny's hand swept down to his belt and cleared the blaster. He swung the weapon up and saw the Space Beast plunging at them. It seemed almost on top of them. Blindly he depressed the firing button and the blaster slammed wickedly against the heel of his hand. Swaths of red stabbed upward. George was firing too, and Johnny could hear Karen sobbing in breathless haste as she tried to clear her weapon.

Inferno raged above their heads as the beams from the weapons met the plunging horror. The body of the thing burst into glowing flame, but through the glow they still could see the darkness of its outline. The blasts from the guns slowed it, so that it hung over them, caught in the cross-fire of the blazing weapons.

SUDDENLY it shot upward, out of the range of the guns. Shaken by the attack, they watched it flame through space, as if in mortal agony, twisting and turning, writhing against the black curtain that pressed upon the asteroid.

Another Beast was dropping from a pinnacle, shooting toward them. And another. Once again the beams lashed out and caught the things, slowed them, halted them, made them retreat, flaming entities dancing a death fandango above the blue-tipped pyramid.

"This won't do," said Johnny, quietly.
"They'll coop us up inside the ship.
They'd attack us if we tried to take off in the emergency boat to reach one of the ships up there."

He stared around the horizon, at the roosting Beasts hunched on the jagged rim. Men, he realized, were intruders here. They were treading on forbidden ground, perhaps on sacred ground. The Beasts resented them, quite naturally. He seemed to hear the subdued rustling of wings, wings of flame sounding across countless centuries.

Wings! That was it. He knew there was something incongruous about the Beasts. And that was it . . . their wings. Wings were useless in space. They had no function and yet the Beasts spread them exactly like the winged things in Earth's atmosphere. He racked his brain. Might those wings, after all, have some

definite purpose or were they mere relics of some other life, some different abode? Might not the Beasts have been driven from some place where there was an atmosphere? Had they been forced to adapt themselves to space? Or were the wings only for occasional use when the things plummeted down upon the worlds of Man and other earth-bound things?

Johnny shuddered, remembering the old dragon myths, the old tales of flying dragons, back on Earth. Had these things once visited Earth? Had they given rise to those old tales out of mankind's dim antiquity?

He jerked his mind back, with an effort, to the problem at hand. He had to take up the emergency boat and find a ship. From among all those derelicts there certainly would be several that still would operate, would take them from this hell-lit slab of rock. But with the Beasts standing guard there wasn't a chance.

Perhaps, if all of them could get into the emergency boat they could make a dash for it and trust to luck. But there was only room for one.

If there were only a way. If Old Ben were only alive. Old Ben could think of some way. Old Ben, with his shuffling walk and twisting face. He closed his eyes and a vision of Old Ben seemed to form within his brain. The twisted lips moved. "I am here, Johnny."

Johnny jumped, for the words had actually rung within his brain. Not spoken words, but thought even louder than the words themselves.

CHAPTER FOUR

Mutation of Old Ben

66W/HO said that?" asked Karen sharply.

"It's Old Ben, ma'm," said the soundless voice. "Old Ben is speaking to you."

"But Ben," protested Johnny. "it can't be you. You were back in the engine room. You're."

"Sure, Johnny," said the voice. "You think I'm dead and probably I am. I must be dead."

Johnny shivered. There was something wrong here. Something terribly wrong. Dead men didn't talk.

"It was the radiations," said Old Ben "They changed me into something else. Into something that you can't see. But I can see you. As if you were far away."

"Ben" Karen cried but the soundless words silenced her.

"It's hard to talk. I have to hurry. I haven't any mouth to talk with. Nothing like I used to have. But I'm alive ... more alive than I have ever been. I think at you. And that is hard."

Johnny sensed the struggle in the thoughts that hammered at his brain. Inside the helmet perspiration dripped down his forehead and ran in trickling streams along his throat. Unconsciously he tried to help Old Ben... or the thing that once had been Old Ben.

"The musical instrument," said Old Ben, the thoughts unevenly spaced. "The musical instrument I bought in Sandebar. Get it and open the box."

They waited but there was nothing more.

"Ben!" cried Johnny.

"Yes, Johnny."

"Are you all right, Ben? Is there anything we can do?"

"No lad, there isn't. I'm happy. I have no mangled body to drag around. No face to keep all streaked with grease so it won't look so bad. I'm free! I can go any place I want to go. I can be everywhere at once. Any place I want to be. And there are others here. So I won't be lonesome."

"Wait a minute, Ben!" Johnny shrieked, but there was no answer. They waited and the silence of space hung like a heavy curtain all about them. The valley was a place of silence and of weird blue light that sent shadows dancing.

George was running for the shattered stern of the ship. Johnny wheeled to follow him.

He shouted at Karen:

"Get back into the lock and wait for us. You'll be safe there."

The two men climbed through the gaping hole the Beast had torn. Carefully, torturously, they made their way through the twisted girders and battered plates. The engine room was a mass of wreckage, but there were no bodies.

"The radiations," said George. "It changed all of them into the kind of things . . . well, into whatever Old Ben is."

THOUGHTS ran riot in Johnny's brain. Radiations that changed life. Changing Beasts into other shapes and forms. Changing men into entities that could not be seen, entities that had no bodies but could go anywhere they pleased, could be any place they wanted to, or in all places at the same time!

If the worst came to the worst there was still a way of escape! Still a way open to them. A doorway it would take courage to cross. but it was there. A doorway to another way, to another form of life, to a life that might be better than the one they had. Old Ben said he was happy . . . and that was all that mattered. Just strip off their suits and walk unprotected into the full glare of the light.

He cursed at himself, savagely. That wasn't the way to do things. If it happened and one couldn't help it . . . all right. But to do it deliberately . . . that was something else. Perhaps, if all else failed, if there was no other way

They found the box containing the strange musical instrument and between them they lugged it out. Despite the lesser gravity it was heavy and hard to handle.

Outside, in front of the lock, they pried up the lid. Instantly, music filled

all of space. Not music in the sense that it was sound, but a rhythmic pulse and beat that one could sense. Music that filled the heart with yearning, music that made one want to dance, music that plucked and pulled at the heartstrings with tripping, silvery fingers. Sobbing notes and clear, high notes that rang like the gladsome clanging of a bell, rippling music like wind across the water and sonorous chords like the bellowing of a drum. Music that swelled and swelled, reaching out and out, appealing to all emotions, crying for understanding.

Johnny saw the astonished oval of Karen's face through the helmet plate.

She saw him looking at her. "How lovely!" she cried.

"It's the radiations again," said George, breathlessly. "Old Ben was right. The thing plays by radiation."

"Look at the Beasts!" Johnny shouted. The Beasts were shuffling toward them, hopping and running, sliding down from their perches on the soaring pinnacles, racing across the boulder jumbled valley floor.

George and Johnny lifted their guns from the holsters and waited. The Beasts advanced and stopped, forming a half circle in front of the wrecked ship. Every line of their gruesome bodies had assumed a pose of rapt attention. They did not even seem to see the Earthmen. Motionless, as if carven from stone, they listened to the swelling paean that swept up and out of the metal box.

Johnny let out his breath, slowly. But he still kept a tight grip upon the gun. The Beasts seemed to be hypnotized, held entranced by the music that poured from out the radiation instrument.

Johnny spoke softly to the others: "As long as the music lasts it will keep them quiet. Keep in the lock and watch. Don't take any chances."

"What are you going to do?" asked Karen, sharp anxiety in her voice.

"There's one emergency boat left," said Johnny. "All the others are smashed. I'm taking it up and see about the ships. They are our only chance."

"I'll help you," offered George.

Johnny turned to face Karen. "Please take care of yourself."

She nodded. "And you, Johnny. You take care of yourself, too."

THE ship was old...a thousand years at least, but it seemed to be serviceable. The hull appeared in good shape. The rocket tubes were intact. A meteor had drilled a hole as big as a man's hand through the pilot cabin. But it had missed the instruments and it would not be too big a job to patch the holes. Probably there were other similar holes through the rest of the ship but they wouldn't matter unless the rocketing projectiles had smashed the machinery. The machinery in a ship of this sort was elemental, mostly fuel tanks, combustion chamber and tubes. No niceties.

Johnny walked to the control board and grinned as he looked over the instruments and controls. Not much to them. In the days when this craft had set out to sail the void a space ship was a rocket pure and simple . . . nothing else.

But the ship was the best he had found so far. He had visited three others and all three were damaged beyond repair. The fuel tanks had been smashed in one. In another the control panel had been shattered by a tiny bit of whizzing stone and the third had one of the rockets sheered off.

Johnny walked back to the open lock and peered down at the asteroid. The valley where the pyramid was situated was just coming over the horizon and the light from the flame made it appear that dawn had just arrived on the little world.

He whirled from the lock and went to the door communicating with the stern of the ship. He'd have to look over the fuel tanks and other machinery, make sure that everything was all right. And he had to hurry. Johnny could imagine what was going on in the minds of the two he had left in the flame-lit valley. The speculation and apprehension, the pitting of hope against hope.

The door creaked open and Johnny stepped through into the living quarters

The room looked lived in. After all these years it appeared as it must have that day nearly a thousand years before when the men who drove the ship had dared come into the Belt, had left their course to investigate the Flame in Space. They had been trapped, exactly as the crews of all those other ships had been trapped. Caught by radiations that turned them into something that didn't have human form, although human thoughts and aspirations and human hope might still remain. Adventurers all . . . men who felt within them the lure of the unknown, men who had dared to come and see and hadn't been able to get back again.

Broken dishes and crockery lay on the floor, where they had been swept off the table or hurled from the shelving by the rocking of the ship, by the shock of hammering debris. The bunks were unmade, exactly as they had been left when the men had tumbled out to rush forward and look out through the vision plate at the mystery which loomed ahead.

A strange tingle of fear rippled along Johnny's spine. He stopped and listened looking around.

His hand slid down to the butt of his blaster.

Then he laughed, a throaty laugh. Getting jittery in an old ship. There wasn't anything here. There couldn't be anything here. Nothing except the ghosts of the men who had manned the craft ten centuries ago. He shuddered at the thought. Could it be possible that the ghosts of the old crew were still here? Was it possible that the things they had been turned into by the radiations still hovered in this room, keeping eternal watch?

He cursed at his fears and strode forward but fear still rode upon his shoulder, a little jeering fear that taunted him and yelped in hideous glee.

The fuel tanks were intact, the combustion chamber seemed undamaged. His inspection of the ship from the emergency boat had assured him that the tubes were unhurt. The ship could be navigated.

Back in the living quarters he stopped momentarily, his eyes lighting on a desk. The ship's log would be kept there. He had just time for a peek. Find out something about the ship. The name of its captain, the identity of the men who had served under him, its ports of call, its home port back on Earth.



He hesitated. The desk drew him like a magnet. He took a swift step forward and slammed into something. Something that yielded to the touch, but with a sense of terrible strength.

Heart in his throat, he backed away. He felt his legs and arms grow cold as ice, the muscles of his abdomen squeezing in, the sudden surge of fear hazing his brain. But his reflexes were at work. Like an automaton, he reacted to the spur of danger. His right hand swept the blaster free and he paced backward, on the alert, like a retreating cat, poised for instant action.

HE FELT his way through the door into the pilot cabin, backed warily for the open port. But there he stopped. Maybe he had imagined he ran into something back there in the living quarters. Maybe there wasn't anything at all. Space sometimes did queer things to a man. He needed this ship . . . Karen and George back on the asteroid needed it. He couldn't let himself be scared away by wild imaginings.

He swung slightly around to look out the valve. The valley of the pyramid was turned broadside to the ship. He strained his eyes trying to make out the wreckage that lay at the base of the pyramid, but the valley was full of shadows that flickered and would not be still and he could see no details.

Swinging around. he stepped forward and ran squarely into an invisible wall that yielded and tried to suck him in. Savagely, he fought free, threshing his arms, kicking with his heavy boots. Teetering on the edge of the valve, he brought the blaster up and pressed the firing button. The red tongue of flame lapped out and mushroomed. Inside the cabin something suddenly blazed into form. For a sickening instant he caught sight of a monstrous form, a nauseating mass of writhing shape.

A thread of sharp, red knowledge snaked through his brain. Some invisible monster of space had taken refuge in the ship, had laired within it, had made of it a home. Invisible until the breath of the gun had reached and scorched it and then the flaring flame had outlined its obscenity.

He tottered and fell backward into space. Floating away from the ship he saw the thing inside, a mass of blazing light, fighting to get through the open valve. With a curse between his teeth he trained the blaster on the port and pushed the button down full power. The kick of the gun hurled him backward, end over end.

Swinging slowly over he saw the portholes in the living quarters of the ship flare with light.

The thing, in its dying throes, was running madly through the ship.

He lost sight of the ship. Then invisible hands lifted him and flung him away. As he spun he caught the glimpse of a mighty flame blossoming in blackness... flame that leaped out and curled and reached for him with fiery fingers in all directions.

The ship had exploded! There must have been a tiny crack in one of the fuel tanks and the blazing monster had rushed into the engine room. In one shattering instant the fuel tanks had exploded. A soundless explosion that tore the ship to fragments, that sent blue and yellow flames tonguing out into the blackness of the void.

He was slowing down. By judicious use of the blaster he righted himself, stopped the spin into which the explosion had thrown him.

He shook his head to clear his thoughts.

The ship was gone. So was the emergency boat.

And he, himself, was trapped in empty space.

CHAPTER FIVE

Alone in Space

LOOKING down over the toes of his space-boots, he could see the asteroid, the valley a-glow with the shimmer of the flame. Down there waited two people, who had depended on him. Ones who had waited while he went out. Now he had failed them.

Bitterness rose in his throat and filled his mouth. His mind seethed with terrible thought.

The least he could do would be to go back and die with them. He might be able to do it.

He lifted the blaster and looked at it. He could use it as a rocket, force himself down into the valley.

Calculating carefully, he aimed the gun and pressed the button gently. He moved as the gun flared. Steadily he drove down toward the asteroid. He shifted the angle of the gun slightly to correct his flight and pressed the firing button again.

But there was no kick against the heel of this hand. The gun was dead! He had used up its charge. Feverishly he searched the belt for another charge, but there was none. Usually there were three emergency charge clips, but someone had been careless.

He was still gliding, but he would fall short of his mark. The gravity of the asteroid would grip him, but not enough to draw him to the surface. He would fall into an orbit. Like the derelicts that whirled around it, he would become a satellite of the rock that flamed in space.

He closed his eyes and tried to fight off the certain knowledge of his fate. He might throw away the gun and that would give him some forward motion. He might strip the belt of all equipment and fling it away as well, but he was still too far away. There was nothing else but to face inevitable death.

Life and death in space! He laughed, a short, hard laugh. There was life in space despite the scoffing of the skeptics. Life as expressed in the Space Beasts and in the invisible thing back in the ship. No one knew how many other forms of life. Life clinging close to the Asteroid Belt, making pilgrimages to a flame that flared in space, lairing in old derelicts.

Life that might be formed of silica, but probably wasn't, for that wouldn't explain the sudden flaring of their tissues before the hot breath of the blasters. Probably some weird chemistry of space as yet undiscovered and undreamed of by Earthly scientists.

Myths of space. Stories told by crazy asteroid miners home from lonely trips. But myths based on fact. A flame that burned blue atop a pyramid. A flame that gave new life and mutated the form of living things Perhaps the silent sentinels of all life within the solar system. Perhaps the great, eternal life force that maintained all life . . . perhaps so long as that flame burned there would be life. But when it was black and dead life would disappear. Radiations lancing out to all parts of the solar system, carrying the attribute, the gift of life.

JOHNNY laughed again. Maybe he'd go crazy out here, make dying easier. Out here it was easier to understand, to take the evidence of one's eyes on faith alone, easier to believe. And now there'd be another myth. The Myth of Music. The instrument down there would play on and on . . . perhaps as long as the blue light shimmered. A Lorelei of space, as asteroid siren!

Music that charmed monsters. He sobered at the thought. There might be . . . there must be some connection between the curious instrument and the flame, some connection, too, with the grotesque Beasts. Establish the inter-relationship of the three, the Music Box, the Flame.

the Beasts and one would have a story. But a story that he, Johnny Lodge, would never know. For Johnny Lodge was going to die in space. A story, perhaps, that no one would ever know.

A red light twinkled on the surface of the asteroid, just above the valley of the flame. Again the red light flashed, a long rippling flash that moved upward, away from the surface. He watched it fascinated, wondering. Up and up it moved, a thin red pencil of flame driving outward from the rock.

The explanation hit him like a blow. Someone was using a blaster for a rocket, was coming out in space to look for him!

George! Good old George!

Hysterically he shouted the name. "George! Hey, George!"

But that was foolish. George would never hear him. It was a crazy thing to do... a foolhardy thing to do. Space was dark and a man was small. George would never find him... never.

But the light was driving straight toward him. George knew where he was . . . was coming out to get him. Then, sheepishly, Johnny remembered. The helmet light! Of course, that was it.

Limp with the realization that he was saved, Johnny waited.

The pencil of red moved swiftly, blinked out and failed to go on for long minutes, then resumed again, much nearer. The charge had burned out and George had inserted another one.

A space suit glowed in the flare of the advancing blaster flame. The flame shifted slightly and the suit drove toward him. Then the flame blinked out and the bloated suit was bearing down upon him. Johnny waited with outspread arms. His clutching fingers seized the belt of the oncoming suit and hung on. He dragged it close against him. He heard the rasp of steel fingers clutching at his own suit.

"George," said Johnny, "you were a damn fool. But thanks, anyhow."

Then the visors of the two suits came together and Johnny saw, not the face of George, but the face of Karen Franklin!

"You!" said Johnny.

"I had to come," said Karen. "George wanted to, but I made him stay. If I hadn't reached you . . . if something had happened, he would have come out and got you anyhow. But I had to make the first try."

"But why did you bother about me?" Johnny demanded fiercely. "I bungled everything. I found a ship and blew it up. I lost the emergency boat. I threw away the only chance we had."

"Stop," yelled Karen. "Johnny Lodge, you stop talking that way. We aren't licked yet. I brought extra charges. We can use the guns to travel and there are lots of other derelicts."

They stared through the helmet plates straight into each other's face.

"Karen," said Johnny soberly, "you're all right!"

"Is that all?" she asked.

"No," he said, "that isn't all. I love you."

JOHNNY straightened from examination of the controls. The ship would run. Probably take a lot of coaxing and tinkering along the way but they would make it if a big meteor didn't come along. He looked out of the vision plate and shook his fist at space. And it seemed to him that Space stirred and chuckled at the challenge.

"Johnny," came Karen's voice, "look what I found!"

Johnny clumped out of the pilot cabin into the living quarters. Probably an old book or an antique piece of furniture. She already had found a bunch of old magazines, published 500 years before, and a camera with a roll of exposed film that might still be good.

But it wasn't a book or a piece of fur-

niture. Karen was standing at the top of the steps that ran down into the cargo space. Johnny hurried to her side. The hold was filled with glinting ore. Ore that glittered and sparkled and shimmered in the light of their helmet lamps. Unfamiliar ore. Ore that Johnny didn't recognize and he had seen a lot of ore in years of wandering through space.

He went down the stairs and picked up a lump, studying it closely.

"Gold?" asked Karen. "Silver?"

The breath sobbed in Johnny's throat. "Neither one," he said. "It's Metal Seven!"

"Metal Seven!" she gasped, with a tremor in her voice. "Enough for dozens of ships!"

The log book would tell where the discovery had been made. Perhaps on some lonely asteroid . . . perhaps on one of Jupiter's moons . . . perhaps clear out on the system's rim.

Jim Franklin hadn't been the first man to discover Metal Seven. Intrepid space-men, 500 years ago, had mined a curious new ore and were bringing it home when disaster struck. And now, through the discovery of this ship, Jim Franklin's daughter would give to the world again the long-lost secret of that mine.

"We'll build another ship," said Karen. "We'll go out again and find it."

Johnny tossed the chunk of ore away and scrambled to his feet.

"You better go to the lock," he said, "and signal to George to come on out. He'll be watching."

"What are you going to do?" she asked.

Johnny grinned. "Get this old tub ready to move. Soon as George gets here we blast off. We're heading for Earth with the richest cargo any ship ever hauled through space."



MURDER FROMMARS

Ray Carver, vacationing top-notch Earth detective, looks for the first interplanetary killer and finds a wife

R AY CARVER reached out from under the covers without opening eyes and groped for the jangling phone. It eluded him.

"Murphy!" he yelled. "Telephone!... Why do the damned things always have to go off in the middle of the night?"

A young Oriental slippered into the room and picked up the instrument.

"Al-lo?"

He listened for a moment.

"For you, Mr. Ray. Captain."

Carver opened an eye. "Captain? . . . What Captain?"

"Of ship. Ship Captain."

Carver sat up suddenly, and groaned. He held a hand to his head. "Gin," he said solemnly, "is Satan's own brew. Lay off the stuff, Murphy. . . . What ship? Are we on a ship?"

The Oriental nodded assent.

"We're not going to Europe, are we? I can't stand Europe. Full of balconies with dictators on them. Tell me we're not going to Europe, Murphy."

"Not to Europe, Mr. Ray. We go Mars."

"Mars! Of all the places! Why are we going to Mars? What went on last night, anyway?"

Ray Carver was aboard the Barsoom, the billion-dollar luxury liner, flagship of Cosmic Carriers, Ltd. It made monthly trips between Earth and Mars. Carver had heard of it, naturally, but he never expected to be traveling on it. There had been a wild party the night before to celebrate the conviction of a ring of saboteurs Carver had rounded up in his capacity as special investigator for the Inter-Asian

Corporation. With prodding, he remembered the beginning of it. A year's vacation was his, in recognition of valuable services, rendered, and he and his friends -by now in an advance state of insobriety-decided that the thing for him to do was to take a space-voyage. Carver had never gone on such a trip. He was an ardent believer in the phrase recently coined by the ocean-liners, airways and railroads: "See Earth First." But, at that moment, the suggestion appealed strongly to him. Why not the Barsoom? It was leaving in three hours. So, unsteadily assisted by his enthusiastic friends, he was soon packed and speeding in his host's big car to Albuquerque, New Mexico, where he managed-with the aid of a hundred-dollar bill—to persuade the uniformed gentleman at the gate that a reservation was a very old-fashioned business and not at all necessary.

THE telephone in Murphy's hand was making rumbling noises. "Give me that black devil-box," said Carver. "And get me a drink. . . . Hello!"

"Good morning, Mr. Carver. This is Captain Gerson speaking. I wonder if you'd mind stepping up to my office as soon as you're able. There's a little murd—ah, matter, I'd like to discuss with you."

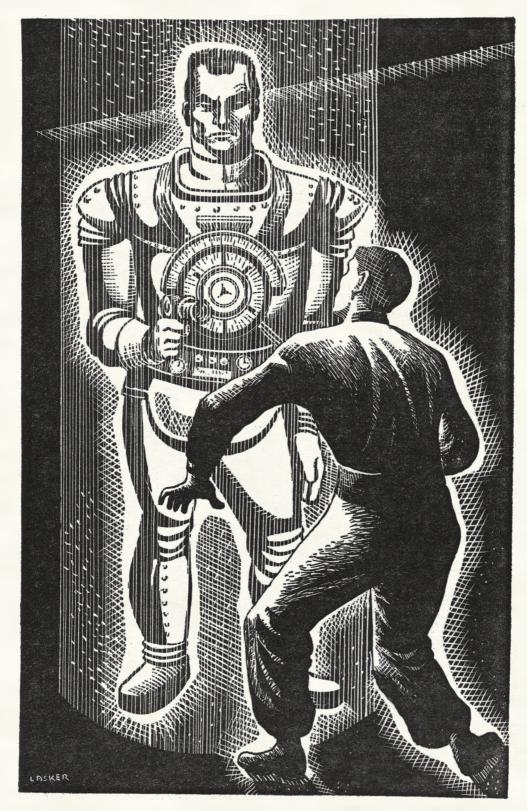
"Be over in half an hour."

Ray Carver hauled his six feet of bronzed, muscled body out of bed. "Bath ready, Murphy?"

"All ready, Mr. Ray. Cold like ice."

Murphy had been retained by Carver during one of his numerous jaunts around

By Richard Wilson



the world. He had engaged him as a guide in Algiers several years previously. Although he was decidedly of Oriental cast, his nationality was uncertain. Murphy, of course, wasn't his real name. That sounded vaguely like a Welsh railway station, but if one disregarded several consonants, it might easily be mistaken for "Murphy." So Carver called him that, soon thereafter—his services proving of exceptional merit—giving him steady employment as his manservant.

Bathed and shaved, and having breakfasted on a cigaret and a scotch-and-soda, Ray Carver knocked at the captain's door.

Captain Gerson himself answered and invited him to have a chair. The captain was a tall, lank man who wore a Menjou mustache and looked as if he had never been outdoors in his life. Carver contrasted the extreme paleness of his face and hands with the ruddy, healthy complexions of captains of old, who had piloted ships of wood and canvas across raging seas. Captains had deteriorated, he thought. Nowadays they had nothing better to do than push buttons and wake people out of bed.

"I'll get right to the point," said Gerson, pushing a box of cigars across his desk

"Do," said Carver, pocketing half a dozen for Murphy, who doted on them, smoking furiously when he thought his master wasn't within smelling distance.

"There seems to have been murder—"
"How exciting," murmured Carver.
"May I play?"

GERSON looked annoyed. "Murder is a serious business, sir. Especially when it occurs aboard a ship like this one."

"Nasty publicity, eh?"

"Yes. And more especially when the murdered man is Count Paolo di Spiro." He paused impressively.

"Ah!" Carver raised an eyebrow. "My

old pal di Spiro. Spy, murderer, thief, and all-round heel. Did he die horribly?"

"He looks very peaceful. But the flesh surrounding his heart is charred to a cinder."

"Tch-tch. Ashes all over his clothes I suppose. And di Spiro was such a fastidious person, too."

The captain cleared his throat. "Have a cigar," he said.

Carver took another handful.

"Your position, Mr. Carver, is well known to me. Your success as investigator for the Inter-Asian Corporation prompts me to ask whether you would consider handling this case for us. Situations such as this, you realize, are rarities aboard the Barsoom. As a matter of fact, this is our first murder."

"How sad."

"We have had no need for facilities for the apprehension of criminals—especially murderers. Therefore, if you would do us the favor of interesting yourself in this unfortunate occurrence, we should be greatly obliged."

Carver covered a yawn. "You must remember, captain, that I'm on my vacation. Or at least so I've been told. And I've always abhorred extra-curricular activities."

Gerson frowned. "I'm sure the owners will make it worth your while."

"Let us hope so. It has always seemed to me that fifty thousand dollars is a hell of a lot of money to pay for a jaunt to Mars—especially when one doesn't even remember leaving for the place. You might play around in that direction."

Captain Gerson stood up and rubbed his hands.

"I think we understand each other. Shall we repair to the stateroom of the deceased?"

"Where the deceased is happily beyond repair, eh?"

Carver smiled at the captain's pained expression.

THE body hadn't been touched. Di Spiro's remains were quite naturally sitting up in bed, his back propped up with pillows, a book in his right hand, his left holding a cigaret which had burned down and singed his fingers before going out. A monocle was still jauntily stuck in his right eye. The left breast of his rather loud pajama-jacket was a mass of blackness. Carver detected, without much trouble, the odor of burned flesh.

"'Marianne, a Candid Biography."
Carver had bent down to read the title of the book. "Seemed to have a lurid taste—both in pajamas and literature."

He prowled about the room, humming to himself, mentally photographing its contents. He went through di Spiro's clothes, folded neatly over a chair, discovering a perfumed handkerchief, a wallet and a red address-book.

Carver said "Aha!", winked at the captain, who was standing uncomfortably in the doorway, and settled back in an easy-chair. He thumbed through the book. "Fast worker." He nodded at di Spiro. "Only a few hours on the boat, and—Listen to this: 'Lois. Cabin 17C. Ext. 165.' Who occupies 17C, captain?"

"I don't know, but I can find out for you."

"Please do. And don't let me keep you if our friend on the bed annoys you."

Gerson thankfully excused himself.

Carver sat in thought for some moments. His eyes wandered to a small bit of white on the floor near di Spiro's trunk, at which he had been staring without recognition. At length he reached down and picked it up. It was roughly triangular in shape, and seemed to be a corner ripped from a larger sheet of paper. He could make out the words:

"... erty of U. S. Govt.' Department of ..."

He pocketed the bit of evidence and looked further. A thorough search of the baggage revealed nothing. A television set standing in the corner of the room held his attention a second. He turned away and seemed to be studying the murdered man, pulling thoughtfully at his lower lip.

Carver left the room, carefully locking the door with the key the captain had given him, and walked slowly down the passageway.

HE had taken perhaps a dozen steps when he was overtaken by a primfaced matron who led a yapping Pomeranian behind her and gestured excitedly with a lorgnette.

"I beg your pardon, but you're Mr. Raymond Carver, aren't you?"

Carver admitted the fact, looking distastefully at the dog that was sniffing suspiciously at his trousers.

"How do you do, Mr. Carver. So happy to know you. My name is Lucinda Snarve. Being fellow passengers, as you might say, I thought it would be a good idea if we became acquainted. These long trips are tedious affairs, unless one makes friends to help pass away the time, don't you think?"

Carver supposed so.

"I've heard quite a bit about you, Mr. Carver—quiet, Fifi! Leave the nice man alone! Perhaps you've heard of me: I'm president of the Southport Spiritual Society. Do you believe in ghosts, Mr. Carver?"

"I'm afraid not, Miss Snarve. But if you'll excuse me now, I have some very important business to attend to. I hope to see you again." He sincerely hoped not.

"But, Mr. Carver, I have something I want to tell you—"

"Some other time, perhaps. Good-bye." And he fled around the corner.

MURPHY, I've got a job for you.

Take this key and dash over to
24B. Take your fingerprint outfit along
and see what you can get. There's a man
in the room, but don't let him bother you.

He's dead." Carver knew it took much more than a corpse to unnerve Murphy.

"Yessir. Captain call while you gone. Say call him back. About Lois person." He smiled broadly. "You catch lady-friend so soon, Mr. Ray?"

"Never mind, you slant-eyed Cupid. Just run right over and do as I said. Do a good job."

