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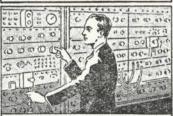
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SCIENCE FICTION, published every other month by Double Action Magazines, Inc., 2256 Grove Street, Chicago, III, Editorial and executive offices, 60 Hudson Street, New York, N. Y. Application for second class matter pending at the Post Office at Chicago, III. Copyrighted 1940 by Double Action Magazines, Inc. Yearly subscription, 75c.

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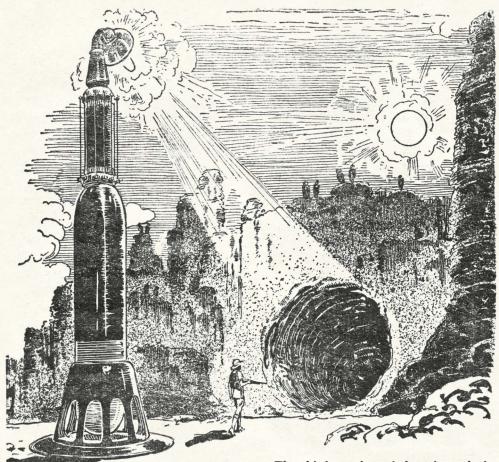
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MEN WITHOUT A WORLD

by DOM PASSANTE

Two men and a girl, lost in the depths of the Peruvian jungle in their hunt for a great scientist, come upon a weird valley where reflected sunlight opens a secret door into the side of a cliff, revealing a hideous plot of cosmic destruction!





HE blazing South American sun had passed the meridian as the little party mounted to the top of the twining mountain road through the Peruvian Sierras. What kit they had was on their backs. There were no mules, no guides; the three of them were quite alone.

Fletcher Grey, lean-faced and of uncertain age, pushed his Panama hat further over his eyes and blew out his cheeks expressively. His bare mahogany arm pointed to the valley that now confronted them.

"Maybe that's it?" he suggested hopefully.

"If not, it darn well oughta be!" Dick Whittle had his field glasses to his eyes as he spoke, studied the view with that certain impartial calm that stamped him for what he was—a research scientist.

The third member of the trio pushed a stray golden curl further up under her topee, sat down languidly on a rock and fanned herself. Dick had said that the Peruvian wastes was no place for a girl; now she was commencing to believe it. In the few moments of respite, her mind went swiftly back over the period since they had left New York. . . .

First, her father, Professor Grant Denham, the famous archaeologist, had sent a desperate radio call from these very wastes, had given the exact longitude and latitude, had sworn he had discovered something of enormous interest, but was lost and needed help.

The dash from New York had followed. All had gone well at first, then the guides had deserted, stealing most of the equipment, leaving the three stranded with only a few instruments and a little food. She shuddered at remembrance. . . . Struggle and flood; jungles and sweat. Onward, day after day—

"I believe it is it!" Dick said suddenly, handing over the glasses to Fletcher—and while he stared through them, Dick pulled a crumpled paper from his pocket and studied it earnestly.

Fay Denham recognized it as the verbatim message that had come over the radio from her father—that had brought her fiancé and his friend from their normal occupation in New York's Research Laboratories, to this forsaken spot in the jungles.

Gazing over Dick's arm, she read:

". . . valley situated approximately immediately below western limb of Peruvian Sierras. Latitude and longitude details will follow in separate report. In the center of the valley is an upright column of curious metal, unlike anything we know—and at its summit reposes a hemisphere of similar metal, its inner side convex—very like the ornaments put on Christmas trees for children.

"Opposite to this column, perhaps a mile away, is a massive cliff escarpment of red stone, upon which are written the most astounding hieroglyphics, so far quite undecipherable. I believe . . ."

Dick lowered the paper, his grey eyes bright and keen.

"We've found it!" he breathed. "Our strugglings haven't been in vain. This is the place. Take a look, Fay . . ."

And she stared out under shaded hand over the valley below. It was not particularly vast, but it was barren and hot in the sunshine, its further side smothered in redundant verdure. In the center of the valley floor she could make out one solitary toost and gleaming ball—then to the right have belief a towering red rock face, the lace of the hillside they were now standing that But from this position, the strange hieroglyphics referred to were invisible be-

cause of the angle.

"So that's where dad called from," the girl whispered. "I can hardly believe it.
... Wonder where he is now?"

"That's what we've come to find out," Dick answered gravely. He stilled the utterance to blurt out that he fully believed old man Denham to be dead. . . .

"Yeah; we made it," Fletcher said laconically, pushing the glasses behind him. "Let's go!" And he started off down the slope, slipping and sliding through the loose stones.

An hour's rough and tumble descent brought them to the valley floor, immediately beneath the columned ball. It reposed a full hundred feet above their heads, completely uncorroded—even as the pillar itself—by weather conditions.

Dick studied it thoughtfully, his scientific mind devising possible explanations. Finally he climbed the post slowly with the aid of a piece of rope, came down again with a baffled frown.

"Damned if I know," he growled. "The metal's unlike anything I've come across before—enormously tough and resistant to this nitric acid phial of mine. May have been here a year or a thousand years; impossible to say."

He swung around and gazed at the towering red rock face a mile distant across the scrubby, rocky stretch.

"Some etchings!" he whistled at length.
"But what do they mean?" Fletcher demanded, frowning. "We didn't come all this way to look at fancy writing which nobody can figure out. We came to find Professor Denham—"

"They look like Egyptian to me," Fay broke in quickly.

Silence fell upon them, the silence of wonderment as to how hundreds of strange letters had been blasted into virgin rock in order to present some kind of unmistakable message. Only a blind man could have missed them, considering their size.

"Not Egyptian, Mosaic. early Arabian-

not even shorthand," growled Fletcher, lighting his pipe. "Best thing we can do is to make a camp here and then try and figure out how to find some clue that will lead us to Denham..."

Dick could not help himself saying, "You really believe we shall find him?"

"Why not?"

Dick looked around expressively. Mutely Fletcher and the girl took in the barrenness and the silence.

"Not even the traces of a campfire," Dick muttered. "I don't want to say it, because of you, Fay—but I think we're too late. Something happened to your dad, even as he hinted in that radio message. Remember, he never communicated again.

"You're a nice cheery sort of devil," Fletcher growled. "If we don't find him, figure out the jam we're in. No way back. We'd never find the way back to our airplane base; we only got here by luck. Without radio, we're sunk. . . ." He broke off as he saw Fay's lower lip quivering in dismay. With rough sentiment, he flung his arm round her shoulders. "Aw, cheer up, kid—maybe I'm nuts anyway. Maybe we all are," he finished significantly, cocking his eye on the cliff writing.

Dick shrugged his shoulders. "Well, since we're going to make camp, we'd better get started. . . ."

Fletcher glanced toward the forest. "Guess there's enough vegetation there to build a skyscraper," he commented. "I'll get some and bring it down to build a shelter with. You fix up a fire."

"I'll collect dry wood!" Fay volunteered, trying hard not to look despairing.

"O. K."

CHAPTER II THE SECRET PASSAGE

RETCHER turned aside and headed away toward the nearby jungle. The girl wandered slowly in the direction

of the rock face, picking up pieces of dry wood as she went. Dick watched her for a time, smiling a little at the smallness of her slim, dainty figure against the vastness all around. Then he turned to prepare the details of the camp.

He was surprised to find how rapidly the time passed. It seemed only minutes before Fletcher came back with his first huge armful of vegetation. He dropped the stuff down, glanced around.

"Where's Fay gotten to?"

"Collecting wood, and—" Dick frowned suddenly, a puzzled light in his eyes as he glanced up. "But hell, she can't be doing it all this time!"

He jumped up. Together they stared over the shimmering heat haze toward the cliff face whither the girl had wandered. She was nowhere to be seen.

"You're a darn fool to let her wander off like that!" Fletcher snapped. "No telling what's around here. If that's the way you treat the kid before she marries you—poor fish—how are you going to— Gosh, that's interesting!" he wound up keenly.

"Huh? What is?" Dick stared at him. "That reflection of this mounted ball on the cliff face. Look!"

In a moment Dick saw what was meant. Like the circular reflection from a mirror, the sunlight striking the columned convex ball had produced a circle of light on the cliff face, was slowly moving along its lower reaches.

"Interesting, yes: but I've got to look for Fay," Dick said anxiously. "Better give me a hand."

They strodea few yards, then Fletcher stopped and pointed. His big lean face was grinning with relief. "There she is—like a cocksparrow studying the Colossus of Rhodes!"

"Wrong gender," growled Dick mechanically, too relieved to further the argument. He grinned too; Fletcher's description was remarkably apt. The girl stood out clearly by reason of her white blouse, was standing

with feet apart and hands on hips staring up at the enormous escarpment. She was at least a mile away, a mere speck. . . . Evidently the cliff had attracted her; time had meant nothing.

"Hey there, Fay—come back here!" Dick roared, cupping his hands to his mouth.