Fifteen minutes later Carver and Captain Gerson were again closeted in the latter's office.

"Well, captain?" asked Carver. "What have you found out about the lady in the little red book?"

"Her name is Lois Clarke. She gave her occupation as buyer for a Park Avenue dress concern."

"Hmm. Have you spoken to her yet?"
"Only socially. I thought you'd like to do the grilling."

"Yes. You might arrange to introduce me at dinner tonight, in the dining-room," said Carver.

"Of course. Have you any idea how the Count was killed? That—er, scorched spot—"

"I've seen wounds like that—always fatal wounds, mind you—that had been inflicted during the Balkan uprising. The weapons had been smuggled to Earth. One of the more unsocial achievements of Martian culture. . . . Captain, I noticed a television set in di Spiro's room."

"Naturally. There's a set in each stateroom. There's nothing unusual about that."

"There is about this one. Its not a receiving set, you see. It's a broadcaster."

"Impossible! There isn't room," said the captain unhesitantly.

"This one," said Carver, "seems to be a new type. A great improvement upon the method now in use. It's ingeniously compact; no larger than a cigar-box. And it's been set into the base of the set already installed there; it's barely noticeable."

THE captain showed his astonishment. "Who could have put it there? The murderer?"

"I hardly think so. I should imagine it was placed there some time before the murder. In order for the 'person or persons unknown' to spy on di Spiro."

"You don't say!"

"I do, indeed." Carver produced the bit of paper he had found. "This, unless I am very much mistaken, is a part of the plans for some Government device or other that was stolen from our dear departed."

"You mean the Count was an American secret service operative?"

Carver smiled. "Hardly. It is more likely that he stole the plans before someone followed his lead. The United States doesn't hire di Spiro's type of mercenary."

"Whom do you suspect?"

"We have a whole shipful of people to choose from. There's no particular miscreant I have in mind."

Gerson passed Carver a booklet. "I have the passenger-list here. Perhaps you'll find something helpful in it. This is the confidential office copy. It lists the passengers by name and occupation."

"I scarcely think anyone would register as 'Butch Jones, Assassin', do you? However, I'll borrow this, if I may, and study it later."

"Certainly," the captain nodded. "What about the—ah—corpse? Have you finished with it?"

"Quite. You may have him to do with whatever you do do with such things. Feed them to the space-sharks, perhaps?"

"We have a licensed mortician aboard to care for any such cases. Not murders, of course; people will occasionally die en route. It's a long journey, you know.... The doctor has made his inspection, and his report, together with yours, will be handed to the Martian authorities when we arrive at Lugana."

"Together with di Spiro, All done up in a very fitting coffin."

"Ah—yes. What about fingerprints? Have you found any?"

"My invaluable assistant is working along that line. We'll have a complete set on file in case they're needed. That is to say: in case we happen to snaffle on to a sufficiently guilty-looking suspect.

"Now, if you'll excuse me, I'll dress for dinner. It's at seven, isn't it?"

RAY CARVER had left the captain's office and was strolling briskly down the observation deck toward his room when a feminine voice hailed him.

"Yoo-hoo! Mr. Carver!"

He looked around, unwisely, and saw that it was Miss Lucinda Snarve. His doom was sealed, he sighed, slowed his pace and made a brave attempt at a smile.

Miss Snarve, pulled by a leashful of Fifi, arrived, puffing.

"How fortunate to meet you again so soon, Mr. Carver. It must be Fate—Karma, as the Hindoos call it. Do you believe in Fate, Mr. Carver?"

"I think I do, Miss Snarve. It seems that every time I venture out on deck I meet you. What else but Fate?"

She chose to interpret this as a compliment. "How nice of you to think so! You said before that you had no belief in ghosts—Fifi, stop!" Fifi had spotted a canine friend down the deck and had left off eating Carver's shoelaces to begin growling and tugging at the leash.

"Well," went on Miss Snarve, jerking about involuntarily, "I think I can change your mind for you. You see, I saw a ghost only last night. A big, tall, glowing thing it was—"

"May I relieve you of Fifi, Miss Snarve? She seems to be giving you a bit of trouble."

"Why, Mr. Carver, how thoughtful of you!" She passed over the leash. "As I

was saying, he was a big, tall-Fifi! Fifi!"

As soon as was convenient, Carver had let the dog loose to follow its own inclinations. It immediately took advantage of its opportunity to race down the deck toward its friend, with Miss Snarve in undignified pursuit.

"I'm so sorry," Carver laughed, and walked rapidly in the other direction.

He reached his cabin and collapsed in a chair, mopping his brow. Murphy arrived soon afterward.

"What news, O Sherlock?" asked Carver. "Have you tracked the foul murderer to his lair?"

"Find five sets fingerplints, Mr. Ray. One yours. You maybe kill Mr. Dispirro, hah?"

"I'm afraid it isn't as simple as that, Mr. Chan. You'll probably find that one of those sets belongs to the captain, another to the doctor, and the other two to di Spiro and the steward who discovered the body."

"Yessir. I go fix 'em up."

"Not so fast! What's that you have under your arm? Robbing the dead, eh?"

Murphy shamefacedly handed over "Marianne, a Candid Biography." "Think maybe catch up on reading. This look good. Hot stuff."

Carver grinned. "All right. But you'd better not read it in bed. Remember what happened to its previous owner."

ATTIRED in his dinner-jacket, Carver entered the immense dining-room of the Barsoom. A waiter bowed and led him thru the scores of people seated at richly-laden tables to the Captain's table, where he was seated at Gerson's right. At his own right was a remarkably pretty girl, petite and blonde, who, however, looked as if she might at any moment cry into her soup. Carver was late, as usual.

Gerson nodded. "Good evening, Mr. Carver. Miss Clarke, may I introduce Mr.

Ray Carver? Mr. Carver, Miss Clarke."

She acknowledged the introduction with a wan smile. Suddenly she apologized and walked quickly from the room. Carver excused himself and followed her, unmindful of the eyes that turned to watch

them.

He found her on the observation deck, sitting in one of the scattered armchairs and morosely watching the pinpoints of light that were stars glittering against the curtain of perpetual night. He drew a chair close to hers and sat down.

"Had I known I was going to be such a shock to you, I'd have sat at another table tonight."

She looked at him; he saw that there were tears in her eyes.

"Please forgive me," she said. "I was very rude."

"Quite all right. You'll have your turn to forgive me in a moment, if I step verbally on your toes. Did you happen to know Count Paolo di Spiro?"

"Yes. He was my uncle. Captain Gerson told me about the, the—his death."
"I'm awfully sorry. . . . You loved him?"

"I hated him! I know what sort of a person he was, Mr. Carver. He was utterly unscrupulous." I also know he was a spy. He—I don't know why I'm telling you this."

"Please go on. You can trust me."

She smiled gratefully. Carver listened, entranced, as she told him of her life. Her mother was Italian, her father English. How, when she was but a child, her parents were killed in an automobile accident. Di Spiro, her only living relative, took care of her, sent her to exclusive schools in Switzerland. He was very kind—at first. When she left finishing school, however, he realized of how much value her charm and beauty could be to him. She began to travel about the world with him, gradually being inducted into espionage and intrigue. She had no choice.

"I HAD no one else. And he didn't care for me—I was merely a useful tool. He'd have had no compunctions about getting rid of me if I betrayed him—as I thought of doing more than once. He was merciless." She shuddered.

Carver remembered patting her hand, thrilling at her touch, saying "There, there," and feeling very silly about it.

Tears glistened on her cheeks. He passed her his handkerchief.

"You're kind, Mr. Carver."

"Make it Ray."

"Thank you—Ray. . . . The night before last, in New York, I remember waiting at a hotel for him, with our baggage packed and standing about the room. He returned late, and in a hurry. We got the bags down to the airport and took off for Albuquerque, where we boarded the Barsoom. I found that he'd stolen the Government's plans for its new robot bomber. He was going to sell them to the Glora—you know of them?"

Carver knew of them. The Glora—dreaded secret revolutionary society of Tuloni, one of Mars' states.

"The plans were in two parts. He kept one and gave me the other."

"What? You have part of the plans!"

"Yes. They're in my cabin. I'm—I'm frightened."

"You have good reason to be. Lois—May I?"

"Please." Her smile enchanted him.

"Lois, you're in very grave danger. Whoever killed your uncle isn't going to be satisfied with half a loaf."

"I know. That's why I wondered if you'd help me."

Help her! Carver would have given his immortal soul, if he had one, just to be near her.

"Look: you've got to get those plans to me. I think I can make the murderer walk into a trap, if everything goes off correctly. Did any of your uncle's clients know you were helping him? "No. I was always introduced, where necessary, as his niece and secretary."

"Fine! . . . Do you have a television set in your cabin?"

"No. They don't have them in the smaller rooms."

"Better and better. Just the same, I think we'd better go down and see. There was a television sending-set in your uncle's room—which I suspect is how they found where he was keeping the plans. . . . Do you mind?"

"Of course not."

They left the observation deck arm-inarm. Carver was afraid he'd fallen in love.

LOIS' cabin, on C Deck, was about large enough to hold a bed, a chair, a dressing-table and trunk and not much else. Di Spiro was a rat, Carver thought. While he traveled in luxury, his niece was cooped up in a cave. He went over the room carefully, looking for a counterpart of the sending-set in the murdered man's stateroom. He found nothing, and breathed a sigh of relief. Lois rummaged around in her trunk and brought out a fur muff. She unzippered a compartment in it and withdrew a sheaf of papers. Carver riffled through them and stuffed them in his breast pocket.

"You stay here for the rest of the evening. Don't let anyone in. I'm going to play counter-spy. See you first thing in the morning. Good-night, Lois."

"Good-night, Ray. Do be careful."

He reluctantly dropped her hand and left for his room,

Murphy was waiting for him with a glass of scotch. Carver drank appreciatively.

"I want you to be very attentive, Murphy. I'm going to indulge in a bit of skullduggery and sleight of hand tonight and I shall have need of your excellent services. Also, possibly, of your butcherknife, which you may stick up your sleeve. We are going to di Spiro's and steal these

papers which I have in my pocket. The wielder of the charred spot of death will be watching everything carefully through his television set. That's where you come in. When he sees me remove these plans from di Spiro's trunk, he'll attack me. See that you get him first. Understand?"

Murphy was grinning widely. "Good stuff, Mr. Ray. I understand."

"Fine. We'll wait a bit longer—till the revelry dies down. About eleven will be time enough."

A few minutes past eleven Ray Carver let himself into di Spiro's cabin with his key. Murphy remained as lookout in the corridor. Carver noticed a scarcely audible humming and a faint glow coming from the direction of the supplementary television set. Neither would have been noticeable had he not known about them in advance.

He walked straight to di Spiro's trunk, using a flashlight in preference to the lights of the room. He wanted his watchers to think him acting without authority and in his own interests. He poked around in drawers, ostensibly searching for something. At length he whistled softly and pretended to take the sheaf of plans from a compartment in the trunk—in reality removing them from his breast pocket. He looked them over, making certain that the beam from his flashlight fell upon them, then stuffing them back in his pocket and left the room.

A S he walked swiftly down the corridor he noticed a pillar of light that seemed to be taking form in front of him. It began to assume the shape of a man. It looked like a ghost.

A ghost! Of course! Why hadn't he listened to Lucinda Snarve, the spiritualist? What was it she had said? "A big, tall, glowing thing it was—" The wavy outlines of the thing became defined. It was a man—a Martian, Carver would say, from pictures he had seen and from Mars'

occasional visitors to Earth. He was about seven feet tall, broad in proportion, and dressed in a sort of metallic uniform. He wore no helmet. His blue-gray hair was short and stood upright on his head. His face was ruggedly handsome. Upon his chest was a box which, Carver thought, would be a miniature television receiving set. About his waist was a wide belt, fashioned of the same material as his uniform. upon which were buttons and levers. Carver noticed that he had pushed one of the buttons when he took corporeal shape. In his left hand he carried a snub-nosed weapon, no larger than an automatic, but with a very wide barrel. This was possibly the gun that had killed di Spiro.

The apparition spoke . . . in English! "Good evening, Mr. Carver. I trust you are well. I also trust you will see fit to retain that health by giving me those plans you have in your pocket."

"Why all the formality?" Carver smiled. "Why not shoot me down as you did di Spiro."

"I sincerely hope that will not be necessary." The one in uniform was also smiling. "The count would not have been harmed if he had played fair with us. We were perfectly willing to pay him well for the plans. But when he tried—as you say—to double-cross us, we grew annoyed. It would not have done to have the documents fall into the hands of the Tulonian government. It might have prolonged our revolution indefinitely."

Carver was playing for time. "You are of the Glora?"

The other inclined his head. "Your servant, sir."

"Excuse, Mr. Glora—" (Good old Murphy!" thought Carver.)

The Martian whirled. The little Oriental, who had crept up unnoticed behind him, grabbed his left arm. He employed a bit of ju-jitsu and sent the gun clattering down the passageway. Carver sprang forward to seize the other arm.

"His belt, Murphy," Carver cried. "Unfasten it!" The Martian struggled with renewed fury, but, powerful as he was, he was no match for the two determined Earthmen. The metal belt followed the gun to the floor. Carver retrieved the weapon.

"You'll be very careful of your movements, you of the Glora," he said. "You know what this thing does to people."

"I know," the Martian was smiling again." You are wise to aim it at my head. It would have no effect on the metal of my uniform."

CARVER grunted. He admired the man's nerve. Passengers and some of the Barsoom's officer's attracted by the scuffle, now ran up. The captain was among them.

"What's all this?" demanded Gerson. "What's that? Oh, hello, Carver. Who is this—this person?" He looked curiously at the Martian.

"I am Lan Yoral, Captain Gerson. Good evening. You may thank Mr. Carver and his brave saffron friend for my capture. Mr. Carver is very cunning. I congratulate him on his clever ruse."

"Here is your murderer, captain," said Carver, "though he deserves a better name. Treat him with respect. He's a gentleman. And don't forget that he killed di Spiro; therefore he's a friend of mine."

Ray Carver rose early the following morning, dressed with more than usual care, fastened a flower from the *Barsoom's* hothouse in his lapel and refused the drink that Murphy had prepared for him.

"Love," he said to his astonished servant, "is exhiliaration enough," and went to call on Miss Clarke.

He found her dressed and waiting for him when he knocked.

"Oh, Ray, darling, I'm so glad you're all right. I didn't sleep a bit last night."

"The important thing is that you're all

right, O Angel. Are you prepared for a little breakfast? That spoonful of soup you had last night wasn't enough."

After breakfast the two of them entered the captain's office, to find him puzzledly examining the gun and metal belt that had been taken from the Martian.

He looked up as they came in. "Hello, you two. Carver, what the devil is this thing? The gun looks simple enough, but the belt has me buffaloed. And where did you find that Yoral fellow—was he a passenger?"

Carver picked up the belt. A section of it opened in his hands, revealing a small compartment filled with papers.

"The plans," he said. "Yoral was no passenger. He was a member of the Glora-Tuloni's underground revolutionary society. He operated from headquarters there, spying on di Spiro, as I suspected, through the television set his agents had installed in the room before you left Earth. The Glora, you know, has its own crop of very brilliant scientists working day and night for the sake of the Revolution. They probably have quite a few gadgets similar to these. The gun, as I said, is not unknown on Earth, but the belt is something else again. It's a unit of an ingenious piece of apparatus, the rest of which is no doubt back on Mars, in one of their headquarters."

"But what is it?"

"I'M coming to that. It works on the principle of high frequency sound waves. Atomic transportation, you might call it. A machine breaks down the atoms of the body, transports them instantaneously through space to any desired point, reassembles them again with the aid of that belt. Naturally, when we relieved Yoral of his belt, he was helpless. Teleportation, some people call it. He was the 'ghost' my spiritualist friend, Miss Snarve, saw. He must have been leaving after killing di Spiro when she noticed him. He probably materialized, at first, right in the room.

"How is the Martian, captain?" asked Lois. "I suppose you have him in irons?"

"We put him in a cell last night. But when we went down this morning he was dead. Poison. He'd killed himself."

"That's too bad."

There was silence for a moment. Then: "Go on, oaf, ask him," Lois whispered.

"What? . . . Oh—yes. Er, Captain Gerson, do you have authority to perform marriages aboard the *Barsoom?* We—that is . . ."

The captain chuckled. "So soon? Of course I have. Well, well, well." He beamed at Lois. "I hope you'll be very happy." To Carver he said "Congratulations! Have a cigar!"

Carver took half a dozen for Murphy, who would be best man.

THE END

GOOD TASTE



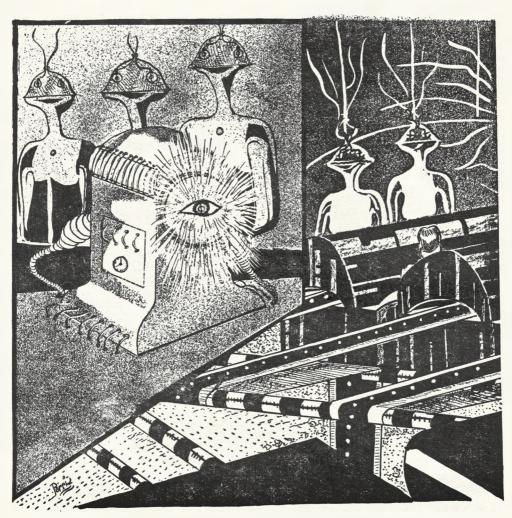
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MASTER CONTROL



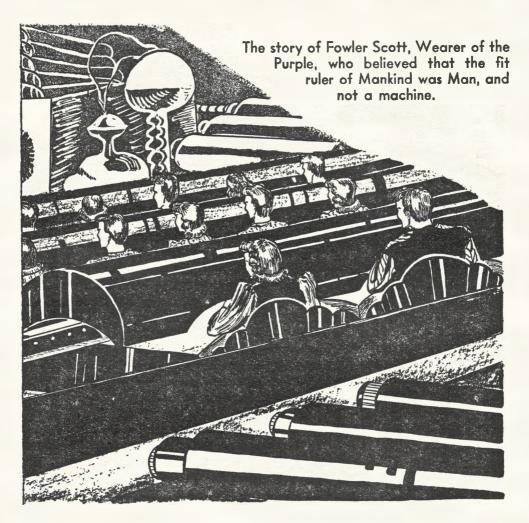
CHAPTER ONE

Central Control

HAT any one man, even though he might wear the purple of the upper levels and be most adept among the technics, should learn the secret of Central Control was unthinkable. For nearly two centuries now, tradition had it that Central Control was little less than a God, a being not to be understood nor seen nor communicated with by mere humans, a being of beneficence to the wearers of the purple and of stern un-

bending discipline and cruelty to those of the mid-level gray. A being, hidden and protected and unapproachable in the ancient dome atop the city, whose will was meted out by the Prime Controls of the upper levels and the lesser Controls in the reaches far beneath, whose favors were for the few and whose harshness for the many. Even the Controls did not know the secret of their Central activating power. Of course the Controls were themselves human beings, though for all the thinking power and independence of will they were permitted they might well

By Harl Vincent



have been automatons. They were mere agents of the great Central obeying unquestioningly all orders emanating from that mysterious dome, unquestioningly and rigidly enforcing them.

But one man knew the secret of Central Control. One man alone, the greatest scientist the twenty-fifth century had unwittingly produced, one who, for his ability and accomplishments, had been made chief of the technics of Manhattan, most powerful of all the remaining States of the decadent and nearly depopulated world. Fowler Scott was that man and

he was a man who was most careful to hide within his own consciousness the knowledge and the thoughts that went with his discovery of the great secret. Scott's mind was insulated against the thought-probing vibrations that went out from Central and all the lesser Controls, at least that portion of his mind he wished to conceal. Scott was a man with a very definite purpose in view and he did not propose to fail of that purpose. It was a lofty one and incredible to contemplate.

With the privileges that were his,

Scott was able to make frequent visits to the lower levels of the city. And many were the sercet explorations he had made of the closed-off and inoperative levels of the millions of robots who had performed all of man's work in the twentythird century. Many visits he had made to the ancient and long unused centers of learning, the museums and libraries with their dust-covered and moth-eaten relics. Many visits to the mid-levels where the gray-clad human workers had taken the places of the robots and were themselves little better than robots under the production-speeding impulses of the labor Controls. Scott had learned much of history, much concerning the reasons for the deplorable conditions of the present. And he had found the truth. had learned the great secret. He now was formulating plans for the remedy-the only remedy possible. The only hope.

To this end he must have a following and thus he was cautiously and without the knowledge of his intended followers building up. In each unit of industry he was choosing a pair of them, choosing carefully as to physical and mental superiority, unsuspectedly educating them for the great work that was to come. He could not fail.

LESSER man, one Hardy, had come to know there was a quality in himself that was not common to his kind. He knew, and he reveled in this knowledge secretly, schooling his thoughts against the possibility of letting loose any radiation which might apprise his immediate Control of this difference he had discovered and was assiduously cultivating. Yes, Hardy was different. And in a subtly peculiar and dangerous way. Dangerous to the security of those who controlled the system of slavery in the cowed cities of this world of the twenty-fifth century. Dangerous to the Controls themselves, to the Central Control of Manhattan. And—Hardy had only recently come to this realization himself—dangerous to the Central Controls of all the widely scattered and war-exhausted cities of the entire globe. For Hardy had learned that he could immunize himself against the brain waves that radiated from the mechanisms manipulated by the Controls. He could be an independently functioning individual if and when he chose. In this he believed he was unique.

How he had learned of his own capabilities, he did not know. It had merely become clear to him one day that he was able to shield his own thoughts from his immediate Control. He could think independently and have no fear of the brainnumbing flash that could sweep out from the orb of metal that topped the machine at the end of the long line of gray-clad workers of which he was a part. And from that day he had waited and had craftily planned. They could not know of his thoughts. This knowledge gave him a feeling of power. Latent power he would some day unleash.

Next to him in line a slim girl worked. Her shell-like ear was day by day a more intriguing thing as he viewed it from the corner of his eye, partially covered though it was usually by the soft masses of brown hair that fell in witching wavelets to the girl's shoulders, Mera, she was called, this neighboring automaton whose face he had never been able to study. You were not allowed to turn your head from your work, not able to do so on account of the gripping brain waves which emanated from the Control orb and kept you at the long hours of arduous toil. At least the others could not do so: Hardy had found that he could move his head if he so desired, but was careful to keep his eyes straight front so that his secret might not be discovered.

And when, at the end of the interminable work day, you were released by the Control and permitted to go to your

poor dwelling quarters, you were simply too tired even to wish to turn your head, too tired even to wish for human companionship. You submitted meekly to the new Control which took you over; with sagging knees and drooping shoulders you were herded into the grimy, perspiring huddles of humanity that were swept on their homeward way in the tiny tube cars, silent and unthinking. It was only during the long sleeping periods, if wakefulness came, that you were able really to think for yourself. And then only dully, for the poor, ordinarily devitalized brain cells had no time to become fully active. All excepting Hardy—he had learned the secret of outwitting the Controls.

Now as he carefully masked his thoughts from the probing of his day Control, he was furtively admiring that neighboring ear. Somehow it thrilled him and made him wonder what its owner looked like, what sort of a person she would be to know, to talk with, to associate with during the few hours when there was no work to be done. But attractive female workers seldom mated with their own class; they were reserved for the favorites of the Controls, for the few wearers of the pruple who cavorted in the upper levels of the city.

Something of Hardy's thoughts must have been communicated to the girl Mera for, suddenly and without warning, she turned swiftly and faced him for the briefest instant. Hardy, as if electrically impelled, had turned full face toward her at precisely the same time. Then both heads once more faced straight forward; both pairs of eyes were intent on the delicate setting of bearing jewels in the instrument parts that came endlessly before them on the traveling belt. The Control had not observed the lapse of the two.

But that revealing instant had Hardy's heart beating like an electric hammer. Not only was the girl breath-taking in her soft beauty, not only were the dark fringes of her lashes the longest and most startling Hardy had ever seen, not only were those eyes at the some time the bluest conceivable and her lips the reddest, but Mera was like himself. She, too, could think for herself; she, too, was capable of shielding or of projecting her own independent thoughts. Distinctly there had come to his mind from hers a gesture of friendliness. They had for one flashing moment been en rapport. It was inconceivable, soul-stirring. Hardy no longer felt the oppression his former isolation had brought.

As his fingers worked with nimble sureness with the tiny drilled sapphires under the magnifying glass before him a number was distinctly impressed on his consciousness. Over and over it was repeated. 26-23-208. 26-23-208. Meracommunicating with him mentally! It was a place of meeting, twenty-sixth level, twenty-third crossway, group 208. Hardy was to see her there tonight. New life surged through him as the siren shrieked for the change of Control.

Fowler Smith's plans were beginning to materialize.

IN THE silent darkness of a huge unused room of the old Synthetic Food Company a tiny spot of light glowed for a moment on strange uncouth mechanical forms and then blinked out. There was the faint snap of a switch and the gentle hum of machinery starting up. The light flicked on again, this time revealing two giant figures that stood erect like two men about to engage in combat. Two robots, thick with the dust of ages, had come to life. A soft chuckle issued from lips in the unseen face behind the circle of light.

"Go to it," a voice whispered with suppressed glee. "Let's see what you can do to one another." There was the clank of metal on metal. The two dim figures struck out like live boxers in the upper closed-circle theatres where the ennui of the leisured class was supposedly relieved. Wavering shadows of the fighting figures loomed large and spookily on the ceiling above.

"Alley-oop!" the sardonic human voice chuckled. "Sock him, Rusty. Sock him, old dust-in-the-face."

There was a tinkle of crashing glass as the eye lens of one of the battling monsters crumpled inward. The rasping metallic voice of the mechanical creature was raised in protest.

"Okay," said the man who could not be seen. "You'll do, the two of you. Back to your places."

With heavy measured tread, the robots stalked to a long line of similar figures and stiffly sat among them. The sound of their motors died down. The light snapped out.

Another link in Scott's chain was forged.

ON THE extreme ground level of the the city where half human derelicts skulk among the shadowy ruins of the ancient public squares and where only an occasional robot police patrol clanks along a deserted corridor, Pinky Collins hobbled painfully into the half light of the lone sunglo lamp that still burned high in the ceiling arch of Cooper Square. Pink had found nothing to eat in many days; he was faint with hunger, desperate.

There was a dim illumination away in the back of one of the shabby old shops that still remained to the district. Pinky looked cautiously to the left and right, then bobbled stealthily to the grimy front of the place. He tried the door and it yielded to his shivering touch.

Here in the nether regions where forgotten men and women eked out a precarious existence, shut off as they were by twenty or more levels from the midcity area and by nearly a hundred from the wearers of the purple, crime was dealt with swiftly and effectively by the few robots needed. There were no courts, no magistrates, no juries. Swift death at the steel hands of the robots was the reward of the transgressor. The last remnants of the shiftless lower class were being speedily reduced in number until soon the ground level would no longer contain a human being.

As Pinky's hand reached in through the shop door, fingers of steel closed on his wrist. Pinky stifled a scream of terror. But these steel fingers did not crush as he had anticipated; they simply tugged at his arm. He wheeled to stare into the crystal eye lenses of one of his traditional enemies. His jaw sagged as a toneless, measured voice came from the resonance chamber beneath.

This was not the usual rasping voice of authority.

"Want something to eat, Pinky?" it asked.

"Garn! Wot yer doin'—kiddin me before bustin' me open?"

"No. Come along and you'll eat."

"Garn!" Pinky's jaw sagged still lower and he stared at the lenses of eyes. They did not glow with the accustomed fierce red but with a soft violet that was somehow reassuring. "Cripes! Yuh mean it!"

The robot cackled; it was almost a human sound of laughter. "Of course I mean it. Come along." The steel fingers relaxed; the seven foot monster stood waiting.

And Pinky trotted along trustingly as the robot strode off slowly into the shadows. How could Pinky know that a man named Fowler Scott had reached even into this region of the lost ones with the long range searching of a mind that was set on a new era for all of Mankind?

CHAPTER TWO

The Man in Purple

THERE was something strange, something furtive in the meeting that night of Hardy and Mera. Something so exciting as to bring a deep flush to the smooth cheeks of the girl and an unnatural brightness to the eyes of the man. They met in the shadows of the deserted twenty-sixth level at the entrance of long-closed group 208. Hardy had seen but a single robot policeman since leaving the lift at this level and that one motionless, the activating power having been shut off. Something mysterious was behind this, but something extraordinarily exhilarating.

"Mera," breathed the man. "You did then tell me this number."

The girl's blue eyes widened. "I?" Her flush deepened as understanding came. "I thought you had told me."

It was Hardy's turn to stare. He saw that a light was inside the supposedly unused group 208 and that several other couples were stealing along the disused corridor toward where they stood. "Someone else," he said finally, "told us both to come. What do you think?"

"It must be," the girl agreed. "It's sort of eery, isn't it?"

"Yes. Sorry?"

"Oh, no," breathlessly. "I've hoped for something like this—ever since—"

"Since what?" Hardy hung on her words.

"Since I knew. Oh, I can't explain, but you and I are—different."

"Yes. But others seem to be different as well. See how many are here."

It was true, what he had said. Their eyes followed the movements of two couples who had gone inside; they saw a number of others there in seats that could be made out in the dim light. Couples, all couples. What had drawn them together?

"Shall we go in?" asked the girl.

"By all means." Hardy placed a hand under Mera's elbow, thrilled to the softness and warmth of the rounded forearm.

They sat, then, a little apart from the others, frankly appraising each other in the soft light.

Mera was first to speak. The throaty richness of her low voice was like a caress. "Whatever this is about," she breathed, "it is nice just to sit here and think and dream. To dream of impossible things and to know that someone else understands."

"Yes." Hardy said nothing further for a moment. Then: "But do we really understand? Why should you and I, of all those in the meter works, come to this knowledge? What is it that we have, anyway? Certainly nothing that has been taught to us."

"I wonder." The girl was thoughtful for a long space, then suddenly grasped Hardy's hand as naturally as would a child. "Look," she whispered. "Someone is mounting the platform."

It was true. A lone man, tall, commanding of presence, his broad shoulders slightly stooped, his thick hair gleaming silvery, was stepping purposefully across the dust-laden flooring that once had known the dancing feet of mid-level entertainers.