She turned at that and waved her arm in response. They saw her action clearly—and they also saw something else. At least the keen-eyed Fletcher did. His powerful hand tightened on Dick's arm.

"Say, look again at that light reflection. It's only a yard from her. She can't see it where she is. Suppose it isn't just light, but something else? If she gets in the way of it—"

"It's sunshine, you nut," Dick scoffed. "What do you expect it to be? A death ray?"

"I dunno. Nothing here would surprise me."

"I'm all for joining Fay. Come on..."
Fletcher hesitated, he knew not why;
then with a shrug, he accommodated his
long legs to Dick's shorter steps and they
strode together across the rocky plain. Fay
waved several times, then resumed her
study of the rock face, entirely unaware
of the reflected circle of sunshine creeping
ever nearer to her.

BOTH men were pretty well forced to watch the ground as they moved to avoid stumbling, therefore it came to both of them as a distinct shock when they heard a sudden wild scream from the girl. Her words floated clearly on the still, hot air.

"Look at the cliff!"

"Holy cats!" whispered Fletcher, transfixed with amazement. :

He had reason to be, too. A portion of the cliff wall, directly in front of the girl, had opened up half its length, leaving an aperture roughly eight feet wide by twenty high. Fay was silhouetted now as a white speck against an oblong of dark. Dick leapt suddenly into life, shouted at the top of his voice.

"Don't go in! Fay, come back! Don't go in!"

"Dammit, man, the girl's only human . . ." Fletcher grunted.

They both stood watching as, driven by curiosity, the girl went forward into the gap and disappeared from view.

"Well?" Dick glared round. "What are we waiting for? We've got to grab her back. . . ."

They started forward, stumbling and gasping with their efforts as they raced over stones and rubble. . . . Then when they were only a few feet away from the great yawning entrance, it closed on them, completely and with solid finality.

Dick came to a dead stop, chest heaving mightily, perspiration pouring down his face. He was too bewildered for the moment to speak. When he did find his voice, his remark was not illuminating.

"It's closed! Closed!"

"No fooling!" Fletcher eyed the mass thoughtfully. Despite his habitual levity, his analytical mind was busy.

Dick swung around, charged for the rock face and examined it with a feverish desperation. Faintly he could detect the almost invisible line where the movable piece linked into the main face. He thumped on it until his fists were sore, bellowed at the top of his voice—but nothing happened and no sound reached him.

"She must have found a concealed spring and pressed it," he gulped at last, mopping his face.

Fletcher laughed shortly. "What do you think this is, a safe deposit box or something? I've been looking around while you've been yammering. . . . That was responsible!" He nodded his atrocious Panama hat toward the circle of light moving along the cliff.

"You—you mean—?" Dick calmed suddenly. "You mean that circle of light operated a spring somewhere?" "Sure . . ." Fletcher motioned Dick to his side. Together they studied the rock face with infinite care, finally turned around and gazed back at the columned globe. The solar reflection had now left the cliff face.

"This rock here," Fletcher said, "isn't like ordinary rock. Notice? It's been treated by some scientific process that, in one particular spot where the sun reflection strikes, has become crystallized. See . . ."

Dick studied the dully glinting portion and nodded.

"Guess you're right, but who on earth would rig up such an idea?—such a complicated style of lock?"

"Likewise, who spent their time writing love letters on the cliff face?" Fletcher demanded. "As to the lock, there must be a scientific principle involved. . . . Listen to this one. If you're half the scientist you make out, you'll follow me. . . . Had we precision instruments delicately enough attuned, we would be able to see this cliff face—or any object for that matter—recoil very slightly under the pressure of strong light. To the eye there is no evidence of this fact—and fact it is.

"Suppose, though, that this crystallized substance, together with that globe's convex interior, have between them some way of utilizing the ultimate force of light?—solar light, that is. The impact might conceivably be strong enough to shift some hidden rock balance which at present we can't find. . . . Anyway, it's an idea, and if I'm anywhere near right, we're up against a science beyond all ordinary standards. We've nothing in our science to touch ideas like that!"

He broke off, made an irritated gesture. "But here am I doping out theories, when our main concern is Fay."

"Blast those guides!" breathed Dick vehemently. "But for them frisking half our equipment, we'd have heavy explosive with us, could make a way through." "Through this?" Fletcher eyed him sadly.

"Well—we might do something, anyway. Revolvers are no good, I suppose . . .? No, of course not. Anyway, Fay will be in deadly danger. If not that, she'll be scared to death."

He turned back to the thin line in the rock and bellowed the girl's name again. Nothing happened. Bitter faced, he turned.

"Sound doesn't penetrate," he groaned. "Suppose we try common-sense," Fletcher suggested in an acrid voice. "That solar reflection worked at roughly ten minutes after three. You were howling at the time so I didn't tell you." He regarded his watch. "It will happen tomorrow at approximately the same time—or should do. If it does, we go in. If not . . ."

He stopped, set faced

"And in the meantime we have to trust Providence that Fay is safe," Dick muttered. He sighed, rubbed the back of his neck perplexedly. "It's going to be hellish waiting all that time, not knowing what's happening in there. But I guess you're right," he admitted resignedly. "We'd better make camp and see if we can think up any solution."

In silence, they turned to begin the return journey.

CHAPTER III INTO THE CLIFF

A THEY walked, neither man spoke. Both were busy with their own thoughts. . . .

Then presently Fletcher stopped, bent down and picked up a battered cylinder of white enamel, rusty with exposure. Baffled, he glanced around on the dimly visible remains of a camp fire. In curiosity he turned the cylinder over, started as he beheld the initials "G. D." scored on the enamel with a copying lead.

"Grant Denham!" he gasped. "Well I'm damned!"

Dick almost snatched it from him, tugged off the airtight lid and then extracted several note book leaves from the cylinder's interior. Tensely the pair of them read.

"Possibly, if my radio message was received, somebody will come to this spot where I have my camp and find this. I am leaving it here in this container with that hope. The white paint may catch the eye.

"I have not yet discovered what lies beyond the rock face, but I am told-with some reluctance I might add-that at certain periods of the year the cliff face opens! It may be native talk, but it is worth waiting for. The time will not be here yet for another two months. . . Somehow, though, I have a deep premonition that those two months mean nothing to me; they might as well be eternity! The guides with me believe, from my instruments I think, that I am bewitched and a danger to their security. I cannot entirely blame them. I have certainly made many strange experiments which have fostered their childish distrust of me.

'I do feel though that they will kill me. The rest of my party is fifty miles away in trackless waste. They refused to accompany me on what they considered a foolhardy errand. Old books have been my only guide to this mysterious valley.

"If anything happens to me, maybe this message will be found. My radio has been smashed; this is my only means of giving a last word—an important last word that I had not the time to transmit before over the radio. Here it is; it will interest any scientist in the party.

'I have been observing for some considerable time the remarkable fact that the sun and planets are becoming appreciably smaller! I have checked this fact with leading astronomers over a period of years. There is no doubt that the circumference of the sun and planets, and moon, have all lessened! Unable to explain the mystery, astronomers have not published facts. I believe—

"I must stop! Danger-! Denham."

The message ended with a hasty stroke of pencil. It was obvious the professor had only had time to push the sheets in the container and then throw it away, his intended explanation never given.

"So they got him . . ." Dick muttered. "Poor old Prof. . . . Must have taken him into the jungle. The remains of the camp are here all right. . . ."

"Wonder what he was driving at?" Fletcher stroked his chin "Sun seems all right to me—plenty hot enough anyway. . . . Do you know anything about it?"

Dick shrugged. "I read an announcement in the paper long ago referring to the puzzling diminuation of sun, moon and planets, but I figured it was bunk. Now I begin to wonder. . . . Denham only pondered worthy ideas."

"When we find Fay we'll have to tell her."

"Yeah . . ." Dick sighed, looked around moodily. "It's got me licked," he muttered. "The shrinking sun and planets? The swinging cliff door? The writing on the escarpment? Fay? Oh, heck! Let's make camp and sit down to think. . ."

SITTING down and thinking did little good. Both men were too morose to talk much. They ate a silent meal, lay before their camp fire, brooding. In turns they snatched brief sleep, but nothing untoward disturbed the calm moon-ridden beauty of the tropical night.

At the first flush of dawn, Fletcher was up and about, climbed up the pillar of the polished globe and made a far closer inspection than Dick had done. The interior, the convex portion, of the globe was certainly of the same crystallized nature as that one portion of the cliff wall.

"I've a few amendments to make to my theory of yesterday," Fletcher said, during the morning. "As I figure it out, the special area of the rock face is very thin—where that crystallized portion is. Light is concentrated and reflected from this device onto it at certain periods of the year—according to the angle of the sun, of course. The force of the light-waves is somehow

converted by the crystal stuff; maybe its atomic makeup changes light into energy. It then passes through the thin shell of rock to hidden machinery behind. That reacts and the cliff door opens. . . . And, boy, what scientific engineering that must have demanded!" he finished, whistling.