He faced the small assemblage, probably forty or fifty couples now being scattered throughout the large auditorium. "I am Fowler Scot," he said simply, in opening.

Which meant exactly nothing to Hardy and the girl at his side. Yet there was something that went with the man's words, something good and powerful and somehow familiar, that had them at instant attention.

Even though the man did wear the purple jacket and trunks of the upper levels.

"TRIENDS," he went on after a pause. "There is no need of going into the reason you all found this place at the appointed time. All of you here are aware of the change in yourselves that has been taking place during the past three years. All of you know you have acquired a new ability, a power not granted to your associates in the various walks of life you occupy. You have, so far, used this new power wisely. And it is sufficent to tell you that it is I who have brought about this change—for a purpose. I trust there is no objection."

A pattering of approving exclamations swept softly through the hall as the man waited expectantly.

"Good," he said with a ghost of a smile. "Now as to my reasons for doing this: It is to take over control of what is left of our civilization from the Controls, to give mankind an opportunity to re-establish itself and again to become free, prosperous and happy. To prevent its complete extinction."

Gasps of surprise at this unheard of temerity could be heard in the small gathering.

"And from what has happened to each and very one of you here, you should realize that this can be done," the speaker continued calmly. Then, warming to his subject: "Five hundred years ago, in the fourth and fifth decades of the twentieth century, our world went mad. In population we were most powerful, in the exercise of good judgment woefully weak. Our ancestors submitted to the rule of what were called dictators, men with the lust for power and conquest ingrained in their natures. A series of devastating wars that nearly depopulated the globe followed. The land was blasted and rendered sterile, the vast cities destroyed, the march of progress stayed. For nearly a century we returned to a state of savagery.

"Then science began anew to forge

ahead. For two centuries it progressed until there rose the new City-States all over the world. With the land no longer productive, everything we ate and wore became synthetic. Life naturally went to the cities, leaving the wastelands between entirely depopulated. By the middle of the twenty-third century great advances had been made. Manhattan, then called New York, was, as it is today, completely closed in, with its own pure atmosphere and artificial sunlight. It was prosperous, housing fifty million humans in its more than twenty mile length of structure which rears to a maximum of a hundred levels, as you know. There were eleven similar structures in what was known as United North America, New York being the largest of all. In the rest of the world were almost fifty more such mechanized City-States. The world was at peace, its governments supposedly democratic. Its total population had been restored to twentieth century strength, though it was now localized in the few huge centers of habitation.

"But avarice again came to the fore. Vast fortunes had been accumulated in the hands of the few. These few became plutocratic rulers who were, if anything, worse than the dictators. The population was dividing into three widely differing classes, those above who wore the purple, those of the mid-level gray, and the outcasts below. And there were the robots, outnumbering the humans two to one. Those of the purple deteriorated mentally, physically and morally. The preponderant wearers of the gray became sullen and discontented. Again war broke out, a series of civil wars that swept the City-States of the entire world and continued for more than a century. The plutocrats were destroyed, the robots became idle, the middle and lower classes were so reduced in number that the cities became what we are today, great empty shells with a few levels occupied and all

remaining humans in the hands of the Controls. A few of the cities were wiped out entirely so that now but forty-three remain. And the population was cut to hardly more than five percent of what had been its maximum. It is even less today and growing smaller rapidly. In Manhattan today there are considerably less than two million humans. A hundred million robots lie idle in the fully mechanized levels. A few who remain of the purple, for some reason still humored by the Prime Controls and this humoring tolerated by Central Control, loll lazily in the upper levels while those of the gray are made to work far beyond their physical power under the driving forces of the lesser Controls. We die young and we are not permitted often to propagate. Mankind is doomed to extinction unless there is a change, a radical change."

POWLER SCOTT paused dramatically. Then his voice rose determinedly: "We, you and I, are going to bring about that radical change. We shall take over the control of the cities temporarily. We shall restore freedom and sanity to the masses. Through our activities the land shall be reclaimed so that no one may go hungry. Production—speeded, controlled labor will become a thing of the past. The Controls themselves are to go, the Centrals, even."

At this last a solemn hush fell over

the little assemblage. It was sacrilege this man had spoken. Not a pair of humans in the hall but anticipated an immediate bolt from the arches above to strike them down. But nothing happened; confidence surged back.

"And you," Scott went on, "you whom I have chosen are to take the places of the Centrals in the various cities. I have deliberately selected couples whom I have considered suitably mated, a couple for each of the forty-three scattered States. I shall continue with your education until the Great Day, which is not so far distant. Have I your approval?"

A buzz of excited conversation rose confusedly. Each paired-off couple, men and girl, was conducting its own private discussion of the amazing scheme. No immediate decision seemed to be forth-coming.

Far back in the shadows of the auditorium, wondering dully what it was all about, slouched Pinky Collins. He too had been summoned, alone. But Pink's stomach was full; he would have agreed to anything now.

Scott's voice rose once more and his audience fell silent. "If there is any question as to my choice of mates, let me say this: there is nothing to *force* any couple of you to wed. It is only that I feel that a man and woman are necessary to replace each Central Control, a male and female viewpoint working together as one.



You may continue in your single state if you so desire. No one will force you to any action you do not wish to take; you will be free-thinking units once the domination of the Controls is definitely removed. Are there any objections or questions?"

Mera was gazing up at Hardy starryeyed. The thing was so big, so seemingly impossible of accomplishment that these two were speechless. Something else had come to them as well, something personally as big as what this Fowler Scott had proposed. And in their minds each looked ahead down a long vista in which it seemed they must travel always upward together, hand in hand.

They paid little attention to the discussion that followed; they felt secure in the new sense of power which had come to them and in the future that seemed about to open, content to wait for the Great Day and trust in this man who had given them so much.

To THE rear of the auditorium, Pinky Collins waited, an inconspicuous blot against a pillar, merging into the shadows that were everywhere cast by the dim light. His ferret eyes were very bright as he saw the couples leaving arm in arm, always paired off as they had arrived, all chatting in animated tones, some gay, some solemnly impressed. Pinky was waiting for Fowler Scott. An unthinking, clanking mechanical man had fed him and had told him to be here. He still was not over the shock, of the experience.

"Oh, here you are." The tall, stooped gray-haired man in purple was approaching him.

Pinky slunk further into the shadowy gloom. There was something queer about all this. "Garn!" he said huskily. "Yuh ain't lookin' fer me, mister."

"Oh, yes I am, Pinky. Come with me." More frightened of these deserted corridors of the unused level than of his accustomed haunts, utterly mystified by this strange call from a man of the purple, utterly terrified at the prospect of being whisked to the top of the city in one of the high speed lifts, Pinky was yet under a compelling influence that somehow came from this man who had spoken so strangely and forcefully to this queer group of gray-coats. Though he had but dimly understood, though he had not the faintest idea as to what he was heading into, he still had a feeling that he was to be part and parcel of some mighty upset in conditions.

"Yer th' boss, mister," he said finally, and unhesitantly followed the man who was Fowler Scott.

CHAPTER THREE

Prison Break

HARDY slept but poorly after the meeting. So engrossed had he been in the girl Mera that the enormity of what Scott had been doing and was proposing did not strike him fully until the sunglo illumination of his sleeping quarters had been snapped off and he was composed for sleep. A new train of thought then began to form in his mind, a train of thought that was increasingly more complex as he alternately dozed and awakened to remembrance of where he had left off in the thinking. He knew that a great change had come over him during the past three years, as undoubtedly it had in the case of every one of those forty-three couples. He did not remember much of his life up to the time when the change had started to set in; he had before that been too completely under the continuous spell of the Controls. He hadn't understood nor cared greatly in those dim days; he had merely lived out his days and nights in stolid submission along with the rest of the mid-level slaves. Now all that was changed. And

by a man of the purple who obviously had something not possessed by the Controls themselves.

It had always seemed before that the Controls were malignant human beings. Now, through the revelations that had come to him and in the releasing of his own mental capacity, he had come to know that the lesser Controls were as much controlled as were their own charges. It was the machines at which they sat which stupefied the minds and speeded up the physical capacity of the workers. The men and women who were called Controls were merely the manipulators of the machines; they in turn were under orders from the Prime Controls, the Prime Controls under the mysterious being known as Central. Hardy and Mera were supposed to get to the point of displacing one of the Central Controlssomewhere as yet not specified. It was incredible. And yet the man Scott had so far demonstrated his own powers; Hardy believed implicitly that he could do as he promised, But to what end? And what dangers and hardships were to be met in the doing?

The others at the meeting had seemed enthusiastic when they left. It had been settled; there were no serious objectors, no questions that had not been answered satisfactorily by Scott. And the promise had been made that immediate results would be forthcoming. Hardy became more and more excited over the prospect and less and less inclined to sleep as the night wore on. When the sunglo illumination came to signify that it was what they called morning, he was in and out of his bath and into his clothes with far more than his usual alacrity.

Mera was on his mind now above all else.

WHEN he arrived at his seat before the long conveyor he looked down at the assembly line Control at the end with new insight into what it stood for. And he was actually sympathetic with the human being who sat at the innumerable check-back lamps and indicators and buttons that he faced. There was the quick, shrill blast that signified the start of the working day, the tingling of the brain impulses that penetrated Hardy's consciousness but were immediately thrown off. He kept his eyes front, though he sensed as never before the nearness of Mera at his side. His fingers began to fly, enormously enlarged, exceedingly swift and capable as seen through the glass. At least the Control was operative as far as speeding up his muscular action was concerned.

New ideas were crowding in upon him; he carefully shielded off his thoughts from the Control. How he was able to do this he did not know; he only knew it was so, and knew that somehow, from somewhere in the upper regions, Scott was doing it all. Continued exposition there was in his consciousness of conditions as they existed in Manhattan and in the rest of the world, continued propounding of remedies possible of application, continued reviewing of facts of history which had led up to these injustices and intolerable situations which were constantly growing worse.

So lost was he in contemplation of what was coming through to him that he did not notice a stir at his side. Not until it had become a veritable disturbance. And then he did something that was hitherto unheard of on the assembly line. He turned abruptly in his seat to face two officers of the upper-level guard who had raised Mera to her feet. Not another worker on the line had observed or stirred. Amazement at what he saw froze for an instant on Hardy's face as he staggered under the impact of a numbing brain wave that swept down from the Control. But almost immediately, with the power which had come to him, he shook it off. The orb of the Control flashed spiteful violet again and again but to no avail.

"Hardy, help me!" Mera was begging him. "Do something. They want to take me away."

One of the guards grabbed her arm roughly. "We are taking you away, my pretty," he corrected her. "And better not make any trouble or it will be harder for you in the end. You ought to consider yourself lucky."

The second guard clamped big fingers on her wrist and she cried out in fear and pain. Then was when Hardy went into action. He lashed out with both fists in blind fury. One, two, in professional boxer's style. And with the weight and power of an unusually vigrous body for a mid-level worker. The guard went down and stayed there. And the other one had released Mera and was coming for Hardy. The Control orb flashed frantically. And then there was the shrill whistle that called the robot police.

Hardy had no very clear idea of just what happened immediately after that. He only knew that again and again he felt the satisfaction of burying his knuckles in yielding flesh or of bones crushing or cracking under his blows. Both guards were on the floor when the reinforcements came in. There were other guards then and-robots! Steel fingers wrapped around his windpipe, a jointed steel arm encircled his own arms, crushing them to his sides and rendering his frantic struggling futile. Mera, he could see, was being hustled off by new guards of the purple. He tried desperately to cry out but could not for the closing off of his breath. His senses reeled, swirling many-hued sunbursts danced before his eyes. Abruptly he knew no more.

WHEN consciousness returned in intermittent flashes of agony that finally crystallized into one long-drawn throb of torture, Hardy found that he lay prone on a metal floor and in utter darkness. Each effort to swallow seemed to drive multiple-edged knives into the membranes of his throat; each effort at serious thinking set up racking vibrations in his tormented brain cells. An attempt to sit up brought a sense of swaying dizziness and nausea that caused him to slump back to the floor.

He lay for a long time suffering such exquisite mental and bodily pain as he had never known a human could endure. Uppermost in his tortured mind was the thought of Mera, helpless in the hands of the upper-level guards, Mera calling out to him for the help he was unable to give her. Hardy knew what this meant: he knew she had been chosen by the Prime Controls for one of the purple clad libertines of the top areas. As his physical pains abated, his mental upset increased. There must be a way to get control of the situation; where was the help of Fowler Scott in this crisis? Or had the Controls gotten to him as well? Was the entire plan to fail?

Eventually Hardy was able to sit up in the darkness; after that he rose groggily to his feet and managed to totter to the near wall of his prison. He felt gingerly over the vertical metal surfaces. edging from corner to corner until he had determined that he was in a doorless and seamless room not more than ten feet on a side. At least no doors nor seams were encountered by his searching fingertips. The darkness was so intense that it was a tangible thing, seeming to bear down on him like a thick, soupy fluid. The air was stifling, malodorous. Hardy knew he was in one of the dungeons of the Prime Controls.

The silence was complete, even the gentle thrum of the mid-level shops being absent. That is how he knew he was in the upper regions; the industrial centers and the power radiating center were

too far removed for a sound or a sense of vibration to reach him.

And then the utter soundlessness was broken by a faint noise that was like the crumpling of tissue paper being thrust through an opening. A whispered voice suddenly was in Hardy's ears.

"Where are yuh, boss?" it came startlingly from out of the gloom. It was like no voice Hardy had ever heard, harsh, crackling and uncouth, yet more than welcome.

"Here," he whispered back. "Who are you?"

A hand touched his own then, a cold and clammy and bony hand. But it was something to which to cling. His confidence, unaccountably, came surging back.

"Pinky," said the voice. "Scott sent me. We're goin' outa here."

The hand was drawing him toward one of the walls. "But how?" he objected.

"Damfino, but yuh'll see. C'mon."

There was a slight sensation of resistance as if a draft of air had opposed their progress. And then they were in the lighted corridor outside. They had passed through the metal wall. Amazed, Hardy turned to look at his queer companion. There was no one with him! And still that clawed hand was in his own. He looked down and choked back the startled cry that rose to his lips. His own hand was not there; neither was his arm nor any part of his body he would ordinarily have seen. He pulled away from the uncanny grip and was immediately visible.

"Here, boss—quick," came the mysterious voice of his invisible companion. "Grab me flipper—quick. Somebody comin'."

Again that cold hand was in his own; once more he was an invisible entity. Something in that weird contact . . . something. But Hardy did not now stop

to reason out the why and wherefore of the astounding thing he was experiencing. Two robot guards were coming down the passage. He and his companion passed on through them and were on their way. At least there was some satisfaction in knowing that they had robots as his guards, not humans. The humans had some respect for his physical prowess; they knew he was safe in the hands of the metal men. Or they thought they knew.

STILL invisible, he followed the guiding hand of his mysterious liberator. They dropped a dozen levels in a lift and got off in an unused corridor. They ran through winding passages in utter darkness, even the illumination having been discontinued here. His companion seemed to know the way, seemed to be able to see in the dark. At length they were against a metal wall that was there and yet somehow only partly solid to the touch.

"Shove," said the invisible man who had called himself Pinky.

Hardy shoved and was through the wall, blinking in brilliant sunglo. Before him stood Fowler Scott.

"Good work, Pinky," he approved. A machine behind him flashed blue light and Pinky materialized as a wizened, nondescript little man with the wondering eyes of a five-year-old child.

"Tanks, boss," he said in a frightened voice. and scurried off.

Looking down, Hardy saw that his own substantiality had been restored. "How do you do it?" he could not help blurting out.

Scott smiled. "It is merely a matter of altered rates of vibration," he explained. "All material existence is vibratory, as are all forces. Each sub-atomic particle of your body has its definite rate of vibration as does that of any perceptible solid. The human senses, sight, touch,

hearing, taste, smell, are capable only of distinguishing substances in a certain narrow range of vibratory characteristics. I merely alter the perceptible vibrational rates to higher or lower rates than are within the range of the human senses. You then become invisible, or absent to the touch, or soundless, or a combination of these, depending on the rate to which I shift the oscillatory attributes. It is very simple."

"Very," Hardy said drily. "Anyway, I appreciate what you've done. And now about Mera."

"Yes—Mera." Fowler Scott was suddenly very solemn. "Something has gone wrong," he admitted, "something has gone very wrong. Mera is but one of eight of my chosen ones—all females—who have been abducted. Central Control has in some way learned too much. How, I can not understand. I thought the shielding of brain wave forms was impenetrable."

A swift feeling of panic came to Hardy. "You—you mean that our—your plan must fail?"

"No-o, not necessarily. But there will be difficulties I had not anticipated. I am glad this happend in time to warn us of danger."

"Glad? What about Mera?" demanded Hardy. Then, as a shamefaced afterthought: "And the other women?"

"Something must be done, shall be done—immediately. It is good Hardy, that I brought you here. I have long probed your intellect and know that you can be a worthy assistant here. And I fear I shall need one who can absorb all of the details I shall necessarily have to impart."

There was something ominous in Scott's statement, an indication of a fear that had newly come to the scientist. A doubt, not a serious one as yet, perhaps, but forming. "I'll do anything possible to help," Hardy told him.

"Good." Scott became animated once more. "First off, of course, I must acquaint you with the apparatus in this secret laboratory of mine. In this apparatus lies the crux of the entire situation, the hope of mankind. You must understand it all soon—now."

"How about Mera?" persisted the younger man.

Scott eyed him keenly. "So you care about her. It is well. At least in your case I did not err in my choice. Well, we shall see what can be done about Mera. Again I say, all depends upon my apparatus."

The scientist turned to a door that led into his inner sanctum and Hardy saw beyond him a great room that was crammed with intricate machines and festooned with cables and gleaming thread-like filaments. His heart sank; he could never master the workings of these formidable assemblies.

CHAPTER FOUR

The Master Control

"YOU'LL master them," Scott averred in a quiet voice, having read Hardy's mind. "But not without mechanical aid. It is strange, that with the force of mind the most powerful of all forces in the universe man has not learned as yet how to use his power to the utmost without the assistance of matter. All of which is to become clear to you when you have acquired a little more knowledge."

The scientist took from a cabinet two caplike contrivances, one of which he handed to Hardy. "Here," he said, "put this on. Through the medium of these we can reach complete *rapport*. It is necessary now as never before in human history."

Hardy fitted the contrivance of flexible metal banding and spring fingers and mysterious coils, condensers and whatnot over his head and buckled its strap beneath his chin. Immediately a sense of unlimited capacity for absorbing knowledge took root in his mind. He looked at Scott, who was smiling, and Scott's thoughts became his thoughts; the scientist's vast storehouse of information was at his command.

He was led first to a long desklike affair that was somewhat similar to one of those before which sat the lesser Controls but infinitely more complicated in its multiplicity of indicating lights, tiny relays, vision screens and operating buttons. Many of the tiny lights were flickering through swiftly changing shades of what seemed to be the uniform basic color. blue. Others flamed red and suddenly went out. Relays clicked incessantly as waves of new color swept the endless banks of indicators above them. Hardy knew suddenly that the life of the city of Manhattan was before him. This board he was facing pictured the activities of the thousands of Controls of the nearly two million inhabitants.

Scott indicated a separate small panel of the assembly on which were indicating lights and relays in pairs, each pair consisting of one white and one red bulb. There were forty-three pairs. This panel represented the individuals the scientist had chosen for the great work he had outlined to them in the meeting of the previous night. Some of the lights were out, but only one complete pair. That was Hardy and Mera. There were seven other lights out, all of them white. These were the other women who had been abducted. Scott did not have to tell him by word of mouth; the knowledge simploy flowed in as he observed these things.

There were relays corresponding to the lights, rows of buttons underneath. The meaning and use of each of these became apparent after but a moment of consideration. Such had been the material adjuncts to Scott's mind force. Their mysteries now were unfolding in Hardy's own

mind, a vast store of knowledge.

Time stood still as knowledge increased. The tiny lights, the myriads clicking relays, the activating buttons drifted out of Hardy's vision. He was probing the sum total of man's knowledge through endless ages; he floated on a tide of brain waves that swept him ever nearer to a shore where was to be found solid ground and understanding of all things. Back and forth he was swept, now to understanding of the ancient science of Mu, now to the lost science of only three centuries back.

He knew now that man's intellectual force is comparable to all other forces in that it, too, is vibratory. He learned to identify and classify the differing vibratory characteristics. He understood gravity, the "cold magnetic force" of the Motherland of a thousand centuries gone; he understood how the touch of Pinky's hand had communicated to himself the vibratory essential of invisibility, how the atoms of his own body had been enabled to pass through and between the atoms comprising solid metal walls without collisions of the particles.

IT BECAME clear to him that life as is now existed on earth was futile and entirely aimless, that its ramifications were utterly dependent on the whims of beings who had no soul and no conscience. His mind was for a long time unequal to the grasping of the real reason for this, as ages of hereditary belief had to be overcome. He groped in the knowledge that in no city of earth were there contented human beings, groped for the reason. There was no logical pattern to any of it, no logical goal toward which human beings might be supposed to aspire. In the upper levels a few effeminate men and empty-headed, vainglorious women idled away their lives in the lax power of the Prime Controls. In the mid-level virile men and women, kept physically fit for their labors by the lesser Controls and speeded to twice their normal capacity during working hours, burned up their bodies in a few short years after attaining maturity. In the lower levels were the outcasts, left entirely to their own resources with the exception of the few robot police who kept them from invading the upper levels and dealt summarily with them if they encroached upon one another among themselves.

There was the rigidly controlled birth rate in the mid-levels and the taking of infants from their parents for rearing and education as the Controls would have it. There was the uncontrolled death rate exceeding the meagre birth rate alarmingly. No disease there was, to be sure, for disease had been conquered. But the unnaturally overworked bodies just wore out and stopped ticking.

No reason could be assigned for any of this except . . . it came to Hardy in a flash of enlightenment that it was all the mad plan of Central Control. Manhattan was only a laboratory in which Central Control experimented with his human guinea pigs. He was merely playing with human life, letting those of the purple play around with their baser emotions and himself observing the effects and reactions. Working those of the gray to their early deaths merely to keep the city functioning and to observe their reactions. Allowing those of the lowest levels to shift for themselves, allowing them to starve and to live in complete ignorance and utter misery in order that he might tabulate the results of an experiment. Closing up dozens of levels of robots who might have done the work and left a life of comparative ease which might have been made highly profitable physically and intellectually for the humans.

Why? Why should a being the masses had been taught to look upon as a God conduct such an inhuman experiment and continue it down through the centuries?

Why? This knowledge came to Hardy finally: because Central Control was not a man but a machine. A machine that could think for itself, functioning entirely without human manipulation or emotion. A machine, hating mankind because of its lack of soul and of love and of any of the human emotions excepting hatred. A machine which was the product of a mad scientist of the twenty-third century whose secret had died with him and had only now been discovered by Fowler Scott. A devilish contrivance which, in the dark century, had been able to duplicate itself forty-two times and, with its counterparts, take over all remaining City-States of the globe.

BUT this machine that perched atop Manhattan had been unable to control its duplicates for they were exact duplicates and it thus had no features of superiority over them. The forty-three cities had remained independent hellholes of misery, hatcheries of a civilization only kept alive at all for purposes of fiendish experimentation. A civilization dying out but not too rapidly to suit the machines. Perhaps there would at some distant date come a time when the Central Controls would permit the propagation of a new line for even more cruel and barbarous purposes. Unless someone would come along who could control the Centrals.

Hardy drifted out from his sea of thoughts and saw the scientist smiling and nodding his satisfaction. "Your last question," said the scientist, "is answered in the mechanism before you."

The intricate contrivances of the desklike assembly swam clearly now into Hardy's vision. He grasped its many ramifications as one amazing, thought overwhelming whole. "The Master Control," he gasped. "Master of the Centrals; Master of the world." "Precisely," Scott agreed. "But it, unlike the Centrals, has no mind of its own. For the work that is to be accomplished it must be manipulated by human hands and controlled by a human mind. Do you see the responsibility that devolves upon the mind that is to do this? And upon yours and other minds which are to take over the other Centrals?"

As the scientist said this, Hardy saw for the first time that his eyes were redrimmed and haunted. The man was afraid, afraid of this great responsibility. And who could blame him?

"Anything would be preferable to things as they are," the younger man told him.

"I suppose so," sighed Scott. And Hardy saw suddenly that the man was very old and weighed down with care and anxiety. He pointed a shaky forefinger at a small synchronous motor that perched on a bracket. "But one adjustment remains to be made," he said, "and I dare not make it till all of you are here. Now eight are missing. We must wait."

Hardy stared guiltily. Mera! How much time had been lost! She must be rescued from her captors. He would never forgive himself if. . . . "Wait!" he exclaimed. "We must get Mera—now."

The haunted look intensified in the old man's eyes. "Yes, and the rest of them," he intoned. Then, raising his voice: "Pinky!"

Before the echoes of his voice had ceased reverberating from the metal walls of the huge laboratory, the twisted little man of the lowest levels was in the room with them.

SCOTT moved to the machine from which the blue light had flashed to restore visibility before. It flashed again and bathed the shriveled form of Pinky in its eery radiance. Waveringly, he dissolved from view.

"I want you to go to level ninety-nine,

crossway eighty-six, group four naught five and see if you can get to the eight young ladies in gray that I told you of. Bring them here one at a time."

"Yer the boss, mister," came out of nowhere. There was a faint crumpling as of tissue being crammed through an opening. Pinky was gone.

Scott crossed to the desklike switch-board and fiddled with a series of buttons. Hardy knew at once that these were on the panel that was segregated for effect on Central Control. Nothing happened. Scott moved to the small synchronous motor he had previously indicated. He manipulated a switch at its base and it whirred into life. Over it was a circular dial on which a pointer began to rotate slowly; with his new-found knowledge, Hardy knew this to be a synchronoscope. Scott intended to synchronize this motor with the activating motor at Central Control. He was not going to wait!

The pointer of the synchronoscope rotated clockwise as the motor picked up speed, turning ever faster. Then, as the motor settled down to constant speed. carefully adjusted the changer. The moving pointer slowed down, commenced rotating in the counterclockwise direction. Ever so cautiously. the scientist reversed the speed changer. The pointer hesitated, returned slowly to the vertical, swayed past and then returned. Scott threw in the synchronizing switch, whereupon there was a confused clicking of the tiny relays on the Central Control panel and a lighting of its multitudinous indicators.

"We're in touch now, Hardy," he exclaimed exultantly. "All is ready. And with you here, I need not wait. The other cities can follow when I have returned the eight and brought the rest. We can go ahead now—in Manhattan."

"But Mera—how about her?" objected the younger man.

"Don't you see? It's quicker this way.

Pinky may take some time bringing them all in. This way we take control of—everything. We can take over the Prime Controls and order them all released—instantly."

The fires of relentless purpose were in the old man's eyes. He depressed a series of buttons-the series. And there came a flash from the board that struck him down! A voice from nowhere that laughed in a raucous mechanical tone. Central Control had not been caught napping. Swiftly Hardy bent over Scott's crumpled form. The man was unconscious but breathing. Evidently his wall insulation here, while not entirely effective, had been sufficiently so to lessen greatly the force of the bolt hurled by Control Central. Intuitively, Hardy knew what to do; in an instant he was at the switch of the synchronous motor and had opened it. Relays clicked off, the lights on the panel snuffed out, the whine of the motor ran down the scale as its speed decreased.

"Here's one of 'em," came the voice of Pinky from out of the air.

Hardy saw that the scientist was stretched out in a comfortable position, then ran to the machine of the blue light and turned it on.

Pinky and one thoroughly frightened, white-faced girl in gray stood hand in hand before him. The girl was not Mera.

"WHAT'S wrong with the boss?" asked Pinky, staring at the prone figure of the scientist.

"Shock," tersely answered Hardy. "Did you see the others?"

"What others?"—blankly.

"The other seven girls."

"Uh—yeh. They're all there—where he said. Only two of 'em's already gettin' spliced."

"Spliced? You mean married?" Hardy's voice rose.

"Yeh, that's it."

"Do you know who they were?"

"Naw." Pinky moved toward where Scott lay.

The girl, overcoming her fear, spoke up.

"They were Doris and Mera," she said quickly.

"Pinky!" Hardy had the little man by the arm. "We're going back to stop that—quick, you hear?" He dragged Pinky to the machine of the blue light. "Turn this off when we vanish," he told the girl, "and look after Scott while we're gone."

"All—all—right." The girl, still pale and shaken, nodded.

But his instructions regarding the machine had been unnecessary; he found he could shut it off himself after the blue light had flashed them into the vibrating invisibility.

CHAPTER FIVE

The End of Control

IN THE rotunda of the cubicle group to which the girls from below had been taken was a Mating Control where the empty ceremony of marriage and the impressing of the brain waves that bound two humans, male and female, until such time as the Controls desired to dissolve the union was performed. Before the orb of this Control two couples were standing with bowed heads when Pinky and Hardy entered. The orb was sputtering purple. The girls, Hardy noted in a glance, were backed up by two of the top-level guards each. And one of the girls was Mera.

Hardy leaped to the side of the dulleyed human at the keyboard of the Control. His powerful invisible fingers wrenched the man's hands from the keys. Dazed, the fellow staggered from his seat just in time to receive Hardy's wellplanted uppercut on the point of his jaw. He slumped down with a shuddering moan. The ceremony was over before it had well begun. And then Hardy saw a terrifying thing. A painful tingling was creeping over his body. He saw his hands materializing, faintly blue in phantom outline. But materializing. Central Control somehow had learned much regarding Scott's activities and was taking measures to circumvent them! Leaping over the Control, Hardy reached for Mera.

Pandemonium broke loose in the place. Hardy struck down one of Mera's guards with no compunction. The fellow's eyes were bulging from his head when the phantom fist swung toward him. Other guards were rushing in. Little Pinky was battling desperately to get the other girl away. And the guards, taken aback by the visions of ghostly beings, were not quick enough to take advantage of the superiority of numbers which was theirs.

"Hardy!" Mera, wide-eyed with wonder, had recognized him. "So you came at last. But how—"

Momentarily, he and Pinky were becoming more fully creatures of flesh and blood. The guards recovered from their temporary panic. But the two men battled like fiends incarnate; they toppled them like tenpins. Little Pinky knew how to handle himself in a rough and tumble. Even the girls helped. They reached the door to the corridor, flinging off the last of the guards. The general alarm shrilled as they wheeled into a side passage. They were in the lift then; its door slid closed and it sank rapidly. For the time being they were safe.