"Probably if we could read that cliff writing, we'd have the solution right now," Dick muttered.

"Mebbe. . . ." Fletcher pondered over that, then turned aside.

He said little after that, or during lunch. Both of them were waiting with intense anxiety for three o'clock. An hour before that time they were at the cliff face, packs on their backs, revolvers fully loaded, torches ready. . . .

In somber silence they watched the circle of light begin its journey of yesterday along the cliff wall. Anxiously they mentally checked off the minutes, stood tensely observing the crack in the cliff face.

At last the light circle touched the crystallized portion— There was a sudden gust of cool air amidst the heat. To the accompaniment of a low creaking, the crack began to widen. Awe-struck, both men stood staring up at the parting walls, marveling at the engineering that had devised such a system in virgin rock.

"O. K.—inside!" Fletcher snapped suddenly, and strode forward.

In a moment, they were together in a tomblike darkness. Hardly had they taken a dozen paces before the rock door closed behind them with complete silence, leaving not the slightest evidence of the sunshine beyond.

"Charming!" came Fletcher's laconic voice from the blackness; then his torch blazed on and revealed his keenly interested face under the Panama hat.

Dick's torch switched on a second later. In silence, they stared around. They were inside a small, artificially made cavern some twelve feet high, with squarely shorn walls. Against the outer wall was a mech-

anism of transparent metal—so tough it did not even scratch as Dick speculatively tapped it with his revolver butt.

Beside him, Fletcher peered at the machinery. It was plainly manufactured from a substance obviously made to stand the test of enormous lengths of time. There were governors, drums of wound wire, small electrodes, tubes. . . . And back of it all a lever arm on a massive joint which receded into the rock, making its reappearance over the visible edge of the rock door.

"I was right this far, anyway," he commented. "This thing, so far as I understand it, is an electrical device which reacts when the force of light waves strike the crystal portion of the rock in front of it—outside, that is—like a photographic lens gathers images to a focus and then imprints them on the plate back of the camera. This machinery then operates, moves the crank, and the sesame act comes into being. A few moments, then this automatic plunger drops and the door shuts. All done by balance. . . . Wouldn't Chu Chin Chow have a grand time here?"

"I like your reasoning—but I like this better," Dick said quickly. He was waving his torch on the floor. It was thickly dusty, but it carried the marks of a woman's gum boots.

"So Fay wasn't too scared to carry on?" Fletcher cried. "Good for Fay! She had her torch, of course..." His eyes followed the prints to a square doorway. Immediately he led the way toward it.

CHAPTER IV

T GAVE entrance to a cavern of far greater proportions—once again manmade. Somehow air was admitted, probably through invisible rock crevices giving outlet to the cliff face. The place smelt musty and incredibly old.

Dick flashed his torch around the walls,

frowned over the sight the beam threw back—that of dully gleaming cases, apparently copper, six feet high and two broad, standing upright in specially contrived niches some twelve feet above the floor level. There were six cases in all, three on each side of the cavern.

"Hell's bells!" he ejaculated. "What do you know—"

"Look!" cried Fletcher hoarsely. "For Pete's sake—look!"

Dick stared astounded as their twin beams converged on the amazing sight of Fay Denham, suspended horizontally and face upward, about twelve feet from the floor! She was directly between the three cases on opposite walls. Her arms were folded on her breast, her body was as straight as though she lay on a board. Her eyes were closed, her face deathly white.

But support there was none! No wires, no controls, no anything. She just floated there like the motionless product of an illusionist's trick!

"Say, would that knock 'em cold on the halls?" Fletcher whispered, waving his hands below her.

"But—but how'd she get that way?"
Dick babbled. "What's holding her up—?"

"She's alive, anyway—at least I think so." Fletcher walked below and around her, studying her keenly. Then he swung around. "Gimme a hand up!" he ordered.

Unsteadily, he climbed onto Dick's broad shoulders, balanced himself with difficulty and examined the girl at close quarters. Her heart was beating steadily; she was breathing evenly. The only queer thing about her was that wherever he touched her he felt his body thrill and tingle.

"Electricity; force of some sort," he exclaimed, jumping down again. "The only explanation is that she's suspended magnetically. Yeah, that's it!" he went on eagerly. "She's between those three cases on each side of the cavern... They're our next line of search. Come on!"

THEY turned and resumed their equilibristic act, Fletcher studying the three cases on the left hand wall by his torchlight. He muttered remarks at intervals.