Mera sagged in Hardy's arms. "Oh, I'm so glad," she whispered.

"Glad! It's a miracle." Hardy held her close and, as her face turned up to his, crushed the waiting lips with his own.

"Here y'are, Hardy," drily coughed Pinky.

The lift stopped; its door opened. The wizened little man from the lower regions was grinning broadly, as was the girl Doris. Pinky's grin was fading,

though; he was regaining his invisibility. Central Control had lost track of them. Hardy's flagging hope revived. He was himself fading from sight.

"Oh, Hardy, I—I don't like it," Mera whimpered as they sped along the corridor. "You—you disappearing this way."

Clinging tightly to her hand to reassure her, he laughed indulgently. "You're the same way," he told her.

She stifled a little cry of horror when she saw that what he had said was so. The contact of his hand had set up the same vibrations in her own structure. They were four invisible creatures now running along in the gloom of the corridor, then plunging into the darkness of the unlighted side passage.

A ND it was a good thing that the invisibility had returned. They found that Fowler Scott still lay insensible when they had oozed through the metal wall into his laboratory. The girl they had left behind with him would not have known how to open the door.

"How is he?" asked Hardy anxiously as he snapped on the machine of the blue light to restore them to normal. He hugged Mera to him as she melted into view.

"Still breathing," said the girl. "But I can't bring him around."

"Oh, Hardy—what happened?" gasped Mera.

Explaining swiftly, Hardy dashed to the Master Control. A quick survey of its many panels told him that the city was being turned upside down in the search for them. Lights were blinking through the spectrum, relays were clicking. At this rate it would not be long before their hideaway would be discovered. It was an emergency Scott should be able to attend to himself.

"See what you can do for him, Pinky," snapped Hardy. "And get that cap on his head." He pointed to one of the contrivances through which Scott had trans-

mitted to his mind so much needed information. Perhaps, even with the conscious mind inoperative, the old scientist might be able to guide him.

Hardy donned the other cap while Mera gazed at him in astonishment. "Are you going to let him lie here and do nothing about it?" she demanded.

"You girls and Pinky can look after him," the suddenly authoritative voice of Hardy snapped out. "I've important work to do here." Already he was in *rapport* with a portion of Scott's brain; intelligence was coming through to him by way of the caps.

Mera sniffed contemptuously. "You'd rather fool with that machine than help an injured man—our leader, at that."

"You don't understand . . . you . . ." Hardy gave it up; there was too much to be done in too big a hurry to try and explain. You couldn't explain to a woman anyway; you just had to wait until she could see for herself. He bent to the task ahead of him.

From Scott's frantic thought waves he knew that the old scientist was dying. There was nothing anyone could do for him. But there was much to be done to save the rest of them and to make pos-



sible the carrying out of the great plan.

HARDY played on the buttons of the Master Control as a musician plays on the keys of an electric organ. One by one the vision screens before him lighted. One by one he paralyzed the lesser controls. This was the first step in the necessary sequence, Scott's thoughts were telling him. These were not emanations from the scientist's subconscious he was getting; they were from the conscious. The man's vocal cords, muscles and nervous system were paralyzed, that was all. And they'd never be restored. But he might yet live to see his dream come true, his thoughts exulted. Only a little while.

The vision screens were picturing panics indescribable. This was necessary as a first step, too. With their Controls inoperative, the workers in gray were stampeding the lower levels, fighting, trampling one another to get to the transportation lanes. With the transportation Controls likewise inoperative, their panic increased. Mob fear possessed them. It could not be helped. The Prime Controls were next. Scenes in the upper levels were even more confusing than below. And here men and women lost all sense of decency, became savage animal things fighting indiscriminately. There were no scenes in the lowest levels of all. This was why Scott had sent for Pinky. In lieu of Controls, Pinky was to be the one to carry the precepts of the new era to the lower regions. Scott would yet live to convey this part of the plan in its entirety, he telepathed. Ideas were flooding in so rapidly now to Hardy's mind that he could only store many of them away for future reference. The immediate present demanded his every attention.

He had started the synchronous motor anew now, was bringing it up to speed. It was synchronized with Central Control! Mechanically, Hardy went to the panel where Scott had been stricken down. Numbers were coming through to his mind now, complicated combinations of many buttons that must be pressed in exactly correct sequence. The thoughts from the scientist's weakenig brain were growing fainter. He had made an error originally; Hardy could not, must not do so. The combinations were being set up less rapidly now on the panel under his fingers; only a few numbers remained. Hardy looked anxiously at the group around Scott. Mera and Doris were weeping. The other girl had gone for more water; Pinky was chafing the scientist's wrists. The final numbers came through. Something about the robots . . . not yet, though. . . .

But wait, came Scott's dying thought flash. You must. . . . There was no more. The old man's career was ended. And now upon the broad shoulders of young Hardy rested the future of mankind. He had become the Master Control. He looked once at the cold, white face of Mera that raised up towards him. There was nothing but antagonism in her set look. Scott had died under her fingers and Hardy had not helped.

Doggedly, he turned to the panels. Dozens of numbers danced in his brain. He tore off the cap from his head and tossed it to the floor. There was a mathematical formula involved in setting up these last numbers. It had come through to him and he had stored it away. But now he could not seem to extract it from the pigeonhole into which it had so hastily been thrust. Sweat ran down into his eves. The vision screen lighted above him, showing a vast assemblage of intricate machinery surmounted by a huge sphere in which there was pulsating light of many colors. The Central Control. The machine with a brain. It had a definite line on them at last. A formula sang through Hardy's consciousness; the formula. He depressed the remaining buttons.

There was a brilliant flash and a terrific thump as if the very space about him had been warped violently. He was flung away from the board, tingling from head to foot with a million stinging, penetrating agonies. But on the vision screen before him he saw smoke arise from that sphere of many colors; it puffed out of existence in a flash that dwarfed to insignifigance the one that had struck here. Central Control was blasted out of the picture in that instant.

And then Hardy flung himself at the Master Control board with all the fury of a madman. He was Master Control now; his was the mind that would take things in hand and bring order out of chaos. He had not expected or wanted the job but now that it had been thrust upon him he would take care of it. And take care of it well.

BEHIND him three girls were sobbing softly. Pinky's crackling voice was trying clumsily to comfort them. But Hardy didn't hear what they were saying; he was intent upon his indicating lights and vision screens; he was driving himself to the task before him. Pigeonhole after pigeonhole of his brain he was



exploring and bringing to light their newly acquired secrets. And, as he worked with the problem confronting him, it did not occur to him that a great measure of common sense was necessary to the leavening of the mass of intelligence Scott had kneaded into his brain.

One by one the Prime Controls were flicked back into operation but were left with open orders to restore some degree of sanity to their charges without the use of damaging force or any form of punishment. The lesser Controls followed. Labor and Transportation were resumed under the same binding instructions that there be no reprisals nor punishments. The small number of robot police throughout the inhabitated levels were shut off from their radiated power. You couldn't trust the mechanical men, even when their orders had been explicit.

He had not noticed that Mera had risen to her feet and was at his elbow. "So," she remarked scathingly in his ear, "you have been charged with the lust for power. You have destroyed Central Control and now are doing as you please about things. You, who had such high ideals."

Hardy deigned no reply. In fact he was too busy to reply. But his heart was heavy within him. What mattered the rest of this if he had lost Mera? He continued doggedly with the work of restoring order. It was so urgently necessary. And he started up the panel of Scott's chosen following; one by one they were being called by the automatic telepathing mechanisms. They would soon start to gather in this place.

Behind him, Mera was watching the vision screens, watching his flying fingers. She could not help but see that he was bringing order out of chaos, that things in the city were returning gradually to normal. She was blinding herself to these

things in the belief that he was setting himself up as a new Central Control. She would have to readjust her mind to a new order of things before she would fully understand. Of course, she had not been lucky enough to have the advantage Hardy had had of the individual teaching of the real Master.

"Just like one of the ancient dictators," she was saying cuttingly.

"Garn!" Pinky's voice spoke up. "Yuh must be dumb, lady. I seen it all; I heard it all. I wuz here, not you. Scott done it, not him. And this guy's goin' on just like Scott figgered. He's all right wit me, lady. Oughta be all right wit you, too."

THE pictures in some of the screens were blurring a little later as, one by one, Hardy got the various groups in order and the automatic controls were set. Soon Master Control would take care of itself for the time being. Soon he might get some rest. In couples, Scott's chosen following had been coming in; the scientist's body had already been removed to his former living quarters on Hardy's instructions. All was going as it should. All excepting the situation between Mera and himself.

"Hardy." A meek voice was raised at his side. Mera was looking up at him with tears in her round blue eyes. "Hardy, I'm a little fool. Pinky told me. And I've watched; I see it all now and know what you're doing. I—I'm sorry. And I want to help, Hardy. Will you forgive me and—take me back?"

"I shouldn't," he growled, eyeing her sternly. Then, as his eyes wandered about the laboratory and saw that they were alone, he slid down from his seat and swept her yielding form into his arms. "But I will."

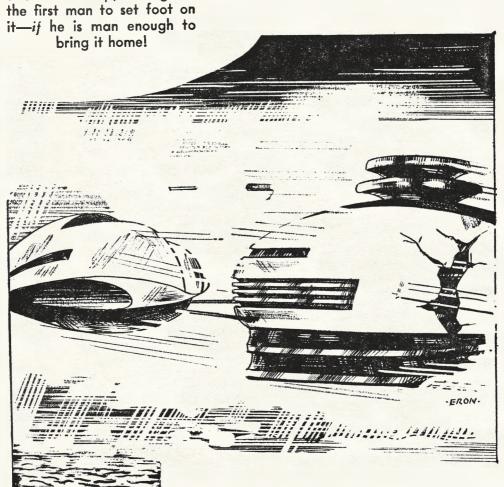
You couldn't for long remain angry with Mera.

SALVAGE OF SPACE

A space-derelict, like an

abandoned ship, belongs to

By Frederic Arnold Kummer, Jr.



OE HALDENE pushed his way through the airlock of the little space-skiff, threw back the big, glass-fronted Svenson helmet that encased his head. From a pocket of the space-suit he drew perhaps a dozen greenish crystals, ranging from the size of a terrestial grape to that of an orange, regarded them for a moment disgustedly.

"Souvenirs of space," he muttered mockingly, and tossed the crystals into an old five-gallon water tin, already half full of the greenish spheres.

With the mechanical precision of long practice Joe

unhooked the intricate air-tight flaps of the space-suit, allowed it to fall about his ankles. Stepping from the folds, he picked up the heavy asbestoid garment, glanced at the dials of its compressed air cylinder, then hung it upon a hook on the wall of the cabin. Still moody, he lit the tiny electric grill, set a pot of mud-colored tala on to boil.

Joe was just rubbing his hands with sand to clean them—for water was scanty on the little skiff—when he heard the outer door of the air-lock slam shut. A moment later another space-suited figure stepped from the lock, pushed back its helmet.

"What luck, Naal?" Joe said, without turning.

The brawny, bulge-eyed Martian scooped a handful of the green crystals from his pocket, dropped them into the tin

"Fourteen, Joey, matoul," he said proudly. "We have good trip."

"Sure. Good trip." Joe was all irony, savagely bitter. "Nice green xalt crystals for Harrold's underpaid workmen to make into rings and beads—souvenirs for gaping terrestial tourists. Maybe he'll give me fifty thaels for them, if I'm nice. Enough to pay for rocket-fuel, supplies, and your wages, Naal. Maybe a couple of thaels left over to buy flowers for Sally. Flowers, when Buck Harrold gives her fine earth-made gowns! Yes, and takes her out in his big space-yacht! Huh! I'd be ashamed to ask her aboard this little tub!"

"So, Joey, matoul," Naal stretched his powerful arms, until the muscles rippled under his red, rust-colored skin. "Woman-trouble. That is bad. And it is bad, my people say, for a man to hate himself." The Martian grinned, revealing teeth stained black from use of strong terrestial tobacco. "Me, I do not think the High-flier is a tub. She good skiff. Old, small, but good. Someday when you have big

ship of your own, I buy her from you. Fifty thaels a trip from old man Harrold plenty for me! Ah, yes!"

Silently Joe poured the boiling tala into two cups, left his on the locker to cool. It was all right for Naal to think the High-flier a fine ship because it could come here to Deimos and back, perhaps twenty-five thousand miles in all. What the hell? Naal was a reddy, a Martian. Give him this old wreck, a chance to make fifty thaels twice a month, and he'd be happy. Buy himself a wife in the slave markets of Mercis and raise innumerable coppercolored kids. But he, Joe, was a terrestial, even if born on Mars, with all of a terrestial's fierce ambitious longings. . .

Joey stared disgustedly about the cramped, cheerless cabin, frowned at the grimy rocket-motors visible through the open door at its rear. Like a jail, he reflected, a jail from which there was no escape. Continue his regular trips to Deimos, and he'd go on as he had for the past year, breaking even. Quit the crystal-prospecting, and he'd starve. While old Harrold, Buck's father, was making thousands for his spoiled son to squander.

"Don't worry so, Joey." Naal, warmed by the stimulating tala, tried to be encouraging. "Woman-trouble is foolish. My old father he buy one, two, three wives at Mercis. And what you think? They all leave him and he only say . . ."

"Dry up, Naal!" Joey swung around to the observation port, stared at the barren, icy surface of tiny Deimos, rose-tinted in the light of Mars bulking like an enormous pomegranate against the blue-black sky. Somewhere on that great red disc, Joey reflected, was Sally Martin. He could shut his eyes and see her, all pink and white, her hair as yellow as sunlight, her simple fibroid dress clinging to her slender frame. Beautiful, too beautiful to be the wife of a sweaty, grubbing crystal-prospector. If he only had a big

ship, one of those sleek, speedy twin-jet craft that plied the lucrative trade routes between Terra and Mars! The captain-owner of such a vessel wouldn't be ashamed to ask Sally to be his wife. Joe sighed. A mere matter of a hundred thousand thaels was all he needed to buy one of those clippers. He might just as well wish for Earth while he was at it. And Buck Harrold, with everything to offer a girl . . .

"Joey!" Naal crossed the cabin, his lead-soled gravity shoes clanging on the steel floor. "Joey, matoul! Look!"

JOE straightened up, awakened from his day dreaming. Naal's bony forefinger was pointing through the porthole at a bright splash of light brilliant against the dark sky. Joe frowned, his blue eyes narrowed. The point of light was growing larger, spreading like an exploded rocket into a thousand flashing sparks.

"Rings of Saturn!" Joey's lean brown face hardened. "A collision of asteroids or baby comets! Meteors, Naal! Thousands of 'em! And no atmosphere on this damned satellite to burn them up! We're in for it!"

"Run away from the storm maybe?"
Naal muttered, eyeing the points of light apprehensively. "If we could make Mars..."

"No good." Joe shook his head. "This whole area will be blanketed for fifty thousand miles before we could reach home. We've got to take our chances! We'll sit down in that hollow between the two hummocks over in section 312. Remember? The one we worked trip before last. That'll be some protection. Hop to it!"

Naal nodded, vanished in the direction of the engine room. Less than two minutes later the rockets began to roar, lighting up the icy plain with their ruddy flare. Joe, at the controls, let them idle a moment to melt any ice that might have

formed about the exhausts, then opened the throttle full.

The little *Highflier* shuddered, leaped forward and upward. Joe glanced out at the tiny shower of sparks, like a thousand fireflies winging through space. Meteors, even big meteorites, a hail of rock and stone hurtling toward Deimos. Joe eased the ship to the right, staring down at the barren plain already pock-marked by countless meteor storms. Then he saw it, the cup-shaped depression between two jagged pinnacles of ice.

"All set!" he called over his shoulder. "Coming down!"

Very gently he eased the skiff toward the hollow, settled her down on the rocky ground without a bump. The rockets snapped off abruptly and Naal crawled through the companionway, his flat, ugly face wrinkled in a scared grin.

"How does it look?" he demanded anxiously.

"A humdinger," Joe muttered. "We better have our space-suits handy, case one of 'em knocks a hole in the hull. And if a big one lands on us . . ."

A rattling roar like a thousand riveters drowned out his voice. Naal's rust-red face paled; he clutched the grotesque little image suspended about his neck, muttering invocations in sibilant Martian.

Joe glanced up at the dark sky. Impossible to see the meteors now; they were moving too fast. The pale ice about the ship, however, was churned up as though by an ancient machine-gun. The roar increased, like hail on a tin roof. Joey gazed anxiously at the roof plating. If a rivet should give . . .

The rocky shower was growing more violent with each moment. The fragments were increasing in size. Dents began to show in the ceiling. Naal, hands trembling, was muttering furiously, swaying back and forth. Joe stuffed his pipe with black aromatic tobacco, puffed at it nervously. Huge chunks of stone were

landing about the ship, now. It was growing hot in the cabin with the friction of the pounding rain of rock. The din became deafening.

Face tense, Joe turned to the porthole. The ice was melting outside, a litter of jagged fragments covered the ground. Suddenly the little ship quivered, heeled over to one side.

"Gosh!" Joey's eyes snapped. One of the ice hummocks had disappeared in a cloud of steam and smoke!

"Big! Big one!" Naal muttered.
"Never was such a storm! Aie! Feel the ship shake! Yetano protect us!"

Another sickening shock, near by. Again the little ship lurched. Joe, trying to look out of the observation port, lost his balance, crashed to the floor, lay there, panting. The porthole was blocked, now, buried by tons of shattered ice, powdered stone. More shocks, and still more. Like a twentieth-century battlefield, Joey reflected, clutching at a ring-bolt for support. It seemed a miracle that one of the huge meteorites had not landed on the space-skiff, reduced it to a bit of twisted, flattened metal. Naal, eyes on the battered roof-plates, was anxiously watching the wisps of smoke from Joe's pipe for a tell-tale swirling that would mark a leak.

THE plates, however, had held so far. The smaller fragments of meteoric stone had given way to huge boulders that spelled either instant death or nothing. These shocks also seemed to be growing less frequent.

"So far, so good," Joe announced. "I haven't felt one for the last couple of minutes. Can't tell though . . ."

Naal's courage was beginning to revive. His bulging frog-like eyes roved about the cabin, taking stock of the damage. Dishes smashed, a tin of flour upset, bottles of syrup and the imported terrestial catsup of which Joey was so fond,

mingled in a sticky puddle on the floor.

"Not so bad," Joe said shortly. "Just enough to use up the dough I'd planned spending on Sally's flowers. Reckon the storm's about over. Any meteors that didn't land here on Deimos are sailing on into Mars' atmosphere to be burnt up by friction. No worry of ours. We'll head home at once, though. Can't tell when one of those strained plates may give way. Easy with the motors. They may back-blast if the rocket tubes're buried."

"Sure. I know." Naal squeezed through the little doorway, chuckling. "We too tough for meteor storms, eh, Joey? Smart, ah, yes, hiding between two hills. I start motors quick, you bet."

Joe leaned moodily against the control panel, raked shattered porcelain into a heap with the toe of his boot. Things didn't seem to matter much, somehow. Six months before he'd have been proud, exultant. But now . . .

He gazed about the dingy cabin, hating it. Woman-trouble, as Naal said. But without a decent ship how could a man hold up his head? A ship like the big silver yacht Buck Harrold put to such poor use. He, Joe, would have ripped out the bar, the luxurious cabins, the gameroom, supplanted them with cargo-holds. And with a packet like that on the Terra run...

"All right, Joey, matoul," Naal called. "I've burnt away all the ice and stuff behind us. We go now, easy."

"Oke." Joe pulled back on the throttle. Shuddering, shaking, the *Highflier* emerged, chrysalis-like, from the heap of debris, leaped skyward. Joe set the controls and, swearing under his breath, began to swab up the pasty mess on the cabin floor.

The twelve thousand mile run between tiny Diemos and Mars would, for a first class ship, require only a few hours. For the *Highflier*, however, a day was necessary to make the trip. Joe, the cabin restored to order, sat at the controls, staring idly at the huge red disc ahead. Behind him he could hear Naal humming softly as he tinkered with his beloved engines. Joe's eyes roved from side to side. Space above Mercis, capital of Mars, was usually filled with ships, sleek, flashing vessels that shot by the little Highflier like beams of light. Today the void was empty; all wise pilots had sought shelter from the meteor storms.

Joe glanced off to the right. Phobos, the larger of Mars' two satellites was in line with him. Which meant he was less than five thousand miles above the surface of Mars. In a couple more hours . . .

All at once Joe's heart leaped. Dead ahead was a long silvery object, very sleek, very graceful in the sunlight that struck it. No mistaking those trim lines; it was Buck Harrold's yacht, the Kylos... disabled! Slender rocket tubes battered, twisted by a meteor! Helpless! "Naal!" Joey cried. "Come here! Look!"

The big Martian came running, peered over Joe's shoulder.

"Kylos!" he exclaimed. "Serve Harrold right, eh, matoul? To give so fine ship to his no-good, drunken son who knows not even one-ten' of what you've forgotten about navigation. Had he heeded storm warning . . ."

"Bring her about, Naal." Joe handed the controls to his companion, climbed hastily into his space-suit. "There may be people aboard . . ."

With consummate skill the Martianbrought the little skiff alongside the disabled yacht. Joe snapped his heavy helmet into place, stepped into the air-lock. A moment later he had swung his light magnetic grapple onto the sleek, silvery hull, was hauling himself across the gap.

The Kylos was like an Archipenko sculpture; the sheer beauty of her flowing lines took Joe's breath away. Give him such a ship as this and she'd have

better treatment than Buck Harrold gave her! Clumsily he clambered along the polished hull. Except for the smashed rocket tubes, the yacht seemed intact. And tubes were easily replaced . . .

Joe, crawling onward, found the emergency ports open, the cradles for the lifeboats empty. Quickly he swung into an air-lock, entered the yacht's main saloon. There was air inside; he opened his helmet, glanced about. Bottles, half-emptied glasses, littered the tables, cigarette smoke still tainted the air, while traces of cloying perfume, red-daubed cigarette butts, spoke of women. A sacrilege, Joe reflected, to use such a ship for such purposes.

Naal's voice in the micro-wave set inside his helmet interrupted Joey's musing. Although the helmet had been snapped back, Joe could hear his companion clearly.

"Any people?" the Martian asked excitedly.

"Abandoned!" Joe exclaimed. "Left to fall, crash on Mars! A vessel like this . . . abandoned!"

"Old Harrold will buy Buck another," Naal chuckled. "Nothing we can do! Come back! The yacht's falling fast! Better we were clear of her pretty soon, eh, matoul?"

"Nope!" Joey's lean face hardened. "Listen, Naal, I don't care if this is Buck Harrold's ship; I can't stand by and let it crash! It . . . oh, hell, you wouldn't understand how a man can love a ship! Anyhow, we're going to try and save it! Get out the towing grapples!"

"But, Joey!" Naal's voice was shaky "We haven't enough power!"

"Orders, Naal!" Joe said crisply, snapping the set off.

Returning to the outer hull of the crippled yacht once more, Joe saw the airlock of the little *Highflier* open, saw Naal appear, lugging several lengths of stout cable. WORKING with swift precision, the Martian fastened the heavy cables to ring-bolts sunk flush in the little skiff's hull, threw the ends of the tow ropes across the gap that separated the two ships. Hastily Joe made one fast to the wrecked, twisted tubes of the Kylos, the others to the cradles from which the little life-boats had been catapulted. Within half an hour the two vessels were securely fastened side by side.

Back in the cabin of the Highflier, Joe emerged, perspiring, from his space-suit. "All set, Naal!" he said sharply. "Start those motors!"

Naal's greenish eyes flicked toward the control panel. The gravity-detector was spinning swiftly as the two vessels, bound together, plunged Marsward.

"Joey . . ." the Martian began.

"Hop to it!" Joe snapped. "Quick!"

Muttering dismally, Naal crawled through the entrance of the tiny engine room. A moment later the skiff's rockets commenced to roar.

Anxiously Joe glanced at the gravity detector. The ships' dive had been checked, but the rate of descent was still sickening.

"More power!" he called. "Give her all you've got!"

A grunt of assent came from the engine room, and the roar of the motors grew thunderous. Joey, his eyes glued to the control panel, frowned. Still falling fast!

"So!" Naal came into the cabin, shak ing his rust-colored head. "Full power! And we keep on diving! Madness, matoul! Madness! Better to cut loose while we can! Why you do all this for no-good Buck Harrold?"

"For Buck Harrold?" Joe stared through a porthole at the sleek, graceful ship alongside. "D'you think I give a damn about that drunken bum? It's the yacht, Naal! She's too beautiful to let crash! I don't care who owns her! Don't

you see? I can't let her go any more'n I'd stand by while a beautiful girl was being killed!" His voice dropped to a far-off whisper. "The kind of ship I'd always hoped for . . ."

"But we go with her!" Naal glanced anxiously at Joey. "We be killed in crash! You—you sure, *matoul*, the meteor storm not jar your head, eh? Maybe you still dizzy..."

"Dizzy?" Joe laughed harshly. "Sure I'm dizzy, Naal! So dizy that I'm going to save Buck Harrold's yacht for him! And I don't expect you to understand!" He reached for his space-suit once more. "Leave the rockets as they are! We're going over to the Kylos, and lighten her!"

Dolefully Naal reached for his spacesuit, followed Joe as he leaped across to the hull of the gleaming yacht. A moment later they were in its gilded, luxurious saloon.

"Open both doors of the air-lock!" Joe snapped into his micro-wave communications set. "We won't need air, wearing our space-suits!"

Naal obeyed, clutching at a stanchion for support as the air cooped up within the Kylos swept through the lock.

"Okay." Joey nodded within his helmet. "Let's go!" And seizing an armful of liquor bottles, he pitched them out into the dark void. The bottles, leaving the ship at an angle, disappeared instantly.

That was the beginning of a furious nightmare of toil. Working like madmen to lighten the yacht, they stripped it completely of Buck Harrold's prized furnishings. Piece by piece the bar vanished, then came the overstuffed armchairs, the roulette tables, the volumes of cheap, sensational books. Tin after tin of imported terrestial caviar or terrapin, cases of champagne, armloads of linen, clothes, not all of them masculine. Rugs, lamps, pictures, cutlery . . . all the useless luxuries with which the Kylos was cluttered. The water tanks were jettisoned, but Joe

was afraid to empty the fuel bins, fearing that the semi-liquid trioxine might be ignited by the rockets of the little *High-flier*, chugging manfully alongside, and blast both vessels to bits in the explosion. Of the *Kylos'* engines, its navigating equipment, he was more considerate, determined to withhold it until the very last.

"Looks more like a ship already," he murmured, booting an elaborately-carved vase containing a fern through the lock. "Ferns!" Joe went on disgustedly. "I hope all this junk burns up in the atmosphere. Imagine being crowned by a potted plant!"

Naal, tossing an ornate mirror into the void, glanced at the red planet below. Its network of canals lay clear in every detail and Mercis was visible, a dark dot against the rusty plain.

"Close," he muttered. "We still fall, I think, Joey. If only the *Highflier* had big motors . . ."

"Suppose you run over and take a look at the gravity detector," Joe panted. "The controls on this packet are wrecked. And see how the skiff's rockets are running. . . ."

Nodding obediently, Naal stepped into the lock, swung himself upward to climb over the hull in the direction of the spaceskiff. He had not been gone five minutes before he returned, dropping lightly onto the edge of the air-lock.

"Joey, matoul!" the Martian's voice was excited. "It work, you bet! You smart fella, yes indeed! We just barely settling down, now! Plenty slow enough for a landing! Maybe Buck Harrold give us a hundred thaels, a thousand, for saving his yacht! Think of it! Big money."

"Huh!" Joe, lugging a heavy multiphone toward the lock, grinned contemptuously. "Fat chance! He can keep his lousy cash! I'm saving this ship because I couldn't stand seeing her a heap

of twisted metal! Because she's as sweet and beautiful in her way as ..." He was about to say "Sally Martin," but Naal interrupted him.

"Matoul!" The Martian pointed through the open air-lock. "A ship! Coming this way!"

Joe joined him, peered into the darkness. A ship, apparently from Mercis, was leaping spaceward toward them. As they watched, the vessel's forward rockets flared, braking its speed.

"One of Harrold's supply ships!" Naal exulted. "No more worries now! And maybe reward!"

Silently Joe Haldene watched the big supply ship come about, edge in toward the clear side of the yacht. Magnetic grapples shot from her bow and stern and a moment later the Kylos was sandwiched between the little Highflier and the rescue vessel.

Metal doors swung open in the side of the supply ship, a gangplank thrust out to the yacht's air-lock. Two bulky spacesuited figures appeared, made their way across the runway.

THE first of the two men was Buck Harrold. Joey instantly recognized those pudgy features behind the glass front of the helmet. The other man, it appeared, was the captain of the rescue ship.

Harrold, catching sight of Joe and Naal, frowned.

"What d'you think you're doing here?"
His voice rattled unpleasantly in Haldene's earphones. "On my ship . . . !"
Joe thrust his jaw forward firmly.

"Just saving it from a crash," he grated.
"That's all! If I hadn't taken it in tow

when I did . . ."

"Huh!" Harrold laughed bitingly.
"That dirty little tub of yours couldn't keep a life-boat from crashing! And after scraping all the finish off my hull, I suppose you figure you'll hold me up for

reward money! Well, think again, Haldene!" He pushed his way through the air-lock into the cabin. "I . . ."

Harrold broke off at sight of the yacht's stripped, gutted interior.

"By all space!" he roared. "You dirty, lousy crook! Ten thousand thaels worth of furnishings . . . gone! What've you been up to, Haldene? What've you and this pop-eyed reddy done to my ship? Speak up, or . . ."

"Listen, you!" Joe leaned forward, his face a white angry mask. "You didn't think enough of this ship to stick by her after her rockets had been smashed! You and your men were only bothered about saving your precious skins! It would have been easy enough for me to let her crack up on Mars! But instead, I came aboard and worked like a dog throwing your damned junk out to lighten ship! I saved her from being wrecked! I don't expect any reward . . . not from you . . . but the least you can do is to keep a civil tongue in your head!"