"They're not solid metal.... Believe it or not, they're made of tightly packed wire; millions of feet of it, I'd say, thin as a hair and— Ouch! They've got electricity running through them. Or is it electricity? Damned if I know...."

"Wire?" Dick wheezed, sustaining all the weight. "Can't you even see between the windings?"

"Not a chance! So tightly packed they form a solid wall. . . ."

Fletcher jumped down and they stood gazing together at the floating, motionless girl.

"Well?" Dick asked at last, perplexedly. What do we do now?"

"Don't ask me! We're up against scientific forces here—scientific forces too mighty for us to understand. Fay's quite unhurt; that's one good thing. She'll recover sooner or later, then maybe we'll learn the truth. . . . Perhaps there is life inside those mummy cases?"

"If there is, why doesn't it emerge?"

Fletcher shrugged, absently flashed his torch around the great cavern. Then he gave a start as he beheld a long, squarely shorn doorway on the far wall. With mute accord, he and Dick started toward it, stood on its threshold and waved their torch beams into the emptiness beyond. The light reflected back to them from carefully stacked machinery, most of it thickly coated with some kind of grease evidently impervious to atmospheric effects.

"Lord!" was all Dick could whisper, as he and Fletcher tramped down the silent, dusty aisles and stared around them. "Good Lord, it's utterly unbelievable! Ages old, untouched— Ready and waiting. Fletch, what do you make of it?"

Fletcher pushed up his hat and mopped his frowning brow.

"It seems absurd," he said, "but from what I've seen of theoretical space-ships, I'd say that most of this stuff here belongs to a space-ship! It is in truth a space-ship dismantled; all its outer plates over there"—he nodded toward a ceiling high stack of curved metal plates—"and here the machinery that comprised the innards. Those pipes over there might easily pass for rocket tubes. . . . There's a lot of other machinery too that isn't applicable to a space-machine. Those massive projectors, for example. Heat ray machines, maybe. Perhaps used to bore out these very caverns. . . ."

He stopped and shrugged. "Looks like Prof. Denham had the right idea in coming around here. We have found something!"

"I just wonder if—" Dick began; then he broke off and spun around at a sudden hoarse cry from the adjoining cavern—a woman's cry, and of pain too!

"Fay!" Fletcher exclaimed, then they both tore back into the main cavern, torch beams playing wildly. They came across no scene of Fay struggling mightily against aggressive captors. No; she was lying on the floor, gradually sitting up and rubbing her anatomy tenderly. Her blue eyes blinked surprisedly in the light.

Fletcher started to grin. He could not help it. Chuckling, he hauled the girl to her feet and eyed her amusedly.

"So—so you got in too?" she panted at last. "What's been happening around here? How'd I come to be on the floor like that? Must have fallen, I guess. . . ." She rubbed herself tenderly.

The two men glanced at each other, then Dick quietly went into explanations. The girl listened with widening eyes.

"You mean that when I thought I fainted in here I really didn't faint? That I was somehow overpowered and made to float like an airship? Bunk!" She broke off and frowned. "Maybe you're right, though. It seems an awful long time ago since I ate and drank. . . . Hmm, funny!"

Fletcher unstrapped his haversack and water bottle, handed them over. As she refreshed herself, Dick went on to outline the fate of her father. She took it steadily. . . .

"I half expected it," she muttered. "I—
I guess crying won't bring him back. . . ."
"Good girl," Dick murmured. "We need

all the nerve we've got at present—"

"Maybe I'm wrong," Fletcher broke in, his head cocked on one side, "but I think I hear something. . . ."

A moment later they all heard it—a slow, crackling crepitation like a chicken breaking through its egg.

"Uh-uh! Something coming!" Fay whispered. Her eyes went quickly around the cavern in the reflected torchlight. Then with a shout she clutched Dick's arm. "Look! That third case is opening!"

"Keep your torches on it," Fletcher said, tight-lipped.

They waited breathlessly, yet somehow without fear. The girl, the men remembered, had not been harmed—only borrowed. . . .

CHAPTER V REVIVAL

HE third case on the left wall broke slowly, its wires snapping like coal underfoot. Then suddenly the front fell entirely away. The torchlight glared onto a being that was anything but fantastic—a man, of apparently enormous age, garbed in white.

His white beard matched his raiment; his long white hair flowed down the sides of his face. And what a face it was! Even in its present repose, it mirrored masterful strength, sublime intelligence—square chin, firm but sensitive mouth, curved nose, and a great, soundly balanced forehead.