Buck Harrold was making sputtering, incoherent sounds, interspersed with blasts of profanity.

"Threw my belongings out?" he gasped. "Out into space! Why, you damned spiteful wrecker! You'll pay for this! Pay for every bit of the damage you've done! By the Lord, I'll break you, see that you spend the next five years in the labor camps! McKain"... he turned to his companion... "take this man into custody until we get back to Mercis! We'll see what the courts have to say about boarding other people's ships to wreck them!"

Gripping the heat-gun at his waist, the captain of the rescue ship stepped forward. Joe stared at him with disbelieving eyes. No reward, no thanks even, for saving the *Kylos!* Not that he'd expected any. But to be accused of deliberate vandalism . .! Harrold wasn't fit to be owner of a ship such as this. The *Kylos*,

like Sally Martin, was beautiful, clean, somehow . . . fine; perhaps that was why he'd worked so hard to save it. With such a ship he, Joe, could enter the terrestial trade, and then maybe Sally. . . .

"Come along!" McKain touched his arm. "You'll have plenty of time for thinking... in jail!"

Joe straightened up, his gaze sweeping the empty saloon. The two big portholes opposite him seemed somehow like dark, pleading eyes . . . eyes that begged for release from a life of idle cruising, drunken revelry. It was almost as though the Kylos, like himself, yearned for long voyages in the void, reckless adventure, the mad exhileration of racing past the great white silent stars, of bridging the dark gulfs of space. Joe glanced at Neal, standing bewildered by the air-lock, at Buck Harrold's red, coarse face. And then he shook off McKain's hand.

"Arrest me for cleaning out the Kylos?" Joe laughed. "Can't a man straighten up his own ship?"

"What!" Harrold roared. "You... of all the impudence! He's crazy, McKain! Crazy as a coot!"

"Yeah," Joe growled. "Well, think this over, Harrold! This ship was abandoned when I came aboard! And the laws of space, modelled after the old laws of the seas back on earth, state that an abandoned ship, a derelict, is the property of anyone who takes the trouble to salvage it! That's what the Kylos was when I came aboard. Harrold! A disabled derelict . . . salvage! And long's I took her in tow, she's mine!"

"Why...you dirty..." Buck Harrold plunged forward, his fists inside their asbestoid covering, doubled.

Joe, grinning, side-stepped; his own muscular arm shot out in a swinging round-house. Harrold's space-suit, ballooned by the air inside, cushioned the blow, but the impetus of it was sufficient to send him reeling to the floor.

"And now," Joe growled. "I'll trouble the pair of you to get off this ship at once! I'm particular about my company! As owner of the Kylos, I don't need you aboard;"

Harrold, swearing in lurid streaks, staggered to his feet.

"He's right!" McKain muttered. "Legally the ship's his, now! We can't do a thing, Mr. Harrold!"

"Except leave," Joey announced. "Right away!"

For a long minute Harrold stared at the wiry spaceman, his porcine eyes snapping with rage.

"All right!" he said at last. "Try to keep her from falling with that little tub of yours. She'll crash and I hope you crack up with her! You won't be laughing an hour from now, wise guy!"

Lips tight, he strode into the airlock, crossed to the rescue ship. A moment later it had cast off from the yacht, was edging clear with quick spurts of its exhausts.

"Joey! Joey, matoul!" Naal came running forward, a grin on his flat, ugly face. "Ah, how you tell that no-good Harrold where he gets off! And this big fine ship...all yours!"

Joe ran an affectionate hand over the polished mechanism of the air-lock. The sleek, gleaming Kylos...his! If he could bring it safely to Mercis, get enough from the sale of the little Highflier to make repairs, alterations....

"Joey!" Naal gripped his arm, pointed. "Harrold's rescue ship! Swinging back toward us! Look!"

PEERING through the air-lock, Joe could see the other vessel come about in a long, sweeping circle, it's flaring rocket exhaust red against the blackness of space. Straight toward the Kylos and the little skiff it came, leaping across the void like a gleaming silver comet.

"Good God!" Joe gasped. "If he's fool enough to ram us . . . ! But it would

wreck the rescue ship, kill everyone aboard! And he must see the light of the *Highflier's* rockets! Quick, Naal! Signal..."

As he spoke, the big supply ship swung about, missing the two smaller vessels by a scant hundred yards. For just an instant its rocket tubes were pointed like huge, spouting cannon at them, and the nose of the *Kylos* was enveloped in searing, lurid flames!

The yacht, the little skiff alongside, quivered under the shock as though struck by a giant fist. With jarring force the back-lash of the supply ship's rockets smote them, completely nullifying the Highflier's efforts to keep the Kylos aloft. Given a terrible impetus by that blast of flame, the two vessels plunged toward the great red planet hardly two thousand miles below!

Joe, hurled to the floor of the cabin by the shock, climbed dizzily to his feet. Naal, his reddish face dazed behind the glass of his helmet, lay crouched against a bulkhead. Joe glanced through the airlock; Harrold's ship was already only a pin-point of light in the dark void.

Suddenly realization swept over Joe. The Kylos was like a disabled auto, being held from sliding down a steep hill by a smaller car . . . the Highflier. And the back-blast of Harrold's rockets had been like a bump from a large truck, sending both vehicles downhill . . . to crash!

"The louse!" Joey muttered. "The dirty spiteful louse! Wreck this yacht before he'd let me have it!" He turned, eyes bleak. "You okay, Naal?"

The Martian dragged himself erect.

"Sure. All . . . all right, matoul." He gasped, recovering his breath. "I . . ." Naal broke off, catching sight of Mars' red surface below. "Mighty Yetano! We fall! Fast!"

"They kicked us down," Joe said bitterly. "And we can't prove it was deliberate!" His eyes were like dead embers, "But . . . Highflier's motors can't keep us up, now!" Naal's face was a sickly mud color. "Must cast off! Quick! This yacht drag the skiff down . . . to smashup! Nothing left to throw out except big machinery too heavy to lift! The yacht must go, matoul! We cut cables, huh, Now?"

Joe's lips were a tight, harsh line. Naal was right. Less than two thousand miles drop to Mars and even with the *High-flier's* rockets still chugging steadily to check their fall, they'd crash in about four hours. And to attempt to land at five hundred miles per . . .

He glanced about the empty cabin. His ship . . . by law and by sweat! He had fought, struggled to save the yacht after Buck Harrold abandoned it. He succeeded, until Harrold's spiteful trick. And now . . .

"Eh, Joey?" Naal made no attempt to hide his fright. "We go cut cables? Now? Every minute we get closer..."

Joe stood like a run-down robot, eyes sweeping the cabin. To abandon this graceful, sleek Kylos! A glowing dream had come into his mind, during the past few hours. He had seen the slim silver ship at the head of the grain-fleet, leaving Mercis with empty holds, heading for Terra and its waiting wheat elevators. Had seen her outdistancing all others in the fleet, racing like a burnished bullet across the blue-black void. And the return to Mercis, holds full, to claim the high prices that went to the first home-coming grain ship! The man at the controls of the vacht hadn't been Joe Haldene, crystal-prospector . . . but Captain Joseph Haldene, the proud master of a proud ship. That man wouldn't be ashamed to ask Sally Martin to marry him. Such a real dream until . . . Very abruptly Joey straightened up.

"Go ahead, Naal," he said brusquely.

All haste, the big Martian climbed through the air-lock, commenced groping

his way over the hull toward the *High-flier*. Joe remained a moment in the spotless cabin, glanced about.

"Goodbye, . . . Kylos!" he muttered. Then, as though ashamed of himself, he quickly swung up over the top of the lock, clambered over the sloping hull to join Naal.

The Martian, electric torch in hand, was standing in the skiff's small air-lock, ready to cut the heavy steel cables. Joe sprang across the narrow gap, landed beside him.

"Cut now?" Naal urged. "Mars get close!"

JOE glanced down. The red planet's intricate canal system was more clear than before, a net-work of dark lines. The two ships were gleaming in the flare of the skiff's exhausts, but beyond them there was only the star-speckled sable sky. Deimos and Phobos, one to the right, the other to the left, were like cold, unblinking eyes, staring from the darkness.

"All right," Joe whispered into his communications set. "Cut clear!"

"So." Naal swung out, electric torch in hand. "Too bad, Joey, to lose such fine ship. Truly, as my people say, it is day of bad luck, this day of the Wedding of the Moons! First meteor storm, then . . ."

"What!" Joey gripped the reddy's arm, his eyes blue flames. "You say this is the day of the Wedding of the Moons! Wait . . . Switch off that torch!" He slammed the air-lock's outer door, dragged the bewildered Naal into the cabin of the skiff.

"But, Joey," Naal muttered. "We fall! Fast! The yacht drags us down! Unless we cut cables . . ."

Joe, bent over his tattered copy of "Principles of Space Navigation," did not reply. Suddenly he straightened up, grinning.

"You're right!" he exclaimed. "The twelfth! At three-eighteen p. m., Martian!

Directly centered over Mercis! We're not cutting any cables today, Naal!"

"Not cutting cables!" The Martian's green eyes widened. "We die! In crash!" He shook his head stubbornly, picked up the electric torch. "Naal no die!"

"Wait!" Joe caught the big man's elbow. "I've never landed you in any trouble before, have I? You've got to trust me! Now go back in that engine room and get everything you can out of those motors! You hear, Naal? At once!"

Naal remained motionless a moment, his bulging muscles tensed. All at once he wilted before Joe's blazing eyes, dropped the torch.

"Yes . . . matoul," he said humbly, and crawled into the tiny engine room.

For the next hour there was no sound in the skiff's cabin other than the steady roar of the rockets, the clink of tools as Naal made continual adjustments of the motors . . . and the humming of the gravity-detector as it clicked off the rapidly shrinking number of miles between the two ships and the planet below.

Joe disregarded the rapidly-nearing plains below. Like a lay figure he stood before the main observation port. his gaze fixed on the two moons looming white and clear in the sky. Phobos, three thousand miles away, Deimos, eleven thousand. They were nearing each other now, about to pass in their orbits about Mars. Fascinated, Joe watched them slide slowly across the heavens. In another moment, the eclipse . . .

Suddenly footsteps sounded behind him.

"Joey," . . . Naal's voice was piteous . . . "Can get no more power from motors! We fall! Cut cables, *matoul!* Cut cables, please! Now, before we crash, die!"

"Wait, Naal!" Joe stared eagerly at the twin moons. Directly before the bow of the skiff they were meeting, the rim of Phobos overlapping that of the more distant Deimos. "Look! The eclipse! What your people call the Wedding of the Moons!"

Naal gazed, bewildered. Suddenly he gasped. The ominous click-click of the gravity detector was slowing, becoming more deliberate with each instant! No longer was it a blurred humming. Each click, representing ten miles drop, was distinct, separate.

"Slowing!" Naal gasped. "Losing momentum the back-blast of Harrold's rocket gave us! How . . . how . . . !"

"Don't you see?" Joey laughed exultantly. "It's gravity! An eclipse . . . the Wedding of the Moons! Moons small, yet close enough to Mars to have a strong pull! One alone wouldn't have done it, but two, lined up by the eclipse, give a double gravitational attraction, are strong enough to check us! You understand? We're in a direct line—the two moons, then us, then Mars! Their drag is enough to slow us, nullify the momentum Harrold gave us! Easy now, for the old High-flier to take the lightened Kylos in! We're going home, Naal! Safely!"

A N HOUR later the two ships, still linked by the heavy cable, settled gently upon the space-port at Mercis. Naal, swinging down from the *High-flier's* air-lock, patted his bare feet delightfully upon the warm red sand of the planet.

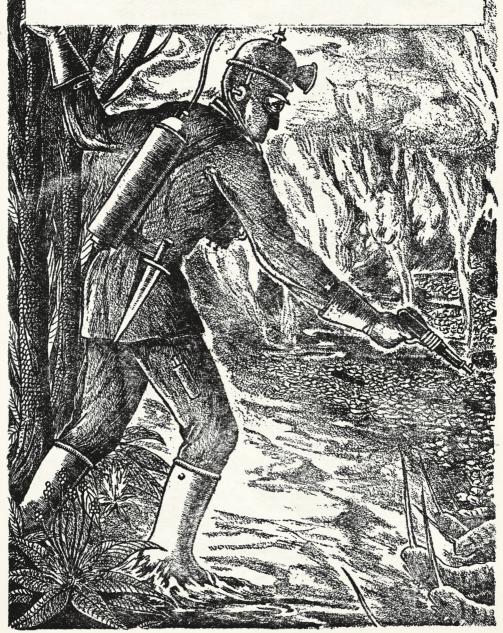
"Home!" he laughed exultantly. "Joey, matoul, you best damn spaceman on all Mars! Yes, and Terra, too! Haie! What a trip! Me, I think I go get drunk!"

"Go to it." Joe climbed wearily from the skiff, stared with bright eyes at the graceful silver ship alongside. "And, Naal. Stop by Martin's on your way through town, Tell Sally that"—he squared his tired shoulders—"that Captain Joseph Haldene of the space cruiser Kylos would like to see her tonight!"

THE CALLISTAN MENACE

By Isaac Asimov

What was on Callisto, the tiny moon of vast Jupiter, that was deadly enough to make seven well-armed, well-equipped space expeditions disappear? And could the Eighth Expedition succeed where those others had failed?





"AMN Jupiter!" growled Ambrose Whitefield viciously, and I nodded agreement.

"I 've been on the Jovian satellite run." I said, "for fifteen years and I've heard those two words spoken maybe a million

times. It's probably the most sincere curse in the Solar System."

Our watch at the controls of the scoutship *Ceres* had just been relieved and we descended the two levels to our room with dragging steps. "Damn Jupiter—and damn it again," insisted Whitefield morosely. "It's too big for the System. It stays out there behind us and pulls and pulls and pulls! We've got to keep the Atomos firing all the way. We've got to check our course—completely—every hour. No relaxation, no coasting, no taking it easy! nothing but the rottenest kind of work."

There were tiny beads of perspiration on his forehead and he swabbed at them with the back of his hand. He was a young fellow, scarcely thirty, and you could see in his eyes that he was nervous, and even a little frightened.

And it wasn't Jupiter that was bothering him, in spite of his profanity. Jupiter was the least of our worries. It was Callisto! It was that little moon which gleamed a pale blue upon our visiplates that made Whitefield sweat and that had spoiled four night's sleep for me already. Callisto! Our destination!

Even old Mac Steeden, gray mustachioed veteran who, in his youth, had sailed with the great Peewee Wilson himself, went about his duties with an absent stare. Four days out—and ten days more ahead of us—and panic was reaching out with clammy fingers.

We were all brave enough in the ordinary course of events. The eight of us on the *Ceres* had faced the purple Lectronics and stabbing Disintos of pirates and rebels and the alien environments of half a dozen worlds. But it takes more than run-of-the-mill bravery to face the unknown; to face Callisto, the "mystery world" of the Solar System.

One fact was known about Callisto—one grim, bare fact. Over a period of twenty-five years, seven ships, progressively better equipped, had landed—and never been heard from again. The Sun day supplements peopled the satellite with anything from super-dinosaurs to invisible ghosts of the fourth dimension, but that did not solve the mystery.

We were the eighth. We had a better ship than any of those preceding. We were the first to sport the newly-developed beryl-tungsten hull, twice as strong as the old steel shells. We possessed superheavy armaments and the very latest Atomic Drive engines.

Still — we were only the eighth and every man jack of us knew it.

HITEFIELD entered our quarters silently and flopped down upon his bunk. His fists were clenched under his chin and showed white at the knuckles. It seemed to me that he wasn't far from the breaking point. It was a case for careful diplomacy.

"What we need," said I, "is a good, stiff drink."

"What we need," he answered harshly, "is a hell of a lot of good, stiff drinks." "Well, what's stopping us?"

He looked at me suspiciously, "You know there isn't a drop of liquor aboard ship. It's against Navy regulations!"

"Sparkling green Jabra water," I said slowly, letting the words drip from my mouth. "Aged beneath the Martian deserts. Melted emerald juice. Bottles of it! Cases of it!"

"Where?"

"I know where. What do you say? A few drinks—just a few—will cheer us both up."

For a moment, his eyes sparkled, and then they dulled again, "What if the Captain finds out? He's a stickler for discipline, and on a trip like this, it's liable to cost us our rating."

I winked and grinned, "It's the Captain's own cache. He can't discipline us without cutting his own throat—the old hypocrite. He's the best damn Captain there ever was, but he likes his emerald water."

Whitefield stared at me long and hard, "All right. Lead me to it."

We slipped down to the supply room,

which was deserted, of course. The Captain and Steeden were at the controls; Brock and Charney were at the engines; and Harrigan and Tuley were snoring their fool heads off in their own room.

Moving as quietly as I could, through sheer habit, I pushed aside several crates of food tabs and slid open a hidden panel near the floor. I reached in and drew out a dusty bottle, which, in the dim light, sparkled a dull sea-green.

"Sit down," I said, "and make your-self-comfortable." I produced two tiny cups and filled them.

Whitefield sipped slowly and with every evidence of satisfaction. He downed his second at one gulp.

"How come you volunteered for this trip, anyway, Whitey?" I asked, "You're a little green for a thing like this."

He waved his hand, "You know how it is. Things get dull after a while. I went in for zoology after getting out of college—big field since interplanetary travel—and had a nice comfortable position back on Ganymede. It was dull, though; I was bored blue. So I joined the navy on an impulse, and on another I volunteered for this trip." He sighed ruefully, "I'm a little sorry I did."

"That's not the way to take it, kid: I'm experienced and I know. When you're panicky, you're as good as licked. Why, two months from now, we'll be back on Ganymede."

"I'm not scared if that's what you're thinking," he exclaimed angrily. "It's-it's," there was a long pause in which he frowned at his third cupfull. "Well, I'm just worn out trying to imagine what the hell to expect. My imagination is working overtime and my nerves are rubbing raw."

"Sure, sure," I soothed, "I'm not blaming you. It's that way with all of us, I guess. But you have to be careful. Why. I remember once on a Mars-Titan trip, we had—"

Whitefield interrupted what was one of my favorite yarns—and I could spin them as well as anyone in the service—with a jab in the ribs that knocked the breath out of me.

He put down his Jabra gingerly.

"Say, Jenkins," he stuttered, "I haven't downed enough liquor to be imagining things, have I?"

"That depends on what you imagined."

"I could swear I saw something move somewhere in the pile of empty crates in the far corner."

"That's a bad sign," and I took another swig as I said it. "Your nerves are going to your eyes and now they're going back on you. Ghosts, I suppose, or the Callistan menace looking us over in advance."

"I saw it, I tell you. There's something alive there." He edged towards me—his nerves were plenty shot—and for a moment, in the dim, shadowy light even I felt a bit choked up.

"You're crazy," I said in a loud voice, and the echoes calmed me down a bit. I put down my empty cup and got up just a wee bit unsteadily. "Let's go over and poke through the crates."

Whitefield followed me and together we started shoving the light aluminum cubicles this way and that. Neither of us was quite one hundred per cent. sober and we made a fair amount of noise. Out of the corner of my eye, I could see Whitefield trying to move the case nearest the wall.

"This one isn't empty," he grunted, as it lifted very slightly off the floor.

Muttering under his breath, he knocked off the cover and looked in. For a half second he just stared and then he backed away slowly. He tripped over something and fell into a sitting position, still gaping at the case.

I watched his actions with raised eyebrows, then glanced hastily at the case in question. The glance froze into a steady glare, and I emitted a hoarse yell that rattled off each of the four walls. A boy was sticking his head out of the case—a red-haired dirty-faced kid of thirteen or thereabouts.

"Hello," said the boy as he clambered out into the open. Neither of us found the strength to answer him, so he continued, "I'm glad you found me. I was getting a cramp in my shoulder trying to curl up in there."

Whitefield gulped audibly, "Good God! A kid stowaway! And on a voyage to Callisto!"

"And we can't turn back," I reminded in a stricken voice, "without wrecking ourselves. The Jovian satellite run is poison."

"Look here," Whitefield turned on the kid in sudden belligerence. "Who are you, you young nut, and what are you doing here?"

The kid flinched, "I'm Stanley Fields," he answered, a bit scared. "I'm from New Chicago on Ganymede. I—I ran away to space, like they do in books." He paused and then asked brightly, "Do you think we'll have a fight with pirates on this trip, mister?"

There was no doubt that the kid was filled to the brim with "Dime Spacers." I used to read them myself as a young-ster.

"How about your parents?" asked Whitefield, grimly.

"Oh, all I got's an uncle. He won't care much, I guess." He had gotten over his first uneasiness and stood grinning at us.

"Well, what's to be done?" said White-field, looking at me in complete helplessness.

I shrugged, "Take him to the Captain. Let him worry."

"And how will he take it?"

"Anyway he wants. It's not our fault. Besides, there's absolutely nothing to be done about the mess."

And grabbing an arm apiece, we walked away, dragging the kid between us.

CAPTAIN BARTLETT is a capable officer and one of the deadpan type that very rarely displays emotion. Consequently, on those few occasions when he does, it's like a Mercurian volcano in full eruption—and you haven't lived until you've seen one of those.

It was a case of the final straw. A satellite run is always wearing. The image of Callisto up ahead was harder on him than on any member of the crew. And now there was this kid stowaway.

It wasn't to be endured! For half an hour, the Captain shot off salvo after salvo of the very worst sort of profanity. He started with the sun and ran down the list of planets, satellites, astroids, comets to the very meteors themselves. He was starting on the nearer fixed stars, when he collapsed from sheer nervous exhaustion. He was so excited that he never thought to ask us what we were doing in the storeroom in the first place, and for that Whitefield and I were duly grateful.

But Captain Bartlett is no fool. Having purged his system of its nervous tension, he saw clearly that that which cannot be cured must be endured.

"Someone take him and wash him up." he growled wearily, "and keep him out of my sight for a while." Then, softening a bit, he drew me towards him, "Don't scare him by telling him where we're going. He's in a bad spot, the poor kid."

When we left, the old soft-hearted fraud was sending through an emergency message to Ganymede trying to get in touch with the kid's uncle.

OF course, we didn't know it at the time, but that kid was a Godsend—a genuine stroke of Old Man Luck. He took our minds off Callisto. He gave us something else to think about. The tension, which at the end of four days, had almost reached the breaking point, eased completely.

There was something refreshing in the kid's natural gayety; in his bright ingeniousness. He would meander about the ship asking the silliest kind of questions. He insisted on expecting pirates at any moment. And, most of all, he persisted in regarding each and every one of us as "Dime Spacer" heroes.

That last flattered our egos, of course, and put us on our mettle. We vied with each other in chest-puffing and tale-telling, and old Mac Steeden, who in Stanley's eyes was a demi-god, broke the all-time record for plain and fancy lying.

I remember, particularly, the talk-fest we had on the seventh day out. We were just past the midpoint of the trip and were set to begin a cautious deceleration. All of us (except Harrigan and Tuley, who were at the engines) were sitting in the control room. Whitefield, with half an eye on the Mathematico, led off, and, as usual, talked zoology.

"It's a little slug-like thing," he was saying, "found only on Europa. It's called the Carolus Europis but we always referred to it as the Magnet Worm. It's about six inches long and has a sort of a slate-grey color—most disgusting thing you could imagine.

"We spent six months studying that worm, though, and I never saw old Mornikoff so excited about anything before. You see, it killed by some sort of magnetic field. You put the Magnet Worm at one end of the room and a caterpillar, say, at the other. You wait about five minutes and the caterpillar just curls up and dies.

"And the funny thing is this. It won't touch a frog—too big; but if you take that frog and put some sort of iron band about it, that Magnet Worm kills it just like that. That's why we know it's some type of magnetic field that does it—the presence of iron more than quadruples its strength."

His story made quite an impression on

us. Joe Brock's deep bass voice sounded, "I'm damn glad those things are only four inches long, if what you say is right."

Mac Steeden stretched and then pulled at his grey mustachios with exaggerated indifference, "You call that worm unusual. It isn't a patch on some of the things I've seen in my day—." He shook his head slowly and reminiscently, and we knew we were in for a long and gruesome tale. Someone groaned hollowly, but Stanley brightened up the minute he saw the old veteran was in a story telling mood.

Steeden noticed the kid's sparkling eyes, and addressed himself to the little fellow, "I was with Peewee Wilson when it happened—you've heard of Peewee Wilson, haven't you?"

"Oh, yes," Stanley's eyes fairly exuded hero-worship. "I've read books about him. He was the greatest spacer there ever was."

"You bet all the radium on Titan he was, kid. He wasn't any taller than you, and didn't scale much more than a hundred pounds, but he was worth five times his weight in Venusian Devils in any fight. And me and him were just like that. He never went anyplace but what I was with him. When the going was toughest it was always me that he turned to."

He sighed lugubriously, "I was with him to the very end. It was only a broken leg that kept me from going with him on his last voyage—"

HE choked off suddenly and a chilly silence swept over all of us. Whitefield's face went gray, the Captain's mouth twisted in a funny sort of way, and I felt my heart skid all the way down to the soles of my feet.

No one spoke, but there was only one thought among the six of us. Peewee Wilson's last trip had been to Callisto. He had been the second—and had never returned. We were the eighth.

Stanley stared from one to the other of us in astonishment, but we all avoided his eyes.

It was Captain Bartlett that recovered first.

"Say, Steeden, you've got an old spacesuit of Peewee Wilson's, haven't you?" His voice was calm and steady but I could see that it took a great deal of effort to keep it so.

Steeden brightened and looked up. He had been chewing at the tips of his mustachios (he always did when nervous) and now they hung downwards in a bedraggled fashion.

"Sure thing, Captain. He gave it to me with his own hand, he did. It was back in '23 when the new steel suits were just being put out. Peewee didn't have any more use for his old vitri-rubber contraption, so he let me have it—and I've kept it ever since. It's good luck for me."

"Well, I was thinking that we might fix up that old suit for the boy here. No other suit'll fit him, and he needs one bad."

The veteran's faded eyes hardened and he shook his head vigorously, "No sir, Captain. No one touches that old suit. Peewee gave it to me himself. With his own hand! It's—it's sacred, that's what it is."

The rest of us chimed in immediately upon the Captain's side but Steeden's obstinay grew and hardened. Again and again, he would repeat tonelessly, "That old suit stays where it is." And he would emphasize the statement with a blow of his gnarled fist.

We were about to give up, when Stanley, hitherto discreetly silent, took a hand.

"Please, Mr. Steeden," there was just the suspicion of a quaver in his voice. "Please let me have it. I'll take good care of it. I'll bet if Peewee Wilson were alive today he'd say I could have it." His blue eyes misted up and his lower lip trembled a bit. The kid was a perfect actor.

Steeden looked irresolute and took to biting his mustache again, "Well—oh, hell, you've all got it in for me. The kid can have it but don't expect me to fix it up! The rest of you can lose sleep—I wash my hands of it."

And so Captain Bartlett killed two birds with one stone. He took our minds off Callisto at a time when the morale of the crew hung in the balance and he gave us something to think about for the remainder of the trip—for renovating that ancient relic of a suit was almost a week's job.

We worked over that antique with a concentration out of all proportion to the importance of the job. In its pettiness, we forgot the steadily growing orb of Callisto. We soldered every last crack and blister in that venerable suit. We patched the inside with close-meshed aluminum wire. We refurbished the tiny heating unit and installed new tungsten oxygen containers.

Even the Captain was not above giving us a hand with the suit, and Steeden, after the first day, in spite of his tirade at the beginning, threw himself into the job with a will.

We finished it the day before the scheduled landing, and Stanley, when he tried it on, glowed with pride, while Steeden stood by, grinning and twirling his mustache

A ND as the days passed, the pale blue circle that was Callisto grew upon the visiplate until it took up most of the sky. The last day was an uneasy one. We went about our tasks abstractedly, and studiously avoided the sight of the hard, emotionless satellite ahead.

We dived—in a long, gradually contracting spiral. By this maneuvre, the Captain had hoped to gain some preliminary knowledge of the nature of the planet and its inhabitants, but the information gained was almost entirely negative.

The large percentage of carbon dioxide present in the thin, cold atmosphere, was congenial to plant life so that vegetation was plentiful and diversified. However, the three per cent. oxygen content seemed to preclude the possibility of any animal life, other than the simplest and most sluggish species. Nor was there any evidence at all of cities or artificial structures of any kind.

Five times we circled Callisto before sighting a large lake, shaped something like a horse's head. It was towards that lake that we gently lowered ourselves, for the last message of the seventh expedition—Peewee Wilson's expedition—spoke of landing near such a lake.

We were still half a mile in the air, when we located the gleaming metal ovoid that was the *Phobos*, and when we finally thumped softly on to the green stubble of vegetation, we were scarcely five hundred yards from the unfortunate craft.

"Strange," muttered the Captain, after we had all congregated in the control room, waiting for further orders, "there seems to be no evidence of any violence at all."

It was true! The *Phobos* lay quietly, seemingly unharmed. It's old-fashioned steel hull glistened brightly in the yellow light of a gibbous Jupiter, for the scant oxygen of the atmosphere could make no rusty inroads upon its resistant exterior.

The Captain came out of a brown study and turned to Charney at the radio.

"Ganymede has answered?"

"Yes, sir. They wish us luck." He said it simply, but a cold shiver ran down my spine.

Not a muscle of the Captain's face flickered, "Have you tried to communicate with the *Phobos*?"

"No answer, sir."

"Three of us will investigate the *Phobos*. Some of the answers, at least, should be there."

"Matchsticks!" grunted Brock, stolidly.

The Captain nodded gravely.

He palmed eight matches, breaking three in half, and extended his arm towards us, without saying a word.

Charney stepped forward and drew first. It was broken and he stepped quietly towards the space-suit rack. Tuley followed and after him Harrigan and Whitefield. Then I, and I drew the second broken match. I grinned and followed Charney, and in thirty seconds, old Steeden himself joined us.

"The ship will be backing you fellows," said the Captain quietly, as he shook our hands. "If anything dangerous turns up, run for it. No heroics now, for we can't afford to lose men."

WE inspected our pocket Lectronics and left. We didn't know exactly what to expect and weren't sure but that our first steps on Callistan soil might not be our last, but none of us hesitated an instant. In the "Dime Spacers." courage is a very cheap commodity, but it is rather more expensive in real life. And it is with considerable pride that I recall the firm steps with which we three left the protection of the *Ceres*.