"Who is he? A Druid?" Fay whispered.
"No more than I am," Fletcher retorted brusquely. "He—"

He broke off as the man's eyes suddenly opened. They were so utterly dark that

pupil and iris intermingled, producing two irresistible black orbs staring from the white face. Those eyes radiated intelligence, mental power that had almost hypnotic—but by no means hostile—intensity.

"Better give him a hand down from that case," Dick said suddenly. "He's not so young. . . ."

"One is only as old as one believes," came the grave response from the wall, in a voice that was deeply rich and mellow....

The three glanced at each other in bewilderment; then in a few moments, the man had descended from his lofty perch by means of formerly unseen steps in the cavern wall. He came forward slowly, his grave eyes fixed on the trio.

"In a moment or two my five companions will have also awakened from their sleep," he stated quietly. "My name, by the way, is Ralgo. . . . My home?" He smiled a little in his beard. "It does not matter. For the moment it is Earth. . . ."

Fletcher was about to speak, but he was waved into muteness.

"Yes, I know you are full of questions—and rightly, too. They will be answered. Your language? A mere nothing when you reflect that language is merely an oral method of expressing thought. I express thoughts too; the language is merely the materialistic go-between, easily mastered from a brief study of your minds. . . . So, I talk your language. . . . Our purpose here? That is a long story, not so easily told. Of more importance at the moment is our gratitude to you for restoring us—particularly you, young lady. . . ."

HIS mystical eyes turned to the startled girl, and she shrank a little closer to Dick's protecting arm.

"Look here, what the devil is all this about?" Fletcher demanded, unable to contain himself any longer. "How do you figure out that Fay restored you? You mean that levitation act?"

"We'll begin at the beginning," Ralgo said impassively. "How we come to be here is not, at the moment, relevant. What is relevant is the fact that my comrades and I found it necessary to retire into a long sleep lasting thousands of years . . . Yes, thousands! Outside this place you may have seen a columned ball? Maybe you know it collects and concentrates the force waves back of light?"

"I figured that," said Fletcher slowly.

"But what about the writing on the cliff face?" Dick demanded.

"That was written in our own language and gave the periods of the year at which our door would open," Ralgo answered. "We had no means of knowing, at the time of commencing our sleep, what language was prevalent in this land, so of course we used our own. When we first arrived here there was little intelligent life around us; and for the consummation of our plans we needed generations to elapse. We could only sleep through those generations, and arrange a system by which our prison opened at certain times of the day in certain periods of the year. One day, we hoped, a living being would enter. One did . . . This woman you call Fay."

"Then what happened?" Fletcher chewed his pipe industriously.

"Our cases were composed of wires possessing a distinct magnetic quality with an almost interminable duration—a magnetism which is to flesh and blood what your magnetisms are to steel. The instant the girl set foot between the opposite poles of the magnetism she was raised and held suspended . . ."

Ralgo paused, pondered as though choosing his words. Then suddenly he asked, "When you wish to conduct electricity from your power houses to, say, your electric bulbs, what means do you utilize?"

"Wires — naturally," Dick answered promptly.

"Exactly; you have to have a medium. Did it ever occur to you that life force might be just like electricity? Life current is perhaps a better term. Think for a moment of the teeming millions on this planet. What do you imagine is their basic life? atoms, naturally, which makes up their beings, and atoms are electrical. Every body must draw life current from other living bodies; the experiments of the scientist Mendel, in relation to living cells, is sufficient witness to that. An organism, however complicated, cannot live unto itself . . . You may perceive that we six, shut up alone here, were unable to return to life until we established contact with the swarming sources of life in the world around us. For that we had to have a medium, just as electricity needs a wire. Fay here became that wire."

"Huh?" Fay ejaculated.

"It's quite simple," Ralgo insisted. "You, Fay—every living unit—is invisibly connected by life magnetism with other life like your own on the planet, no matter if thousands of miles separate you from it, as is so at present . . . So as she hung there in an unconscious state, she was unwittingly conducting to our cases a life current through her body from the life around her. The atomic makeup of the cases transformed the energy thus received, mechanisms inside operated and . . . We awoke. The moment that happened the magnetism ceased. Fay, I suppose, fell to the floor . . ."

"I'll say!" she growled.

"And until she came nobody has ever been in here?" Dick questioned.

"No." Ralgo turned and glanced upwards as the other three cases revealed signs of collapse. One by one, as the party watched, the remaining unknowns lept down to the floor—all of them very like Ralgo himself, though it was plain he was leader.

One of them presently absented himself in the machine cavern beyond, and a moment or two later the gloom was transformed by blazing bars of light set high in the roof. "Cold light!" whistled Fletcher. "Boy, would that fetch some cash!"