I looked back only once and caught a glimpse of Stanley's face pressed white against the thick glass of the porthole. Even from a distance, his excitement was only too apparent. Poor kid! For the last two days he had been convinced we were on our way to clean up a pirate stronghold and was almost dying with impatience for the fighting to begin. Of course, none of us cared to disillusion him.

The outer hull of the *Phobos* rose before us and overshadowed us with its might. The giant vessel lay in the dark green stubble, silent as death. The seventh to attempt and fail. And we were the eighth.

Charney broke the uneasy silence, "What are these white smears on the hull?"

He put up a metal-encased finger and rubbed it along the steel plate. He withdrew it and gazed at the soft white pulp upon it. With an involuntary shudder of disgust, he scraped it off upon the coarse grass beneath.

"What do you think it is?"

The entire ship as far as we could see -except for that portion immediately next the ground-was besmeared by a thin layer of the pulpy substance. It looked like dried foam-like-

I said: "It looks like slime left after a giant slug had come out of the lake and slithered over the ship."

I wasn't serious in my statement, of course, but the other two cast hasty looks at the mirror-smooth lake in which Jupiter's image lay unruffled. Charney drew his hand Lectronic.

"Here!" cried Steeden, suddenly, his voice harsh and metallic as it came over the radio, "that's no way to be talking. We've got to find some way of getting into the ship; there must be some break in its hull somewhere. You go around to the right, Charney, and you, Jenkins, to the left. I'll see if I can't get atop of this thing somehow."

Eyeing the smoothly-round hull care-



THREE STRONG NOVELETTES IN THIS ISSUE!

Old Charley Ruane had once been the law in Venture Valley, but now one son rode the outlaw trails, and the other was a drunken, broken sheriff at whom crooks jeered . . until the memory of a promise to a dying man brought them together, and in a hell of blood and lead and gunsmoke, they found. . .

TWO PATHS TO GLORY
by BARRY CORD
Tom Roan, C. William Harrison, and other writers
of top-notch Western fiction also appear in this month's issue of



fully, he drew back and jumped. On Callisto, of course, he weighed only twenty pounds or less, suit and all, so he hose upwards some thirty or forty feet. He slammed against the hull lightly, and as he started sliding downwards, he grabbed a rivet-head and scrambled to the top.

Waving a parting to Charney at this point, I left.

"Everything all right?" the Captain's voice sounded thinly in my ear.

"All O.K.," I replied gruffly, "so far." And as I said so, the Ceres disappeared behind the convex bulge of the dead Phobos and I was entirely alone upon the mysterious moon.

I pursued my round silently thereafter. The spaceship's "skin" was entirely unbroken except for the dark, staring portholes, the lowest of which were still well above my head. Once or twice I thought I could see Steeden scrambling monkeylike on top the smooth hulk, but perhaps that was only fancy.

I reached the prow at last which was bathed in the full light of Jupiter. There, the lowest row of portholes were low enough to see into and as I passed from one to the other I felt as if I were gazing into a shipfull of spectres, for in the ghostly light all objects appeared only as flickering shadows.

It was the last window in the line that proved to be of sudden, overpowering interest. In the yellow rectangle of Jupiter-light stamped upon the floor, there sprawled what remained of a man. His clothes were draped about him loosely and his shirt was ridged as if the ribs below had moulded it into position. In the space between the open shirt collar and engineer's cap, there showed a grinning, eyeless skull. The cap, resting askew upon the smooth skullcase, seemed to add the last refinement of horror to the sight.

A shout in my ears caused my heart to It was Steeden, exclaiming profanely somewhere above the ship. Almost at once, I caught sight of his ungainly steel-clad body slipping and sliding down the side of the ship.

We raced towards him in long, floating leaps and he waved us on, running ahead of us, towards the lake. At its very shores, he stopped and bent over home half-buried object. Two bounds brought us to him, and we saw that the object was a space-suited human, lying face downward. Over it was a thick layer of the same slimy smear that covered the *Phobos*.

"I caught sight of it from the heights of the ship," said Steeden, somewhat breathlessly, as he turned the suited figure over.

What we saw caused all three of us to explode in a simultaneous cry. Through the glassy visor, there appeared a leprous countenance. The features were putrescent, fallen apart, as if decay had set in and ceased because of the limited air supply. Here and there a bit of gray bone showed through. It was the most repulsive sight I have ever witnessed, though I have seen many almost as bad.

"My God!" Charney's voice was half a sob. "They simply die and decay." He told Steeden of the clothed skeleton we had seen through the porthole.

"Damn it, it's a puzzle," growled Steeden, "and the answer must be inside the Phobos," There was a momentary silence, "I tell you what. One of us can go back and get the Captain to dismount the Disintegrator. It ought to be light enough to handle on Callisto, and at low power, we can draw it fine enough to cut a hole without blowing the entire ship to kingdom come. You go, Jenkins. Charney and I will see if we can't find any more of the poor devils."

I set off for the *Ceres* without further urging, covering the ground in space-devouring leaps. Three-quarters of the distance had been covered when a loud shout, ringing metallicly in my ear, brought me to a skidding halt. I wheeled

in dismay and remained petrified at the sight before my eyes.

THE surface of the lake was broken into boiling foam and from it there reared the fore-parts of what appeared to be giant caterpillars. They squirmed out upon land, dirty-grey bodies dripping slime and water. They were some four feet long, about one foot in thickness, and their method of locomotion was the slowest of oxygen-conserving crawls. Except for one stalky growth upon their forward end, the tip of which glowed a faint red, they were absolutely feature-less.

Even as I watched, their numbers increased, until the shore became one heaving mass of sickly gray flesh.

Charney and Steeden were running towards the *Ceres*, but less than half the distance had been covered when they stumbled, their run slowing to a blind stagger. Even that ceased, and almost together they fell to their knees.

Charney's voice sounded faintly in my ear, "Get help! My head is splitting. I can't move! I—" Both lay still now.

I started towards them automatically, but a sudden sharp pang just over my



temples staggered me, and for a moment I stood confused.

Then I heard a sudden unearthly shout from Whitefield, "Get back to the ship, Jenkins! Get back! Get back!"

I turned to obey, for the pain had increased into a continuous tearing pain. I weaved and reeled as I approached the yawning airlock, and I believe that I was at the point of collapse when I finally fell into it. After that, I can recall only a jumble for quite a period.

My next clear impression was of the control-room of the Ceres. Someone had dragged the suit off me, and I gazed about me in dismay at a scene of the utmost confusion. My brain was still somewhat addled and Captain Bartlett as he leant over me appeared double.

"Do you know what those damnable creatures are?" He pointed outwards at the giant caterpillars.

I shook my head mutely.

"They're the great grand-daddies of the Magnet Worm Whitefield was telling us of once. Do you remember the Magnet Worm?"

I nodded, "The one that kills by a magnetic field which is strengthened by surrounding iron."

"Damn it, yes," cried Whitefield, interrupting suddenly. "I'll swear to it. If it wasn't for the lucky chance that our hull is beryl-tungsten and not steel—like the *Phobos* and the rest—every last one of us would be unconscious by now and dead before long."

"Then that's the Callistan menace." My voice rose in sudden dismay, "But what of Charney and Steeden?"

"They're sunk," muttered the Captain grimly. "Unconscious — maybe dead. Those filthy worms are crawling towards them and there's nothing we can do about it." He tickled off the points on his fingers. "We can't go after them in a spacesuit without signing our own death warrant—spacesuits are steel. No one can

last there and back without one. We have no weapons with a beam fine enough to blast the Worms without scorching Charney and Steeden as well. I've thought of maneuvering the *Ceres* nearer and making a dash for it, but one can't handle a spaceship on planetary surfaces like that—not without cracking up. We—"

"In short," I interrupted hollowly, "we've got to stand here and watch them die." He nodded, and I turned away bitterly.

I felt a slight twitch upon my sleeve and when I turned, it was to find Stanley's wide blue eyes staring up at me. In the excitement, I had forgotten about him, and now I regarded him bad-temperedly.

"What is it?" I snapped.

"Mr. Jenkins," his eyes were red, and I think he would have preferred pirates to Magnet Worms by a good deal, "Mr. Jenkins, maybe I could go out and get Mr. Charney and Mr. Steeden."

I sighed, and turned away.

"But, Mr. Jenkins, I could. I heard what Mr. Whitefield said, and my spacesuit isn't steel. It's vitri-rubber."

"The kid's right," whispered Whitefield slowly, when Stanley repeated his offer to the assembled men. "The unstrengthened field doesn't harm us, that's evident. He'd be safe in a vitri-rubber suit."

"But it's a wreck, that suit!" objected the Captain. "I never really intended having the kid use it." He ended raggedly and his manner was evidently irresolute.

"We can't leave Neal and Mac out there without trying, Captain," said Brock stolidly.

THE Captain made up his mind suddenly and became a whirlwind of action. He dived into the space-suit rack for the battered relic, himself, and helped Stanley into it.

"Get Steeden first," said the Captain,

as he clipped shut the last bolt. "He's older and has less resistance to the field.

—Good luck to you, kid, and if you can't make it, come back right away. Right away, do you hear me?"

Stanley sprawled at the first step, but life on Ganymede had inured him to below normal gravities and he recovered quickly. There was no sign of hesitation, as he leaped towards the two prone figures, and we breathed easier. Evidently, the magnetic field was not affecting him yet.

He had one of the suited figures over his shoulders now and was proceeding back to the ship at an only slightly slower pace. As he dropped his burden inside the airlock, he waved an arm to us at the window and we waved back.

He had scarcely left, when we had Steeden inside. We ripped the spacesuit off him and laid him out, a gaunt pale figure, on the couch.

The Captain bent an ear to his chest and suddenly laughed aloud in sudden relief, "The old geezer's still going strong."

We crowded about happily at hearing that, all eager to place a finger upon his wrist and so assure ourselves of the life within him. His face twitched and when a low, blurred voice suddenly whispered, "So I said to Peewee, I said—" our last doubts were put to rest.

It was a sudden, sharp cry from Whitefield that drew us back to the window again, "Something's wrong with the kid."

Stanley was half way back to the ship with his second burden, but he was staggering now—progressing erratically.

"It can't be," whispered Whitefield, hoarsely, "It can't be. The field can't be getting him!"

"God!" the Captain tore at his hair wildly, "that damned antique has no radio. He can't tell us what's wrong." He

wrenched away suddenly, "I'm going after him. Field or no field, I'm going to get him."

"Hold on, Captain," said Tuley, grabbing him by the arm, "he may make it."

Stanley was running again, but in a curious weaving fashion that made it quite plain, he didn't see where he was going. Two or three times he slipped and fell but each time he managed to scramble up again. He fell against the hull of the ship, at last, and felt wildly about for the yawning airlock. We shouted and prayed and sweated, but could help in no way.

And then he simply disappeared. He had come up against the lock and fallen inside.

We had them both inside in record time, and divested them of their suits. Charney was alive, we saw that at a glance, and after that we deserted him unceremoniously for Stanley. The blue of his face, his swollen tongue, the line of fresh blood running from nose to chin told its own story.

"The suit sprung a leak," said Harrigan.

"Get away from him," ordered the Captain, "give him air."

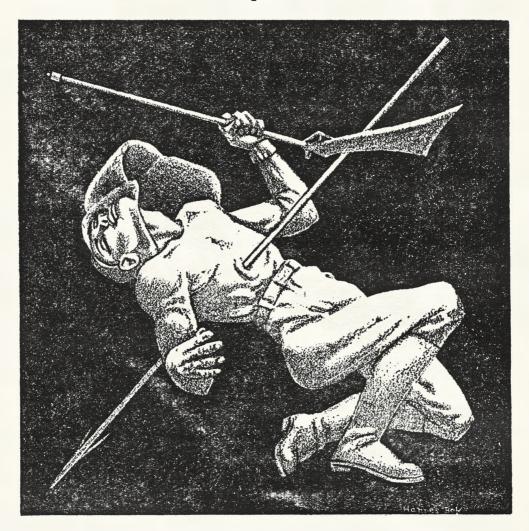
We waited. Finally, a soft moan from the kid betokened returning consciousness and we all grinned in concert.

"Spunky little kid," said the Captain.
"He travelled that last hundred yards on nerve and nothing else." Then, again.
"Spunky little kid. He's going to get a Naval Medal for this, if I have to give him my own."

CALLISTO was a shrinking blue ball on the televisor—an ordinary unmysterious world. Stanley Fields, honorary Captain of the good ship Ceres, thumbed his nose at it, protruding his tongue at the same time. An inelegant gesture, but the symbol of Man's triumph over a hostile Solar System.

STEPSONS OF MARS

Guns are not enough, when the enemy is too strong. But if you can find out their weak point, and if you have one man who has the weapon to be used against it. . . .



By Ivar Towers

CHAPTER ONE

Forced Enlistment

HEN you're unemployed on Mars, you're unemployed for sure. Because the Martians which means the Earth colonists—have a peculiar idea that every individual must ocupy a definite niche in the scheme of things—or else become a derelict wanderer. Martin Sloane and his pal, Red Keating, were learning that very well. Too well in fact; so they tried to forget it by tossing away their last few dollars in the

various dives that lined the Street of Lights in Iopa. When their money was gone, they wouldn't be able to forget any more—but the time to worry about that was when it was gone.

They had strayed in and out of seven of the Street's saloons, and were now in the stage where they chuckled to themselves about the pleasing swaying motion of Iopa's streets. And they were singing, quite pleasantly singing at the top of their powerful voices.

That was when they ran into a broadshouldered and stocky person who wore three chevrons on the sleeve of his grey tunic. The sergeant sprawled in the street for only a second, then bounced up again like one of those non-tiltable dolls and swore offensive oaths in three languages.

Red Keating brooked no insults from a simple soldier, and he swayed up to him with intent to assault. But Sloane wasn't quite so drunk. He shoved Keating back and intervened.

"Sarge," he said, patting the incensed non-com on the chest, "pay no heed wha'soever to my bull-headed friend, who is very, very drunk. We 'pologize mos' profoun'ly for knockin' you into th' gutter an' spoilin' your pretty uniform. Wouldn' have done it for worlds; was accident, pure and simple. Pure like me... simple like m'pal over there."

The sergeant was almost convinced. In fact, he wanted to forget the matter entirely, when Red, who had been patiently listening to his friend's words, decided to lend a hand. His homely Irish mug bent in a simian grin and he attempted to throw a friendly arm about the sergeant's shoulders, but succeeded only in rabbit-punching him and again sprawling him face down in the gutter. This was too much for the already overtaxed trooper, who fished a whistle from a pocket of his blouse and blew lustily on it, summoning several soldiers to his aid.

Not long after, Sloane and Keating

were being marched down the street, each held by three grim and determined guardsmen.

SLOANE yawned and rubbed his eyes. He had a vague idea that he was in jail again. On the other side of the narrow room Red was dumped across a cot. happily snoring like an amorous walrus. his battered face checked by an odd shadow. Tracing it to its source, Keating found it to be cast by a barred window set in the stone wall of a small cell. Looked familiar, he thought, taking in the two cots, sink, and rat-hole.

He shook his head and leaned over to rouse his companion-in-misery. Red sat up and stretched.

"Ouch!" he said brightly, squinting at their surroundings. "Who picked these sumptuous accommodations?"

"As I recall it," said Sloane, gingerly feeling his head, "it was decided for us by twenty hulking brutes, armed with lead pipe. What happened after they got through wiping their feet on us?"

"I'll swear they sat on us. They sat on us, and that is where everything goes blank. Positively blank." Red answered. "I presume we're in the calabozo?"

"Obvious. They should be coming in any minute now to take our orders for breakfast. Personally, I don't want any; I'd much rather crawl into a corner—any corner—and die. What's the antidote for kisju, Red? Or would there be any?"

Before Red could reply, the cell door clanked open and a soldier appeared in the opening, his large ears flapping in his distress.

"Captain wants you two guys," he announced, looking uneasily at the pair. They stared in fascination at his ears.

"C'mon," he insisted. "Down this way."

They proceeded down the corridor, the guard prudently keeping his hand on the butt of an enormous positron pistol bumping against his hip.

"Did you notice those ears?" Sloane whispered. "I'll bet when he's in a hurry—"

"In there," the guard interrupted, gesturing toward a door on which was lettered "Officer of the Day."

The O. D. was a mustached Frenchman attired in the colorful uniform worn by the officers of the Tellurian Army of Maintenance, known familiarly as the "Tellies". This was a force enlisted from the various armies of Earth to keep order on the Red Planet and to protect the interests of the transportation tycoons who sent monthly shipments of luano crystals to the hospitals at home where the valuable mineral, native only to Mars, was used in the treatment of cancer.

The O. D., Captain Redon, according to the plate on his desk, was striding up and down the room when they entered, puffing on a special cigarette made of oxygenized tobacco, which was the only kind that would burn steadily in the planet's rarified atmosphere.

Red nudged his friend. "Looks happy."
The captain stopped in mid-stride and glared at them. The guard whispered a frightened "Shhh!"

Redon savagely snuffed his cigarette and sat down at the desk. He motioned the guard away. There was silence for a moment, and the two unrepentant malefactors looked about them interestedly. The walls of the office were covered with illustrations from Parisian publications. Red looked from one particularly outspoken photograph to the captain:

"Tch-tch," he said.

The captain flushed. "Come here," he said softly—oh, so softly.

They came.

"I understand that you were arrested last night in the Street of Lights, in an advanced state of alcoholism . . ."

"He means we were drunk," the irrepressible Red murmured.

"... and while in that condition," con-

tinued Redon, heroically ignoring the interruption, "assaulted and threatened the life of Sergeant James MacBride. Is that correct?"

"We heard it different," ventured Red.
"That is substantially correct," Sloane contradicted, who was aware that diplomacy, not belligerence, was in order here. He stepped heavily on Red's number ten foot to acquaint him with that fact. Red smiled beatifically at the captain, and kicked Sloane in the shin—hard.

"I guess I was mistaken, at that," he amended. "But we didn't threaten the big lug's life. We just knocked him into the gutter."

"I see. Simply a boyish prank," the captain said acidly. "I am glad, however, that you have chosen to avoid unpleasantness by not lying about the affair. I have a peculiar distate for liars. There are now two courses open to you. You may accept sentence of nine months apiece at field labor on Hornhill 'Port—or you may choose the alternative of enlisting in the Tellurian Army for a period of three years at regular pay. Which is it?"

BOTH men knew what "field labor" meant. Absolute peopage heart-breakmeant. Absolute peonage, heart-breaking toil under the blistering sun at the Interplanetary Spaceport, filling in the deep, intolerably hot pits made by the incandescent exhausts of the great liners as they blasted their way through the thin atmosphere to some other planet. Then at night you dropped your shovel and trudged back to the military barracks, and in spite of the bitter, burning cold you flopped on your hard pallet like a corpse and slept until morning to do it all over again. There was no need for them to confer. They would join the Tellies. Why. lots of impecunious Earthmen had been known to enlist for the mere adventure of it. It was a lark . . . Soldier-of-fortune stuff. Besides, all their money had gone for kisju, and the dollar a day the Tellies got was infinitely preferable to the questionable food and lodging handed out to the field laborers.

They exchanged glances. Sloane modded and turned to Redon.

"Okay, we'll join your army, Captain," he said. "Where do we draw our pretty uniforms?"

"Good." Redon rose and touched a bell. "I congratulate you on your choice. The Army will make men of you." He looked at their lean, flat, muscular bodies. "Even better men; trained and disciplined. I'm sure you'll get more than enough excitement in the ordinary life of the—ah—Tellies. Guard, take these men to Lieutenant Mueller. They are to be fully outfitted and assigned to Training Depot Number Seven. That will be all."

Lieutenant Mueller was a short, stout, roly-poly of a German who might have been a butcher before his army life. He watched in a fatherly sort of a way, sucking placidly on a gurglingly soupy pipe, while Keating and Sloane wrote brief autobiographies on their enlistment forms

"Martin Sloane, American, twenty-six, single. Education: Monticello government school, graduate of Darwich College. Previous military experience: United States Army, five years."

"Raymond Keating, American, twentyeight, single. Education: Dayton government school. Previous military experience: United States Army, five years; Legion Etrangere, two years."

Mueller inspected the papers with a critical eye, corrected one or two small mistakes, and mumbled an inaudible and perfunctory oath of enlistment at them. The next stop was a supply room, to which Mueller personally conducted them. Then, for the first time, he actually spoke to them.

"Slip the supply sergeant a pack of butts," he said, amazingly, "and you may

get a decent fit. So long, boys."

None of the uniforms on the long stacks of shelves were precisely the right size for the two recruits, which somehow didn't seem quite relevant at the moment. The shoes were a bit large at one end but paper stuffed in the toes, or the wearing of three extra pairs of socks, would fix that. The peaked, snappy caps were, on the other hand, entirely too small; although this wouldn't matter long, as the gloomy horse-faced sergeant informed them, since they'd be on desert duty all too soon, where skull-caps and transparent, shoulder-length flexol capes would be the uniform of the day. Their cast-off civilian clothing was stuffed into zippered bags, to be returned, when and if. The sergeant pessimistically indicated a pile of bags that would never be claimed. Red looked at them, and sighed. His mind was dwelling on the contrast between the G. I. cotton underpants he was now wearing, and the blue silk he'd previously prided himself on.

"Y'know, Mart," he murmured, as they slopped out of the supply room, leaving the sergeant to his melancholy meditations, "this is just like the army back home. Only two sizes: too damned big and too damned small."

CHAPTER TWO

The Mysterious Martians

THE barrack room was an uncozy place. Rows of olive-green metal cots stretched from two walls to an aisle in the center. Beneath each cot was a wheeled coffin in which the soldier was expected to keep his equipment, oiled and in such klim-bim order as would bring no tongue-lashing after Saturday inspections. The rookies' spare time was spent in cleaning and oiling their positron rifles, fresh from the arsenals at Osteo and packed with a gummy cosmoline that defied removal, short of picking the particles of grease

from each individual pore of the metal. It was said that this condition was purposely ordered by the powers that be, expressly to keep the poor recruit fruitfully occupied and keep him out of trouble. They were also expected to keep their uniforms laundered and in repair. Equipment- and garrison belts hanging on the hook on the left side of the locker. Dress blouse, followed by G. I. field blouse, both to be buttoned when hung up. Slacks, dress breeches, G. I. field breeches-also buttoned. Cotton or Bombay dress shirts, G. I. field shirt—buttoned. Ties to be hung from the hook on the right-hand side of the locker.

There were a couple of hooks in the back of the locker, too, but nobody ever knew what they were for. Hadn't been used in years.

On the shelf of the locker were ranged, in equally strict and religious order as prescribed by T. R. Seventeen, the close-fitting helmet and earphones by which orders were transmitted in the thin broth of the Martian atmosphere, and a garrison cap. Dress gloves were hidden beneath the cap, and were never worn. There was still a bit of room, on the floor of the by now overcrowded locker, which was reserved for a shoe-box containing polish, cleaning rags, a brush, a can of oil, and a face towel. Then there were a pair of garrison shoes and a pair of boots, both never, never to be found unlaced.

All this had to be removed once a day, generally before breakfast, and the lockers dusted and the bunks made up. Then ho! for the parade ground and fifteen minutes of close-order drill, and then breakfast. After the meal, which was really quite good, consisting of cereal, fruit, bacon and eggs, and coffee—all you wanted, if you were smart—the men marched back to barracks and smoked or slept an extra five minutes, or cleaned up the room, until assembly and drill.

Theirs was a rigorous, sternly disci-

plined life, but, withal, easy enough, once they learned their way around. Keating and Sloane, ex-soldiers and experienced in the devious ways of dodging work and trouble, adjusted themselves almost immediately.

One afternoon Red ran out of the first sergeant's office waving a yellow slip around his head.

"Hey, Mart!" he yelled. "Passes to town! C'mon, unwind yourself!"

Sloane looked up from his task, which happened to be watering one of the mules that had been imported from Earth in an abortive experiment with draft animals.

"Sam here seems to have a touch of the mis'ry. Doesn't appear to be at all well. Must be the atmosphere and general unfamiliarity of the joint." He surveyed the bleak surroundings. "Nope, not a bit like Missouri."

"Poor Sam," Red commented. "I remember when he first got here. He got sore at young Allen, for some reason or other. He waited his chance, and when the time came, he meandered over to where the kid was tieing his bootlace. He reared up and was all set and cocked to let Allen have it. Sam kicked out all right. but not having read any books on the subject, he forgot about the blasted Martian recoil and landed flat on his face. He picked himself up and wandered away, unhappy-like; I never saw such a puzzled look on an animal's face before. And Allen went peacefully about his business, never knowing what missed him."

Sloane laughed. "Poor Sammy; he's just pining away. I don't suppose he'll last much longer . . . I never did like playing nursey to a Missouri mule anyway."

"Yeah. But how about these passes? We going to paint the town red?"

"The whole damned planet's red already. We'll just see that it doesn't get blue tonight."

Red grinned sourly. "Pun my word," he said, and ran.

Martin and Keating turned off the Street of Lights into Thoris Place in search of a new saloon. Halfway down the block stood a decrepit, dark-fronted place, sandwiched between a dance-hall and a cheap hotel.

An age-rotted sign over the entrance proclaimed to all who cared to see that this was Slimy Mary's.

"Prob'ly a very beaut'ful lady," hiccoughed Red, "festerin' in this sink of iniq—inki—aw, in this sink. Whadda say, let's rescue her."

"Oh, hell," Sloane groaned, "you starting that again? What the heck, though... you're quite probably right. But first permit me to straighten thy visor, sir knight—there. Very 'andsome. Now..."

THEY pushed through the swinging doors and walked to the bar, past tables circled by the bleary-eyed dregs of Iopa and the "girls" who consorted with them.

Mary was a washed-out blonde who could easily have passed for forty, in the dusk with the lights behind her. She wore a rubber apron over her magnificent girth, and leaned on the bar, watching her customers with a fishy, dispirited eye.

"Hullo, Princess," was Sloane's greeting. "Get your cloak. We've come to rescue you. Or don't you want to be rescued?"

"Yeah?" said Mary. "Who ya kiddin'?"
"Bright-eyes," said Red, "we are happy.
We are very happy. We've been happy
all night. We would like everybody to be
happy. So you can give me a tremendous
slug of kisju. Give everybody a tremendous slug of kisju... even this frogfaced gentleman next to me, name of
Sloane. Mart, meet Mary. Mary, Mart."

He liked the sound of that. He repeated it several times.

"Mary." said Sloane, "may we serve you, my pretty? Can we slay some evil knight for you?" Mary decided that the best way to get rid of these nasty people was to fall in with their ideas. he pointed out a man at the other end of the bar, with his back to them. "See that guy?" she asked. "I don't like his face. I can't see it from here, but I still don't like it. Sorta slug him for me, will ya?"

"Sure. Sure," Red agreed happily. "Anything you say, Mary."

He picked up a handy bottle and advanced on the unsuspecting victim, licking his lips and walking on tiptoe. He raised the bottle.

It had come to Sloane, meanwhile, that there was something oddly familiar about the man with his back toward them. Now he knew. The fact that the stranger wore civilian clothes had thrown him off for a moment, but he recognized him now.

"Red!" he yelled. "Don't hit that guy! It's-"

Too late! The bottle smashed down.

Sergeant MacBride rose unsteadily to his feet and combed glass out of his hair. He looked uncertainly about him with glazed eyes until he spotted the astonished faces of Mart and Keating. The sergeant turned apoplectic; his collar seemed to be choking him.

.."You!" he said. With great and obvious self-control he pulled himself together. "Come on," he said, calmly taking each of the soldiers by an arm. "Come quietly. Come very quietly. I want to have a long, long talk with you."

Sloane paused at the doors. He looked back.

"Mary," he said, "that was a helluva dirty trick."

THE drills on the parade ground of the Iopa Reservation were long, tedious, tiring, and much-cursed, but necessary. Without this preliminary training the Tellies' troops would not have lasted a day in the desert. Drill—drill—drill—and drill some more. Marking time full pack,

marching up and down . . . squads right and squads left, right front into line . . . and then the dirty son-of-a-gun—he gives us double time . . .

Exercises under the noonday sun under the supervision of barking non-coms. And the fifteen-mile marches out into the desert, where the men set up camp, cook and eat their noontime meal, rest for an hour, and return to Iopa. "Picnics," these little trips were called.

Toward evening, one day, Sloane and Keating sat with Barry Fawnes on the latter's cot, polishing their equipment and talking of people they had known back on Earth,

"Speaking of people," said Keating suddenly, "where're all the natives? Mart and I have been here for eight months now, and not a lousy Martian have we seen. You'd think they'd pop up once in a while, running a shop, or as guides, or something."

"That's been puzzling me, too," put in Sloane. "Not only the fact that you never see them, but that no one ever mentions them or refers to them in any way. Yet there must be some about some place. Too many things point to it. Their buildings, for instance; old, but not terribly so. Not more than one or two hundred years, at any rate. And the roads . . . magnificent! Paved smoother than anything on Earth. And yet no Martians. Surely they can't all have died off before we arrived!"

Fawnes looked at his reflection in the bit of metal he was industriously rubbing, and glanced up at them. "Oh, there are Martians, certainly. Not the ones that built the roads and buildings, however. Those structures are at least a thousand years old; the roads are older yet. Out in the desert you will find ruins that will make those buildings you saw look like a new housing project.

"The first Martians seen at close range were those that greeted the first space-

ship to land. They waited until the ship had grounded and the crew emerged, then killed them all and lugged the ship off into the desert and buried it there. They did the same thing to the second ship three years later, and they plagued merry hell out of the first colonists. Kept 'em in a perpetual state of siege, you know. When more Earthmen, and more, arrived, though, the Martians grew quite cautious and withdrew into their abandoned cities in the Outlands. They've always been rather a mystery to everyone. I've been in the service for five years, and in all that time I've seen but three and those were at least a mile from me at the time. They never seem to come near the cities any more."

"What do they look like?" Sloane questioned.

Fawnes shrugged. "From what little I've seen, and from what I've heard, which might very well be fable, they're eight-foot horrors, oval-shaped and greenish. They get around pretty swiftly, though no one knows how—they may or may not have legs. You see, nobody at all knows anything about them."

Red shuddered. "Nice pets," he said, and spat, accurately inundating a tiny lizard investigating the mysteries of a crack in the cement floor. The lizard scurried away.

Martin looked at him sorrowfully, a shocked, hurt expression twisting his lean face. "Oh, you low, vulgar person!" he exclaimed, mournfully, shaking his head.

DISCIPLINE was even more strict at Camp Shroyer, whither the two were transferred, but orders couldn't stop the men from thinking. The colonel's orderly heard something at the keyhole of a conference, and told the mess-sergeant. The mess-sergeant told the sutler-sergeant, who told just one corporal, who told a friend who happened to be a private, and in an hour it was all over the post.

Sloane sat on the edge of his bunk, his feet in a pan of warm water, after the inevitable march into the middle of nowhere and back, when Red shattered his lauguorous calm. "I hear," said Red, "about those things—"

Mart looked at him with murder in his eye. "That's just fine," he said acidly. "Look, Red, I was happy until you came in. Won't you please go very far away? What things?"

The big man goggled.

"Don't you know? Where've you been? I got it from a personal friend of the commandant—we march tomorrow!"

Sloane sank back with a groan. His face turned scarlet and his eyes bulged dangerously. "Oh, God! Oh, you—you—! Of course we march tomorrow . . ."

"No, no! I mean, against the Greenies, Mart! Aren't you excited? Aren't you scared?"

The miraculously recovered man smiled quietly. "Not yet, kid. But I will be. It's only the lad without any gray matter that isn't afraid of anything. You've got to conquer fear to be brave, and here's how you can do it. You know how to handle a posi-rifle; sometimes the gun backfires, and you get your face burned, but it isn't often. And when a good marksman aims and fires, he can call his shots. Well-you're the shot. Somebody . . . something aimed you in one direction and whatever you think you're doing you're going ahead the way you were aimed, and nowhere else. That's predestination, my son—and if you can't overcome your fear of the Greenies, or if you're all set to go in and rip them open and take their hides home on your belt, you won't do what you aren't meant to do by the man behind the gun."

Red scratched his head. He had been listening and trying to understand, when all he knew was that he wasn't afraid any more, and that he felt closer than ever before to his companion of drunken

days and nights. He said, "Damned if I see what you mean, but I'll take your word for it, Martin. But we gotta get ready for inspection in a couple of hours. Let me have your rifle; I'll polish it up a little."

"Nuts to you, y'big lug!" said Sloane. "I've got arms, haven't I?"

CHAPTER THREE

On the March

THE guns glistened dully in the hot spears of the Martian sun as a snaky column of one hundred or so men, in neutral-colored uniforms, marched with the long, swinging stride that produced maximum efficiency for the air and gravity of the red planet. In the fifth rank, side by side, strode Red and Sloane. They had been ten long days on the road, and soon there would be no more road—just sand. Sloane knew what that meant: sun from above and sun from below, made more terrible by its reflection from the blistering floor of the desert. The flexol capes were sweaty and uncomfortable, but a man who neglected to don the garment that enveloped his head and shoulders in crinkling folds would first be blistered, then driven mad by the harsh, pitiless radiations. And when the sun shot below the flat horizon and the icy winds swept around the little, two-man shelters, there was no relief.

Why were they fighting for possession of a dead planet? Why were they marching into hells undreamed of back on happy little Earth? Not one-quarter of the men knew, but it was for their home world that they threw their lives away.

Mars is a pauper among the worlds, for air and water, but its treasures of minerals are almost limitless. Dreaded cancer's claws had been at the throat of the Third Planet ever since the dawn of man; with the Age of Machines they spread wider and gripped all the tighter.

It was as though the spirit of disease had loosened its clutch for a space, but to jeer at man, and then to haul him back to the slime.

Then the priceless luano crystals were discovered on Mars; tiny gleaming things that meant life to Earth and its peoples. The ships that drove through space were loaded with the stuff; it was for that that the Tellies were stationed on the bleak, red world. For there had drifted rumors back to Tellus-ugly rumors of great, horrible green things. The miners who lived there and had established true homes; the "wanted" men and women who had found brief haven far from the scene of their crimes; the giddy creatures of wealth who scurried to Mars for the thrills and the novelty; the seekers of easy wealth who probed the low, tough hills for gems and metals: and the men of science who had come to the strange planet for the sake of the new knowledge-something was wrong, they all said. No, not all, for not all were there. It was conceivable that men had died of the myriad vices to be found in the jerry-built sin-centers, but the terrified whispers persisted and grew. Caravans had vanished. Colonies had been utterly extinguished; not a trace of them ever found to prove their previous existence. And when the supply of luano was checked, the Tellies came into

This was to be no mere punitive patrol, thought Sloane, easing his rifle on his shoulder. This was a strong force of one hundred and fifty picked men. The time was near when—

There was a faint musical chiming in his ears; by his side Heimroth, the German, was sinking so slowly and quietly to his knees; then he sprawled flatly and limply. The column dispersed to the sides of the road as one hundred men assumed one hundred defensive positions, but no enemy was in sight, nor did any further casualties ensue.

A sliver of copper ten inches long protruded from the body's throat. Tersely the M. O. gave his statement, the peculiarly deadly nature of the missile lay in the fact that it spun so swiftly and violently in its flight that it twisted and tore veins, muscles, and tendons as far as eighteen inches from the actual wound. A nasty weapon.

The column moved on, some men sweating and white-faced with fear, hardly able to pack their rifles. Others were glad of the few moments' rest that tragedy had afforded them.

They reached the road's end, and without a pause marched on, their eyes hardened for the glare of sun and sand, readjusting their flexol capes on the move and cursing as the recalcitrant material scratched chins and foreheads. The air gradually grew chilly, and a cold, thin wind soughed around them, twisting the sand into fantastic shapes. At the company commander's orders the column halted and bivouaced on the spot. What point to fussiness, when each patch of sand is precisely like its neighbor? Tents were pitched in a neat, circular formation, outposts established. Within twenty minutes the mobile battle-unit had become a quiescent field of furry hillocks, and the sudden Martian night fell.

SILENTLY sentries changed during the night; the first hint of dawn saw a sketchy breakfast distributed to the men, and the striking of the tents. The Tellies were on the march.

A soldier without a watch couldn't have told what time it was when it happened, so embracing was the monotony, but all at once two men staggered, clutched at their bodies, and fell, and some heard faint tinklings. The line held and went on, but there were heard mutterings against the officers who were driving them into slaughter; insensibly the tension increased until, about noon, the first file screamed



and pointed ahead. Rapidly the word spread along the column, "Towers . . . it's one of their cities . . . towers—" There was an unconscious tightening of grips on rifle butts, an involuntary hitching up of equipment.

Red turned a puzzled face to Sloane: "Are we stopping here? What's up—do we storm the city?"

Sloane smiled. "If there's one thing I learned in the army, my boy, it's that officers are the lowest form of animal in the System. But don't forget that they have things in their little black bags of tricks that you don't know about. If they

didn't, they wouldn't be officers. If they don't know what they're doing, nobody does."

"Yeah," Red worried, unconvinced, "but does anybody?"

They could see the city then, if city it was. Towers of red rock, squared and brutal, rising around a central walled plain, it seemed to be. In response to orders the men deployed to a spearheaded formation, Captain Suchminski at the point. They wormed up to the squat towers—there was no sign of life, inimical or otherwise. Even the usual tiny lizards were lacking. Suchminski, taking a rather

long chance for the effect on the morale of his company, stood up and gave the order to take the city. Up to great, massive doors in the central enclosure's wall they marched, and through them. Without instructions several of the soldiers swung the great gates shut and dropped the precisely-hung bar that locked them.

Two-man patrols, dispatched to investigate the city, soon returned, and the entire detachment was drawn up into line; Suchminski was to address them.

"Stand at ease, men," he opened. "You may smoke, if you like, but please pay attention to what I have to say. I like speechmaking as little as you do, but this is quite necessary.

"You men are well-trained-the toprankers of the Army. You have been hand-picked for a very important job, one that will be found in all the histories of the future . . . the job of cleaning up the vermin that infest this planet. These monsters have been called by various names; 'greenies' is one; a fanciful classicist who spent his sabbatical on Mars gave the rumored natives the name of 'lamiae'-loathsome beasts from the dregs of mythology. Enough to say that we are here to stamp them out. To give our Earth her chance for life! These beasts have tampered with, and shall eventually bring about a stoppage of the production of our Martian luana crystals, if unchecked. Our difficulty is that we are totally in ignorance of the nature of these creatures, save that they are bent on the destruction of human life on Mars, and so, eventually, on the extinction of man on his own Tellus.

"This city we are now in is typical of the mystery that surrounds the greenies. Why is it here? Why is it—in perfect condition—abandoned? Why have we not been attacked in force? We do not know! And there's the whole story. We know only that their phychology is one of logic: to stop our crystal supply they slaughter our miners; to deter further colonists they horribly mutilate those they snare. Yet no one has ever seen them. That is all—absolutely all—we know. We are here to find facts, to draw conclusions from those facts. That is all."

A long silence followed; then, "Company, attention! First Sergeant. Dismiss the company."

THE wind was not as fierce that night; the walls that surrounded them broke its back. Sloane and his friend found it perfectly comfortable to remain awake and talk.

"What Such' really said was that, whether we know it or not, this is a scientific expedition."

"Yeah?"

"The lamiae have a weak spot, presumably . . . a weak point or one which may, by some strange freak of fortune, be vulnerable to Tellurians though useless to any race constituted slightly otherwise. And our job is to find that potential Achilles heel-though we don't know if they have feet or not. This is the first time, I know, that an outpost has actually been flung into the teeth of the things. It's a dare, a chip on the shoulder. The Central Tactical Committee hopes that one or two of us will survive the expected 'molestation', as they say in the reports. But nobody has gotten out alive, up to now. You get stories from hopheads and bats, but that's about all . . ."

"Yeah."

"Why doesn't Such' examine the problem analytically? Their fundamental characteristic is a *strangeness*, as far as we know, to Earthly attitudes and concepts. You have to fling yourself out of your body as far as you can—If you were a greeny, Red, how would you go about killing you? We won't find that the proper weapon to use is the positron bolt or a bomb, when we get a clue. Those things are different, I'm convinced—as incredibly alien to us as anything could ever be. That must be why we hate them; probably why they hate us as they do . . . And yet I can understand their position. They're fighting for their planet, just as we're fighting for ours . . ."

He paused. Red said:

"I once heard an old rumdum in a Frisco dive say that he'd seen them. Yeah, seen the greenics! He was high as a kite on ethyl—he said that after he met them he swore he'd stay drunk till the day he died."

"And I'll wager it wasn't long after. Red, have you got any hard liquor about you? Because if you have, I want you to chuck it away. That stuff is okay in the cities until something better comes along, but in active service you need a clear head and body ready for action. I can cut it out clean when I want to, and I did. You ought to—hell! The big oaf's asleep."

The wind cried over the walls, and the night was bitter. Sleepers turned restlessly in their tents, and the sentries paced up and down, drawing their hoods and heavy coats close about themselves.

CHAPTER FOUR

Madness and Death

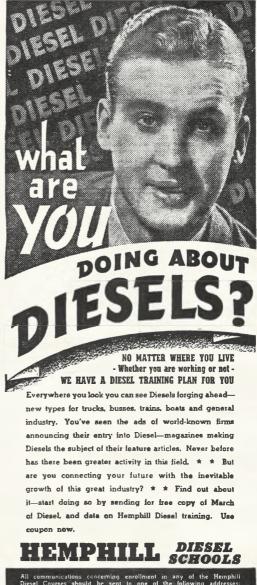
THE next morning there were eyeopening calisthenics in lieu of marching. Suchminski believed in racing his men through a joint-cracking series of gymnastics. Breakfast was then rationed out; they ate, and talked of many things. Fawnes began to sing one of the lilting songs of the Tellies:

"We're the scum of every spacehole from Antares to the Sun,

We're the toughest eggs that ever cracked a crown;

When they say we're through the jobs we do are only just begun
While we're fighting for the Tellus

While we're fighting for the Tellus green and brown!"



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The knot of men around him joined in the chorus,

"All comrades together, we are fighting for the victory of man! United, march onward—we're the boys who build the roads and clear the land!"

Suchminski walked by. "May I request," he said bitingly, "that you refrain from this needless noise?"

He stalked away, and as the men sank back to their comfortable seats around the fire, Red looked wonderingly after him. "What's biting him? What's wrong with a little singing?"

Sloane laughed. "Maybe if it was singing he wouldn't mind, but that fruity basso of yours is enough to make a mule sick. In fact I wouldn't be surprised at all if poor Sam had died of that, what with you crooning love-songs every night."

"Aw, cut it out, Mart!" begged Red. "I ain't got a bad voice. Besides, Suchminski wouldn't care if I had the best voice in the Three Planets—it's just that the big bum is down on us as heavy as lead on Jupiter. He's a scut, that guy is."

Sloane considered, "Red," he said, "you have the wrong idea. Such' is an officer, and he didn't get those pips on his shoulder straps by good luck. He knows how to handle the run-of-the-mill, and I hear he's a pretty able tactician. It's no joke to have a bad man down on you; but it's worse to have a good man on the other side of the fence. Maybe, Red, it wouldn't be a bad idea to watch out for that officer-laddy. It's not childish spite that made him shut us up-look through that loophole. See the sentries? It's hard on them, I suppose, when we sing. You wouldn't like to be out there under that sun, and hear the Happy Home Quintet singing from peace and security; neither would I. The skipper's a shrewd guy; he knows that our chief weapon right now is morale, when we have nothing else to

work with. How do the greenies attack—we don't know. Well, a sentry keeps thinking about that, and finally works up to a point where he'll break and run from his own shadow. That means one man lost in the desert, and twenty men whose strength and psychological resistance have been cut in half."

"Game o' cards, fellas?" a man interposed. It was Bristol, a pimply-chinned young private with a thin, whining voice. His deck was always at his side; he was suspected of card-stacking, but the others gladly asked to be dealt in, to break the nerve-wracking monotony.

THE dealer was winning heavily, by the standards of the Tellies, though Sloane had won and lost a thousand times the pot on the turn of a single card. Then, to Bristol's obvious discomfiture, the pasteboards began to run against him, and the stakes gradually flowed back to the pockets of the bettors. The game broke up from sheer inertia, without winners or losers.

Red and Sloane drew apart. Sloane grasped his friend by the front of his blouse, and poising a hard fist, demanded, "Where's your deck, my little one?"

Red flushed, and produced from some hiding place a pack of cards identical with the unfortunate Bristol's. "I can't stand that little worm, Mart," he said. "There he was sitting, raking in the other boys' pennies—I hadda do something."

Sloane staggered him with a mighty buffet on his broad back.

"Stout fella. Red. You sure did, and maybe it was the right thing. You know, you've changed since you yanked me out of that dive in Tunis . . . for the better, I guess. You were pretty near to getting your back ventilated for the way the cards sat up and said uncle every time you whistled. You've got a heck of a funny way of doing things, though—your sense

of justice wouldn't stand for a cheat, so you go right ahead and cheat hell out of him and right one wrong with another . . . oh, boy!"

Red scratched his head. "It wasn's that," he said uneasily. "It was the way he handled those cards. Crude, Mart—crude, I call it! I just wanted to show him what a real manipulator could do with a pack. I'm not saved from sin yet, fellow—not by a devil of a long way!"

Sloane smiled, and said, "Let's go find out how Bristol's taking it."

They strolled over and hailed the sharper. He slouched up to them with a snarl on his ratty face. "Keating," he intoned, "I think I'm going to teach you gambling manners." Red knew what that meant; he'd often said it himself. The two of them charged, head down, like a pair of bulls.

It didn't last long, though; there was that faint bell-sound which some had come to know, and a furiously spinning shard of metal whanged into the hardpacked ground of the enclosure, seemingly from nowhere, tearing a great gash in the surface. All scattered to cover, huddling against the meagre protection of the walls. Suchminski shouted, "Five men to go outside!" Sloane and Red leaped to him, and with them Corporal Medonia and two French Tellies. Tersely the captain ordered a sally-port opened, as a pair of the terrible darts threw a shower of dirt over him. The door swung open, and the little band ran through and spread out.

"God!" screamed one of the men, and he began to fire wildly into the mass of monsters some distance away. They were huge, green things, grotesquely reminiscent of the Terrestrial prickly-pear cactus, studded with cold spines upon which the sun was reflected, lending them a hazy, indefinite outline. They did have legs—two short, stumpy legs upon which they hopped with an agility surprising for creatures of their size. A third mem-

ber, rooted at the base of the spine, might have been a third foot or a tail, and gave them leverage and mobility. And their faces—their faces were hidden in the haze that surrounded them, but the ghost that was seen was enough to set the Terrestrials' teeth on edge. There was something alien about them that set up a definite reaction of horror in Earthly nervous systems.

THEIR weapons were not entirely strange, resembling somewhat the ancient Roman ballista. Several of the machines were set up on tripods and directed, on the principle of the mortar, that their bolts might fall in the fort of the Tellies.

Some of the things fell under the juicebolts of the frenzied man's rifle; with disconcerting speed they slid away from the spot under fire and retreated a little. The five volunteers advanced one at a time, the other four lying back and maintaining a covering fire while one man wiggled forward. The lamiae continued to fall back in their bewildering, kangaroo-like fashion, firing bolts from their crossbows as they went. The men ducked into a fortuitous depression in the hot sand, and fired over the crest, ignoring the deadly bolts that whizzed above them. One hurtling shaft tore off the flexol cape of one of the Frenchmen, and carried it on. The fellow, a Parisian named Antoine and said to be an ex-Apache, shot a hurried glance at the coppery sky, and scrambled frantically after the cape, some hundred vards away. He had covered perhaps half the distance, crouching and zig-zagging like a frightened rabbit, when he suddenly straightened up with a piercing scream, and clawed at his chin and eyes.

Medonia, who knew what was happening, looked away. Under Antoine's blue chin were appearing the terrible burns caused by the malignant radiations of the sands. The sun's direct rays were ripping into his eyes; pain would soon send him

mad. Insanely he staggered back to them. staring sightlessly, his hands piteously outstretched before him. Deaf to their cries he passed by and reeled on toward the Martians, unprotected, his rifle discarded.

Red vaulted over the little parapet and dashed after the Frenchman.

"Come back, you fool!" shouted Medonia. "He's past help!"

But Red did not listen. Antoine, unseeing, would have blundered into a lamia, had it not hopped aside. But another of the monsters grabbed him about the waist, tearing his belly open with the sharp points of one spiney arm, and dashed him to the ground with a murderous impact, where he lay still.

Keating miraculously escaped the whizzing javelins that flew thick about him and was right in the thick of the Martians, firing wildly into the green of them and doing terrible damage at that short range. The monster that had killed Antoine crept up behind the Earthman, who was unable to hear his companions' warning shouts. As the remaining three skirmishers raced toward him, Red was hoisted high into the air, kicking and struggling, and flung through space like a stone from a boy's slingshot. He landed in soft sand, shaken but unhurt, as the others reached him. The lamia hopped grotesquely over a rise in the sand.

Sloane helped Red to his feet, brushed the sand from him, and adjusted his flexol shield. "You okay?" he asked anxiously.

"Sure," said Red, gazing uncomprehendingly at the rifle he had kept unreasoningly clutched in his fist all through his lightning-like flight. "What happened to the dingbats?"

Sloane cuffed him on the side of the head. "Y'big bum," he said. "The dingbats? Oh, they skedaddled. Couldn't stomach your furious assault. You'll be mentioned in dispatches now; isn't that nice?"

"Oh, go to hell!" Red growled.

The Frenchman touched Sloane's sleeve. "Please," he said softly, "would you help me bring Antoine back to the city? He can—have a decent burial—at least."

"Of course," soothed Corporal Medonia, who had overheard. "Land a hand, Sloane, will you?"

A NTOINE and six other Tellies from the city who had been killed by the shafts of the Martians were given simple burials that afternoon as the first dark winds of evening whispered among the dunes. There was nothing to mark the graves, nor would there be any. No services in honor of the fallen, no fanfare of glory. Some clerk, rummaging in Headquarters files, would some day find brief reports, colorless, thankless precis of the deaths of men who died to save their world.

That would be all. . . .

A rough hospital was set up in one of the deserted buildings to accommodate future wounded. The wounds inflicted by the Greenies' weapons were terrible indeed. A hit at any place in the body was fatal, and unless immediate attention was given those men stricken in the arms or legs, these wounds also led to death.

Morale was low. Those who had actually seen the monsters, through the eyes of fear, spoke to those who had seen nothing but mysterious, spinning lances that ripped and tore and brought agonizing death. There were mutterings against Suchminski, talk of mutiny. The men were laboring under terrific tension, and something was sure to break soon.

There was a gathering by one of the towers, three days after the attack of the lamiae. The men talked for a while—the usual conversation of the trooper, dealing with women, drinking bouts, Tellus and home, bits of small gossip about their

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officers—and then some bright lad produced a pair of dice. The close-clustered group was instantly transformed to an irregular circle; ennui and fear were temporarily forgotten or relegated to the background as the men focussed their attention on the game. There were little cries of eagerness, shouted invocations to "Baby", soft curses when luck ran against the player of the moment. Coins jingled or shushed into soft sand, the ivory cubes clicked against each other, and the shuffle of many feet and bodies wrapped all these lesser sounds into one bulging parcel of sonancy.

The clown of the company, a quick little ex-jockey riding under the name of Kenmore, had the dice, "Come on, luck," he was saying. "Stand aside, you mugs, and watch a guy that knows how.

. Ha! Match that, Panicola, and I'll buy you a drink when we get back to Iopa-if you don't get a spear through that fat belly of yours!"

Panicola growled a profane reply, expressing a desire for certain indignities upon Kenmore's carcass. Kenmore grinned.

"My, my!" he said. "Wash your mouth out with soap, Pan. You know what soap is-or do you?"

There was a stir in the crowd, and Caarlsen, a newly-made non-com with a distorted sense of his own importance, pushed his way through.

"Okay, break it up!" he growled, although there had been no orders prohibiting gambling. "On your feet, goddam it!"

Cries of distressed protest rose in answer. Caarlsen was this, he was that; surely he'd let them have a little fun . . . he wasn't the kind of dirty son of a gun that would break up an innocent little crap game.

"Hev. look, Corporal," Kenmore begged, serio-comic. "Just one more

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throw, huh? I'm hot now—you wouldn't wanna spoil a run of good luck, would you? I'll make faces at you, nice nasty faces... waggle my fingers at you and say 'boo!' in dark corners..."

For answer the corporal strode to the center of the ring and swung one booted foot, scattering the dice and the little heap of coins beyond all possibility of recovery.

The soldiers drew together in a compact bunch, muttering ominously. They had changed in a minute from a happy, good-natured crowd back to a collection of murderous, mutiny-minded malcontents with swift and sudden mayhem in their hearts. Caarlsen stood before them, hands hooked lightly in his belt; whatever his other faults he was, at least, no coward—or was it simple stupidity? In any case, he was in grave danger of a severe mauling, at best, and the gates of the military prison at Osteo were swinging wide for the infuriated soldiers when—

THE rapid notes of a resonator sounding "Alarm!" clicked loudly in the tiny headsets worn by each man. The men forgot their grievances, and discontent shoved aside by the prospect of a tangible enemy, grabbed their stacked rifles and ran to their posts. Suchminski stepped from the house he'd made his headquarters and rubbed the sleep from his eyes.

"What's up?" he cried to the sentry in the lookout tower.

"The Greenies, sir! They're comin' back—hundreds of 'em!"

"Where from, you fool? The south? Okay, Bradbury—Jones: take your sections to the south towers and walls. Larsen—Richer—Cadoux: distribute your men around the east and west walls. Wylie, take three men; place yourselves under Lieutenant Lowndes' orders in the hospital. Speir, your section to the north wall. Okay, let's go!"

The small force was quickly redistributed. For a minute or so they waited, tense and expectant. Keating peered over the crudely crenellated wall to watch the bounding approach of the lamiae, a much larger band than the one of the previous attack. The hot morning sun glinted harshly on the weapons they carried, ready for immediate action. Red, at his side as usual, spat, and grimaced at the thought of what these same cross-bows might very shortly be doing to him.

When the Martians were five hundred yards distant they raised their bows and loosed a rain of spinning spears that sped surely toward the walls behind which the Earthlings crouched. The deadly hail fell inside the fort with a series of loud thuds. The man next to Keating was impaled where he stood, a lance going entirely through his body and smashing against the pavement. A scream died in his throat as he fell to the stone sidewalk below, his blood spattering those about him.

"Fire!" screamed Suchminski into his phone.

The shots from one hundred-odd positron rifles hissed out, wreaking fearful damage in the close-packed ranks of the attackers.

"Fire!" cried Suchminski again, and again.

The Greenies, closer this time, suffered even greater damage. Scores went down with each volley.

"Fire at will, section chiefs take charge!" Suchminski shouted, aiming his own weapon at a green haze that had raised its bow, and blowing it to fragments.

The firing increased in volume as the Martians rushed the outpost. At this close range the carnage was terrific; the advantage was all with the Tellies, as any half-baked strategist could see. Only a few Greenies reached the walls and began to scale them, but the defenders, undesirous of coming too close to these

spiny beasts, made short work of them. Only a handful were left, running as fast as their stumpy legs could hop over the sand dunes, when "Cease Firing!" sounded.

The hot, tired men recharged their hand-searing rifles and cleared away the dead for the struggle to come. Sentries were posted again and, for half the afternoon, paced the ramparts, eyes sharp on the horizon. One swore suddenly. He called:

"Captain! They're back—and with something big!"

CHAPTER FIVE

The Problem Solved

WHAT the "something big" was, they soon found out. Sloane glued his eyes to a loophole, Red inevitably beside him.

"It's a . . . it seems to be a . . . Lord knows what!" Then, suddenly, he cursed. "We might have known! The things that built these towers have what we don't want. It's a gynne—a siege engine." He yielded to Red, who looked curiously.

"What do you make of it?" Mart asked.

"Just another one of those tin slingshots they've got, only—gosh—it's big! What'll they do with it?"

"Knock down our walls and carve us up for dinner," said Sloane quietly. "They can do it with that thing; I'm not kidding. They were used in the Middle Ages, back on Earth, and I don't see why they shouldn't work here. Seems to be the same design as their smaller projectors. That means that the bolts they toss would be the same as the ones that caused all our casualties, only scaled up perhaps fifteen times . . . what one of those twisters does to a man, the big ones will do to the fort. Somehow, Red, I aint happy no more. . . . Look, I think they're aiming it- yep, right at us. They must have our range, too, for the job. Pity, after the swell showing we were making—we haven't got a chance against a thing like that. Why the hell don't they fire?"

Red lit a cigarette and let the smoke trickle from his nostrils. "Maybe," he said, "they haven't brought up their ammunition yet. I remember once, when I was in the Legion, we'd brought up a battery of .75's . . . ah, I'll tell you later; I'm not in the mood right now. Lot of those things out there, aren't there? I guess they plan to chew up the walls and then rush in and get the ones that aren't killed by their bolts or falling debris. Funny people, those Greenies. I haven't found the weak spot you were talking about, Mart."

RED was on guard duty that night, the coldest of the campaign.

They carried him in in the morning. He was almost frozen, and when he'd thawed out a bit, he explained to an openly skeptical Sloane that he had been slugged.

"Were you drinking?" Sloane asked. "Did you have a flask?"

Red looked scared. "Yeah," he admitted hesitantly, "and now it's gone! A litre of mellow ethyl I'd picked up in Iopa and was saving for sentry-go on cold nights. But I didn't touch a drop—this was my first turn on guard; I was slugged from behind, I tell you, and when I woke up it was gone—the whole flask. I can't think of a guy in the outfit who'd be low enough for a trick like that."

"Neither can I, Red. . . . I can't think of a man. . . . I can't think of a man—a man! Red! I've got it! I think I have! . . . Wait—"

"Wait, hell, Mart! Don't go wacky on me now—I'm nearly that way myself."

Sloane capered madly about the puzzled, apprehensive man.

"Don't quote me, kid, but I kind o' think I've got that Achilles heel of our little playmates outside! Do you remember that I once said foolish, foolish things about our lamiae? Things like 'their predominant characteristic is a strangeness to man'? I was wrong, Red! Utterly, insanely, imbecilically, gloriously wrong! For the greenies are so very much like people—especially certain people I can point out, not forty kilometres from where I stand. Let's go find your flask; I bet I know just where it is."

THE office of the Central Tactical Committee of the Tellies is as sacrosanct as any spot on Mars, yet two ragged madmen had managed to force their ways into its depths. With strange, wild laughs they brushed aside immaculate secretaries and attaches, to at last hammer on the door of General Warner Allen Grabb, C. I. C. Himself, he opened it, and the two lunatics rushed in like brother simoons.

General Grabb was a hard, but just man; before summoning a squad of husky M. P.'s he would hear these men through. He bade them be seated; one did so without a word, collapsing into a fortunately situated chair and laughing hysterically; the other leaned across the general's desk and spoke.

"I introduce myself, sir, as Private First Class Sloane, Fifth Company of the Tellurian Army. I have a suggestion to make in regard to the campaign against the greenies, sir.

"It is this—the creatures, like so many human beings, are so constituted that to them vaporized alcohol is a lure; liquid alcohol a narcotic. In other words, even as you and I, pal, first they sniff, then they drink.

"My moronically happy friend in the chair was so considerate as to bring with him a portable still designed to synthesize ethyl-alcohol out of food-tablets and carbon-monoxide. With this happy device remaining, the outpost is supplied with an

uninterrupted source of pure and potent alcohol. I believe their technique is to place a pan of the stuff near a loophole, and when the bibbing lamiae come to taste, they knock hell out of them. . . ."

The two left with the blessings of the Committee, and the promise that immediate action would be taken along the lines so recommended. They were also given a week's leave, this to be spent as they saw fit. And there was little doubt as to what they would see fit.

Sweetly scented, bathed, and tailored. the two friends strolled down one of the wretched little lanes of the Iopan backalleys, inhaling the dear fragrance of stale beer, spiked wines, macerated cigars and discarded cigarets. Red slushed his foot through a puddle of mush, and sighed happily.

"Just like the old days, hey, Mart?"

"Yeah, it's great. Where do we begin drinking? We've got a week to stiffen up in. How about a three-day drunk, next day in a Russian bath, and another three-day bat?"

They turned up a street, and broke through a swinging door arm in arm. Mary was leaning on the bar, her face a mask of sorrow.

"Hiya, kid!" whooped Sloane. "Cheer up, big spenders are in town!"

She looked up. "Yeah?" she said list-lessly.

"Give me a triple kisju twice," he said, "and the same for Red. You remember Red?"

Mary didn't move her tremendous feet. The mustache on her upper lip quivered a little. "You ain't heard, have you?"

"Ain't heard what? And where's our liquor?"

"That's what you ain't heard!" she almost screamed. "Every drop o' hooch in town's confiscated three hours ago. General Grabb, he says the Greenies need it more than we do."



Heavy Science?

Dear Editor:

Fourteen years ago, less a couple of months, I bought my first science fiction magazine. I now buy almost everything along this line that I can get. Astonishing Stories is a fine addition to the field, judging by the first issue. I consider only one magazine (which costs twice as much) to be definitely superior to your first effort. Many are decidedly inferior to it.

In "Half-Breed," Asimov has written a fine, sympathetic tale of the difficulties encountered and overcome by minority racial groups. A really excellent story.

"Chameleon Planet" is one of the best science fiction stories Polton Cross has written. It is also the only really logical story on the theme of continuous evolution (change in the single organism, rather than in succeeding generations) that I have read. It would be hard to explain such an orbit and such orbital velocity, perhaps, but the explanation is hinted at, at least.

"The Lifestone" has a fair plot, and a good villain in Lang. I like stories set in bizarre environments, if they are well done, and I think this one is. But why drag in the girl "by the hair," as Asimov would have put it, in his pre-author days?

"After the Plague" is good, even plausible, although so far this war seems very unlikely to end as portrayed in the story.

"Asteroid." An excellent little fantasy. I like Gregor's shorts very much, and this is no exception. The feelings and actions of the beautiful, alien life-forms are put across very well.

"Elephant Earth" is a neat bit of satire. The ending, especially, is perfect—for a satire!

"White Land of Venus" is not quite up to Kummer's best; still, it is a good story. The White Land seems quite plausible on Venus, although why it should be small (except to simplify the story) I can't imagine; I think it would probably be large—a belt encircling the planet, perhaps.

The cover—an accurate portrayal of the scene illustrated. For once, brilliant coloring is justifiable. How about putting the printing in a narrow line across the bottom of the page?

Inside illustrations: the large ones for "Chameleon Planet" and "Half-Breed" very good. Figure work in the fight illustration for "After the Plague" very poor. Others so-so.

Other features: O.K. as they stand. Add good poetry, if you like, but omit cartoon strips (they are available by the gross at every newsstand), quizzes, and puzzles. I would rather not have reprints; they are available in at least three magazines now.

I agree with Lowndes on the matter of "chronic irritations," but don't insist on too much "action" in stories. There are two science fiction mags now which are almost all "action," and they rate pretty low with me. (Your first issue O.K. in this respect.) Personally, I would like to see at least one, perhaps two, so-called "heavy science" stories.

Yeah—I know, this letter is too long. My excuse is that it is all about the first issue of a good, new science fiction mag.

I'm anxiously awaiting the first issue of Super Science Stories.—D. B. Thompson, 3136 "Que" Street, Lincoln, Nebraska.

Worth a Hangover!

Editor, Astonishing Stories:

Last night was Christmas Eve. I had a perfectly grand and glorious time. This morning I found in my overcoat pocket a copy of Astonishing, but in spite of a headache and a horrible stomach pain I read every word in it. I might mention that I was a scientifiction fan before I picked Astonishing up somewhere in my delirious wanderings last night.

Say, you've got something worth writing about—you are the first magazine I ever wrote a letter to—and I have been reading this tripe since some six years ago I picked up an old copy of *Amazing* with "Through the Andes," or some such story. I tell you, it's a fever—like a drink—once you get used to it, you cannot break away! Not that I want to anyway.

But—to get down to Astonishing, the first story I read was "Half-breed." Heyho, I sez to myself, if this is an example, let's dig into the rest. If Isaac Asimov writes that quality of story always, give us more of him. I was more or less disappointed in "Asteroid" and "Elephant Earth"; and "Chameleon Planet" was not much higher in my estimation. I dreaded to read "White Land of Venus" because of the horrid picture illustrating it, but I take everything back. It was a good

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story! "After the Plague" and "Half-Breed" are by far the best stories in this issue, and certainly rank high among all sf. I have read.

You may tell practically all of your illustrators to give more life to their pictures, or I will start ignoring their work. Somehow or other, the pictures have an air of stiffness and inanimateness about them; also, there appear to be too many solid blacks for my liking; furthermore there is lack of pertinent detail. For example, take the picture on page 78. It is a fine drawing, but—the mountains appear to be given too much prominence, and although it is supposed to be an action picture, Griffin looks to me like a statue.

Mr. Binder, if you can be relied upon to produce so good a cover every time, I'll petition Astonishing to keep you on a life pension.

How about a contest or something? I'm itching to get a life subscription to Astonishing.

Thatsaboutall, I guess, except: do not sink below the standard set by this first issue, keep on improving, and you are on your way to becoming one of the best scientifiction mags in the field. I'm sure you have gained thousands of supporters like myself, with this very first.

If I can find such a jewel every time I go on a bat, I shall have to find ways and means of keeping myself inebriated perpetually. Think of the eternal joy!-Fred Holobow, 233 27th Avenue, N.E., Calgary, Alberta, Canada.

"From the Gods!"

Dear Mr. Pohl:

Ah. A message from the Gods! That's what Astonishing proved to be. Usually on first issues a mag of this type is cluttered to the overflowing point with sex, Cosmic Ray Guns, etc. But you proved different.

The discussions column, Viewpoints, topped all others I have seen, and on the first issue, when one doesn't expect any at all. Fan Magazines is a fine column, but there wasn't a complete enough review. Next time make your editorial a little longer. It was a little lacking this time. Blummer's page, "True — No Doubt" was good. But—do not start a questionaire unless it is purely on science fiction. I thought the reviews most noteworthy.

That cover for "Chameleon Planet" was a honey. Binder was at his best. Splendid covers, perfect figures, nicely laid out. Come again on that point alone. And thanks for not calling an extra long story a novel. Novelette is descriptive enough.

But the best thing is the fact that you're not paying attention to big names. In that case, Harry Warner, Jr., W. Lawrence Hamling, etc., are just waiting for a chance at a pro mag with some topnotch material to offer. I know.

And give Hannes Bok, Walter Marconette, and the other unknown artists that are actually better than the old ones a chance. Thanks for *Astonishing.*—J. J. Fortier, 1836 39th Avenue, Oakland, California.

On Elephants

Dear Mr. Pohl:

The first issue of Astonishing Stories was welcome indeed. It was almost with trepidation that I awaited its appearance, but my fears were unfounded. In outer appearance alone it is superior to a number of already established science fiction magazines. The cover is well-drawn, appealing, and well-balanced in color scheme. The heading for the title stands out at a distance, and, while there is room for improvement, it doesn't offend in garishness.

I cannot praise you enough for the neat and artistic layout of the contents

page. Or again, for the clean-cut type face you use, and the tasteful headings for each individual story. The blurbs give just enough to arouse interest without grossly overdoing the matter.

The illustrations could be a great deal better. But the most interesting thing to note is that, with the exception of Binder, you have an entirely new set of illustrators, who give the magazine a fresh, new touch. I am happy to see two drawings for the novelettes, and hope this will be continued.

Congrats are due you on your departments with the exception of "True—No Doubt," which is a blot on an otherwise personable magazine. Particularly commendable are the reviews.

I question the plausibility of "Elephant Earth." True, the elephant possesses intelligence, but it is hampered by its size and lack of manipulatory organs. The trunk just isn't enough. It might be possible for elephants to dominate Earthif they can reduce their size and develop something like hands. And for that, some natural enemy must arise to force a survival of the fittest, and thus a gradual evolution toward smallness and adeptness. Only such elephants could survive these "elephant-killers"; the rest would die off, before breeding. Then natural selection would bring forth an elephant entirely capable of taking Man's place as Earthlord. But it would be an odd-looking elephant indeed to our eyes.

"Half-Breed," while not as well written as some of Asimov's work, is good and worthy of him. Mention is due also to "Asteroid" mainly because Gregor does not fall into the usual hack-device, but allows a realistic trend to develop to its logical conclusion. "Chameleon Planet" listen well, but just cannot stand up to careful thought. The rest of the magazine is readable but not memorable.

May I suggest again that you make your reader's column the real McCoy by

adding your comments to letters? Best wishes, and here's anticipating the companion mag and Astonishing No. 2.—Robert W. Lowndes, "The Ivory Tower," 2574 Bedford Avenue, Brooklyn, New York.

Not 4 "4E"

Dear Editor:

Good work on Astonishing Stories. "The Lifestone" and "Asteroid" were expert jobs, the others not down to a 10c standard but not as good as these two by wide margins. Cover very good, interiors all a little crude except the one illustrating "Half-Breed." Where is Leo Morey now? He is not as good as he used to be, but he's better than anybody you have but Eron. Or get Binder to do some more interiors.

I hope that before you print another letter like "4E's" (whoever he may be) you will take steps to make it readable. Illiteracy is pardonable, but such an obviously deliberate attempt at artificial illiteracy is in bad taste and ought to be corrected rather carefully or not printed at all.

Congrats, and I hope Super Science Stories is as good, despite the handicap of a story by me.—Jim Blish, 12 Washington Terrace, East Orange, New Jersey.

Part of the Triumvirate

Editor, Astonishing Stories:

I did not learn in advance that a new science fiction mag was forthcoming. Quite by chance I saw Astonishing Stories on the stand, bought it, read it, and am now glad I did. Regularly, I read only one weird and one science fiction mag. Now I assure you I shall make it a triumvirate by adding your mag, and I'll frankly tell you why in two reasons: 1. First issues are notably poor, and your book surprised me (pleasurably!) by being quite good! (With the exception of one "poor" story and one "fair," neither

of which I'll mention because I don't believe in writing letters listing my story preference.) 2. In that editorial you sounded very sincere and I hope you were—in fact I know you were, because you've already put three of the good suggestions into practice: the book, film, and music reviews. I definitely do not like your title, but I realize that most of the other possible titles are already taken; however, this is a very trivial point with me and I wouldn't care if you called the mag *lcky Iliads* so long as the contents are good. Henry Hasse, Seattle, Washington.

Two Fan Artists in This Issue

Dear Mr. Pohl:

I have just completed reading the first issue of your new stf magazine, Astonishing Stories. And, like all first issues, there is plenty of room for improvement.

However, I would like to commend you on the excellent reviews by DAW, Michel, and Wilson. All three did a swell job in their special fields; I hope to see more of each in following issues. Jack Binder has a fine cover for "Chameleon Planet." Pleased to see him on an stf magazine cover. Ackerman has an excellent suggestion in his letter, that you ought to let some of the fan illustrators do an occasional cover or inside work. To his list of fan illustrators, however, I want to add the name of James M. Rogers, Art Editor for the Science Fiction Fan, who has plenty of the qualities necessary for work of this kind. How about it?

The fan magazine review column is also to your credit, keep it by all means. I note with pleasure the letter department. I favor such a column every time; keep it going. I'm waiting now for you to go monthly, and for Astonishing's companion stf magazine, Super Science Stories.—Olon F. Wiggins, 3214 Champa Street, Denver, Colorado.

"Paid More for Less"

Editor, Astonishing Stories:

Please accept an old-timer's congratulations on your presentation of a dime stf magazine. Astonishing tills a long-felt gap admirably. I've often paid a lot more for a great deal less, in the time I have been an "addict."

As to the exact date stf got me, I'm a little hazy. Can you date "The Blind Spot" and "The Treasures of Tantalus" in the Argosy? "Doctor Hackensaw" (and Tubby) in the old Science and Invention? "The Comet People" in W.T., or "The Talking Brain" in one of the early Amazings?

Here's to a bigger and better Astonishing!-W. T. Brennen, Richmond, Va.

Fan Biographies?

Dear Editor:

From a reading of "Viewpoints" I see that many had advance notice of Astonishing's arrival. I had none; therefore, it was with great surprise and pleasure that I "discovered" the magazine in my ceaseless eye-scan of newsstands.

Here are my suggestions: Keep the story length and balance static (I am against the so-called full-length novel type of story because they are usually just action varns of no meaning); have a fullpage editorial, a chatty, informal one; increase the pages devoted to "Viewpoints" and "Fan Magazines"; include "Book and Film Reviews" only when there is something of vital importance; delete "True-No Doubt!"; include biographies of your authors and prominent fans, also photos of them, for this is the most interesting part of fantasy, and I believe the theory false which states this dispels the escape-from-reality aura surrounding stf magazines.—Donn Brazier, 3031 North 36th Street, Milwaukee, Wisconsin.

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Fan Magazines

(This department is meant to serve as a reader's guide to the current crop of amateur fantasy publications. If we have missed any such of national circulation, we apologize, and suggest that the editor send us a review copy for the next issue.)

SPACEWAYS, bi-monthly published by Harry Warner, Jr., 303 Bryan Place, Hagerstown, Maryland. The tenth issue of this well-balanced and excellent magazine contain the usual array of columns by "The Star-Treader," Satyricus, and others, plus some good poetry and, with one exception, capable articles. The exception is a carping attack upon the professional editors

STARDUST, bi-monthly published by W. Lawrence Hamling, 2609 Argyle Street, Chicago, Illinois. An excellentlyprinted, slick-paper magazine. The contents of the magazine do not come up to its appearance, though L. Sprague de Camp's little short is top-notch.

THE SATELLITE, monthly published by J. F. Burke, 57 Beauclaire Drive. Liverpool 15, England. Though the war has cut off most of this magazine's circulation and pages it still manages to be of interest.

FANTASCIENCE DIGEST, bi-monthly published by Robert A. Madle, 333 East Belgrade Street, Philadelphia, Pennsylvania. This veteran magazine carries valuable material by Donald A. Wollheim, John F. Burke, Fred W. Fischer, and others.

FUTURIA FANTASIA, published by Ray Bradbury, 3054½ West 12th Street, Los Angeles, California. Los Angeles puts out the highest quality fan magazines in the American field. This is no exception. On the lighter side, it has material by Kuttner, Hannes Bok. Ackerman, Freyor, and many more.

LE ZOMBIE, fortnightly published by Bob Tucker, Box 260, Bloomington. Illinois. Still a leader in the whimsy field. Tucker pledges to correct his spelling in the future, which ought to triple his circulation.

WATER, WATER EVERYWHERE

By Milton Kaletsky

OST fundamental of all chemical substances, but one about which we scarcely ever think, is that familiar yet strange liquid—water, which makes us and our world what we are. For though its unusual, unique properties, especially its extraordinary ability to dissolve chemicals, water is more than just necessary to life, it is the very essence of life itself.

Millions of years ago, in some unknown manner, life was born in the water of the oceans, born out of water and salt and some carbon compounds. For millions of years living creatures existed only in water. Even when the first adventurous animals crawled up on land and succeeded in breathing air, life could not break free from water, for every plant and animal still begins in water. Plant seeds must find the proper conditions of moisture before they can sprout. Animals begin as sperm cells swimming in water or watery fluids towards an egg cell that is mostly water; and the developing embryo always lies in wet surroundings until birth.

Every one of the many physical and chemical reactions that occur in our bodies depend on water. The air we breathe is of no use until its oxygen is dissolved on the moist surfaces of the lungs. Only then can oxygen be absorbed into the blood and carbon dioxide be removed. The food we eat is as useless as sand to the human body until digestion has changed insoluble fats, proteins and carbohydrates into soluble fatty acids, amino acids and sugar. Then and only

- Milton Kaletsky, well-known fan and writer of former years, makes his return to science fiction with an interesting article on the most familiar of substances, water.
- This article is an experiment. Do you, the readers, wish scientific articles to leaven the science fiction in our stories? Your answers, in the form of letters, to that question will determine our future policy in that regard. Let us hear your Viewpoints on the matter.

then can bread and meat and fruit, which do not dissolve in water themselves, serve their purpose. What the body cannot change into a solution it cannot use and must expel as superfluous waste.

Every bit of food that is used, all the waste that is produced by the body, all the hormones manufactured by the glands and all the vitamins and minerals needed for healthy living, all these travel about your body dissolved in the watery part of the blood, the serum. In fact, a person could live without eating and drinking and without his stomach and intestines if he received large injections of water solutions of all the end products of digestion. Hospital patients who cannot eat are fed this way.

Some day, perhaps, a single daily injection will be all the food and drink anyone will take.

Every organ in your body is bathed by a watery liquid. Your joints and intestines are lubricated by oily water. Your eves are filled with clear salt water and their entire surface is covered with the same fluid. The semi-circular canals in your ears, which help you keep your balance, are also filled with water. In the inner ear, nature uses a tube filled with water as part of the system which transmits sound from the ear-drum to the auditory nerve, because water is an excellent conductor of sound. Your muscles would not respond to your will if they were not always bathed by a film-like layer of calcium compounds dissolved in water. And the evaporation of perspiration—as much as four quarts on a hot day-helps keep you cool and comfortable and prevents death by overheating. If we didn't perspire, we'd never live through summer, not even through one really hot day. And certainly no one could ever live in the Tropic Zone.

When you're sick, water often comes to your aid. If you have a cold or hay fever, the mucous membranes of your nose pour out water in an effort to wash away the irritating substances. This discharge from your nose is not the cause of a cold; it is the body's attempt to cure the cold. When something gets into your eyes, out pour the tears to wash it away. And if you unluckily get certain intestinal illnesses you suffer from diarrhea, which is another attempt by your body to wash away germs.

Two-thirds of your body's weight is water, and only one-third is solid matter. Ninety percent of the body's fat and fifty percent of its protein (muscle) could be lost without much danger, but the loss of only ten percent of its water would be serious and of twenty percent probably fatal.

Physically, a human body is hardly more than a large water solution enclosed in a water-proof bag and hung on a bony framework.

Pure water is completely tasteless and odorless and, in thin sheets, colorless and transparent. But pure water is never found in nature or in faucets. Even rain is not pure as in falling it carries down dust, bacteria, pollen, oxygen, carbon dioxide and many impurities poured into the air by factories. Trickling through the ground, water is sometimes cleaned by filtering, but it may acquire new impurities by dissolving rocks and picking up microscopic plants and animals. Then your city waterworks adds germicides, so that by the time rain reaches your drinking glass it contains a long list of chemical substances and organisms, living and dead.

The purest natural water is dew. Contrary to popular opinion, dew never falls. It either rises from the ground (look at the *under* side of some grass on a dewy morning), or else settles directly out of the air onto leaves and grass.

Southern Europe used to be terrified by "blood" rains until chemists analyzed the red water and found the color was due to red sand from the Sahara Desert which was blown across the Mediterranean Sea and then washed from the air by rain.

Moisture in the air produces many interesting and beautiful phenomena. Rainbows are caused by refraction of sunlight or moonlight by a falling sheet of rain. Ice crystals, floating high in the atmosphere, produce coronas and haloes. Coronas are the white or colored bands surrounding the sun and moon, while haloes are arcs of lights separated from the sun or moon by angles of $22\frac{1}{2}$ degrees or 45 degrees.

These are best seen at night, coronas appearing twice weekly and haloes once a month.

Atmospheric water takes many other forms: clouds, fogs, hail, frost and snow. A fog is a cloud in the wrong place, down on the ground where it is a dangerous

nuisance instead of up in the air where it is harmless. Hail and frost are cropkilling enemies of farmers; but snow is the farmer's friend because it forms an insulating blanket on the ground in winter. which keeps some warmth in the soil and prevents the cold air from freezing roots and seeds.

LIFE on earth would be impossible if water didn't have a certain peculiar property. Most liquids contract when they freeze and the solid substance, being heavier than the liquid, sinks to the bottom. A pool of alcohol or glycerine or melted glass or almost any other liquid would freeze at the bottom first and would freeze solid, killing anything that might be living in it. Water does exactly the opposite. It expands on freezing, so that ice is lighter than water and floats. Lakes and seas therefore freeze at the top first in winter, and the layer of ice protects the water underneath from the cold air above and so prevents complete freezing. This remarkable and unusual property of water kept the oceans from freezing into a single huge cake of ice during the cold glacial ages of the past. Had the oceans frozen, all living things would have perished.

Water is nature's great irresistible force. It wears down mountains, eats away continents, and scrapes off the soilskin of the ground. High on mountain peaks, rain seeps into cracks in rocks, freezes at night, expands as it changes to ice and splits the rock like a wedge. In this way, over thousands of years, frost and chemical action pulverize the rocks and change them into soil which man can use-until melting snows and heavy rains come tumbling down to wash it away again.

Rain can do so much damage because of the unbelievably large quantities that fall. A one-inch rain deposits 65,000 tons of water on each square mile, and a wide-

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spread storm drops as much as three billion tons altogether.

While rain and rivers bore from within, the ocean attacks the edges. Wind-driven waves, crashing incessantly on the shore, take a bite out of a continent every time, and eventually the continents will be worn down to low reefs. When the oceans will have swallowed all the land, when the insatiable waves will sweep unhindered over a completely water-covered world, the ocean will still be filled because there is so much ocean and so little land. Only three-tenths of the earth's surface is land. The other seven-tenths is water. And the ocean is much deeper than the mountains are high.

Seven-tenths of the surface of the earth—water! Water enough for the bath of a Titan!

There's enough water in the seas to cover the entire earth to a depth of two miles! That's two and a half quintillion tons of water, about 2,500,000,000,000,000,000,000 quarts, almost all salt water. Water, water everywhere, and hardly a drop to drink!

Against this great mass, against the overwhelming power of sun and wind and wave, stands man with feeble dams and sea walls and mathematics. Man can win only a small, temporary victory by diverting some flood water into irrigation systems and reservoirs. But the final victory is water's. Inevitably, inexorably, rain and frost and waves will destroy the continents. Yet even in this conquest water will defeat itself; for the ocean bottoms, overloaded with the sediment of ages, will sink and force the continents upward once more. When the tumult and shouting of mother earth in labor will die, new continents will be born; and water, undiscouraged, untired, insatiable, will begin again its million-year-cycle of destruction.

THE END

BOOK AND FILM REVIEW

Fantasy Books

THE HOPKINS MANUSCRIPT by R. C. Sheriff. Published by The Macmillan Company, New York. \$2.50.

The moon loses its orbit, circles inwards, finally collides with the earth. Mankind survives the catastrophe by means of underground refuges, but, in the squabble that arises over the exploitation of the moon's crust now reposing where the Atlantic Ocean used to be, war arises and wipes out what's left of the race. That is the action of the novel.

We read all this as seen through the eyes of a stodgy British country squire interested more in his poultry than in humanity. The story presumably is a manuscript he has written and cached for future generations. All this cataclysmic history is fed to us dimly through the unimaginative and petty mind of Mr. Hopkins. Unfortunately, it seems that the author himself scarcely shelters ideas rising above those of his protagonist.

"The Hopkins Manuscript" conveys nothing new, nothing hopeful, and nothing very real. —Donald A. Wollheim.

ATTACK ON AMERICA by General Ared White. Published by Houghton Mifflin, Boston, Mass. \$2.50.

The horrible Europeans gang up on America, and invade the U.S. from Mexico and the Southwest. America is caught unprepared as always, but rallies after a long time and hurls the fiendish skunks back to their dens across the sea. It's an old theme and has been overdone a hundred times by every jingoist whose ears redden every time he hears a foreign tongue. Completely divorced from the actualities of politics, history, and economics, Attack on America is no different from its hundred predecessors.

When the reviewer was a little boy, there

was a series of boy's books about the invasion of the U.S. by the Kaiser after he had mopped up the Allies. The purpose of the series was, of course, to impress the children of the necessity of preparedness, one of the moves by which the U.S. moved toward entering the first World War. Evidently preparedness is in the air again. We hope it won't have the same conclusion.

-Donald A. Wollheim.

A BOOK OF MIRACLES by Ben Hecht. Published by Viking, New York. \$2.75.

"A Book of Miracles" is a volume of seven short novels, each dealing with some supernatural or miraculous occurrence. We do not recall Ben Hecht writing in this fantasy strain before, but he has mastered it to the point of delight. Some of the sections of the book are in satirical strain; others are serious.

Science-fiction fans will appreciate best The Adventures of Professor Emmett which tells the story of a lonely and introverted entomologist, of his interest in termites, and of his death and reincarnation as a termite, and the service he does to mankind in that guise. Not too new an angle for science-fiction readers. but it is handled in an utterly original manner. —Donald A. Wollheim.

Fantasy Films

GULLIVER'S TRAVELS. Produced by Max Fleischer; directed by Dave Fleischer. A Paramount release.

Walt Disney's only rival in the full-length cartoon field, Max Fleischer, working in his Florida studios, produced a musical comedy version of Jonathan Swift's story of Lilliput in time for the Christmas trade. The tale, beautifully unreeled in Technicolor, soft-pedals the so-

cial satire in the classic and centers on the slapstick. Lemuel Gulliver, the ship-wrecked sailor, lands on the shores of Lilliput in time to settle amicably a dispute between its people and those of Blefuscu. A war is being waged to decide whether "Faithful"—the song of Lilliput—or "Forever"—Blefuscu's anthem—will be sung at the wedding of the rival nations' prince and princess. Gulliver arbitrates by blending them into "Faithful Forever."

Gulliver, who was copied frame by frame from motion pictures of a living actor, stands out with astonishing realism. Other excellent characters are Snitch, a spy, Gabby, the town crier, and Twinkletoes, a befuddled carrier pigeon. Prince David and Princess Glory are insipid.

-Dick Wilson.

THAT THEY MAY LIVE. French production; English titles. Starring Victor Francen. Jean Diaz, World War veteran, vowed to his comrades that there would be no more war. When, in 1939, his country again takes up the sword, he goes to the soldiers' cemetery at Verdun and calls forth the battle-maimed dead from their graves to march on those responsible for the present conflict.

-Dick Wilson.

THE INVISIBLE MAN RETURNS. Universal Picture; written by Kurt Siodmak.

The Invisible Man had a brother who, nine years after Griffin's death, revives the invisibility experiments in a desperate attempt to effect the escape from execution of a condemned friend, Geoffrey Radcliffe. Radcliffe, the new Invisible Man (Vincent Price) gradually goes mad as his brain is poisoned by the bleaching drug "duocane" ("monocane" in the original). He has insane visions of invincibility through invisibility. In the end

—but see this scientifilm for yourself. It has a keen climax. Technical tricks have improved in the six or seven years since the first film. We now see for the first time the Invisible Man's nebulous figure in smoke and rain; and the experiment wherein a depigmented guinea pig is restored to visibility is absorbing.

-Forrest J. Ackerman.

THE RETURN OF DR. X. A Warner Brothers-First National Picture.

Dr. Xavier (Humphrey Bogart), electrocuted for starving a child to death in an experiment, is brought back from the grave by Dr. Flegg (John Litell, whose consuming passion in life is haemology, the study of blood, and the synthesis of an artificial fluid capable of sustaining life. Dr. X, the clammy corpse he endows with a transient after-life, becomes his assistant. Since Flegg has not been able to perfect his pseudoblood, however, Dr. X must needs replenish himself a la Dracula. The pic has a little lab-stuff, a couple of "speeches," and about three big laughs. I was a little disappointed. (It is not, incidentally, a sequel to "Dr. X," produced by the same studio about seven years ago.) Plot seemed somewhat draggy and climax only mildly thrilling; but make-ups of Bogart, Litell, and Lya Lys are recommended.

-Forrest J. Ackerman.

FORTHCOMING FANTASY FILMS

Following are the titles of a number of imaginative films scheduled for release during the year of 1940:

The Invisible Man Returns, Dr. Cyclops, White Eagle, Flash Gordon Conquers the Universe, The Lost World, Atlantis, Earthbound, Food of the Gods, The Electric Man, Television Spy, Heart of Darkness, Buried Alive, The Invisible Killer, Turnabout, The World Trembles, The Death-Predicter, and 1,000,000 B.C.

Tales To Come

ARKNESS, a tremendous, sentient globe of pure force, drifted absently across space. He was tired, though young as his race went, tired and bored with the aimlessness of his existence.

Darkness spurred back several millions of miles and stared at the huge sun, at the heart of which lay a frightful mass of energy, mass enough to realize his dream by propelling him across the space between the universes. Suddenly he knew fear, a cold fear. He felt that the sun was animate, that it knew he was waiting there, that it was prepared to resist his pitiable onslaughts.

"I have eaten suns before," he told himself. "I can at least split that one open, and extract the morsel that lies

in its interior."

He drew into him as many of the surrounding suns as he was able, converting them into pure energy. He ceased at last, for no longer could his body, a giant complexity of swarming intense fields sixty millions of miles across, assimilate more.

Then, with all the acceleration he could muster, he dashed headlong at the star.

He contacted, bored millions of miles. and was thrown back with mounting velocity. Hurtling back into space, Darkness knew these tactics would prove useless. His vision roving, it came to rest on a dense, redly-glowing sun. For a moment it meant nothing, and then he knew, knew that here lay the solution.

He plucked that dying star from its place, and swinging it in huge circles on the tip of a tractor ray, flung it with savage force at the gargantuan star.

A titanic explosion ripped space, sending out wave after wave of cosmic rays, causing an inferno of venomous raging flames that howled far into the sky. The mighty sun split wide open, exhibiting a violet hot gaping maw a billion miles and more wide.

Darkness dropped rapidly into the breach, and clutched the Great Energy to him. Quickly he ate away and absorbed the merest portion of the surface of the sphere. He was amazed at the metamorphosis. He became aware of a vigor so infinite that he felt nothing could withstand him.





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Introducing science fiction's most incredible character, Darkness, the vast hero of Ross Rocklynne's brand-new story, "Into the Darkness," which will appear in the June Astonishing Stories. You won't want to miss this great science fiction story!

Also in the issue are "He Conquered Venus," by John Russell Fearn, "At the Wedding of the Moons," by Frederic Arnold Kummer, Jr., and others of the finest science fiction appearing today.

Watch for the June issue!

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