"No doubt you'll require food," Ralgo said, turning. "Come this way . . ."

And he led the way into the machine cavern . . .

NOW that the place was thoroughly illuminated, the two men at least could gather the tremendous knowledge that was implied by those gleaming engines, several of them being tended by the remaining five men. To the girl, seeing the place for the first time, the sight was very close to wonderland. She gazed around in wrapt awe, continued to do so long after Ralgo had motioned to a table and provided food and drink from massive synthesis machinery.

"Say, what do you make of these old boys?" Fletcher muttered, as they were left to their meal. "Who do you figure they are? From their appearance, they're earthly; yet from their conversation I judge they are from another world. I'll swear that stuff there is the remains of a spaceship."

"I'm not so mystified as to their origin as I am to their purpose in sleeping thousands of years and making such elaborate preparations for awakening," Dick muttered. "Look at them now. What's that they're rigging up? A telescope?"

Neither Fay nor Fletcher answered. Then Ralgo came forward and seated himself, regarded the three each in turn.

"I wonder," he said slowly, "if you—or any of your men of science—have realized that the earth is doomed to destruction?—maybe centuries, but it will come long before its natural time; in fact, not only this world, but all the inner planets in the system. Mars, Venus, Mercury..."

"How doomed?" Fletcher asked.

"Have any of you noticed that the planets, sun and moon are apparently becoming smaller?"

Dick started. "Good Lord, yes! I've seen references to it, and Fay's father went

further than that. Here-read this."

He fished out Denham's notes from his pocket and handed them over. Ralgo read them gravely, returned them.

"Probably he was about to explain the matter just as I shall do now," he commented. "It has been going on for generations, thousands of years, is part and parcel of a ruthless scheme of power upon which my colleagues and I stumbled long ago before our sleep . . . Truth of the matter is, the sun and planets are not really receding. The real fact is that Earth and planets are getting *smaller*, while the sun remains the same size as ever."

"What!" exploded Fletcher. "That's absurd!"

"Why is it?" Ralgo demanded. "You understand Relativity, do you not? If the Earth and everything on it becomes smaller in exact ratio, the only guide to the fact is the apparent shrinkage of distant stellar bodies, and if those bodies—as in the case of the planets—are also shrinking, the effect of distance is more than ever evident. Weight is unchanged, because as you will presently see, the mass of the earth has not been materially altered . . . In the end, Earth and the planets will be so compressed to their atomic bases that electron will unite with proton and each world will go out in a flash of cosmic rays."

"Say, you paint a devilish picture," Fletcher breathed, staring at the Ancient fixedly. "Where do you fit in, anyway?"

The somber eyes turned to him. "We fit in because we know all about it, and have for generations. This disaster threatening the inner worlds is made by intelligent minds . . . There is something you must all see. Come here."

They all got up from the table and moved to the mass of machinery which Dick had said resembled a telescope. He was not far wrong, either. A vast rotunda of metal reached up to the cavern roof, was bolted there. At its lower end, in the floor, was a circular reflector of mercury. Gears and

controls were numberless, manned by the five other scientists now awaiting Ralgo's orders.

"What you are about to witness may seem miraculous to you," Ralgo stated. "You have perhaps 300 or 400 inch reflectors with which to scan the heavens, relying purely on light reception. You have not a telescope like this which catches the flying electrons driven from the objective itself, electrons hurled across the gulf by light pressure from the planet under observation. Those electrons can be, and are, built up here by this instrument into a mosaic pattern. The result is an X-ray view of our objective at extremely close quarters. Now watch . . ."

The lights expired, leaving only the spotlights over the control boards. The five bearded scientists began to work in perfect unison. The mercury mirror glowed blindingly bright, then changed to black, studded with gleaming stars as it mirrored the cosmos.

"Naturally, the electrons we trap pass through the rocks with perfect ease," Ralgo commented.

The three said nothing. The view of stars apparently moving towards them made them feel horribly dizzy — then they steadied as a majestic planet loomed into view — the well recognizable equatorially bulging mass of Jupiter, complete with his belts of cloud.

Again Ralgo spoke. "We are of course following the electron paths back to their source, hence we move at the speed of light."

Even so, it took nearly forty-five minutes to span the gulf to the giant world. Even then the onward rush did not cease. The view plunged downwards through the dense cloudbanks into a land of murky, depressing twilight—a land that was, in the main, red rock, in the center of which was an enormous transparent dome, housing beneath it a vast but incredibly efficient city.

CHAPTER VI "DESTROY!"

T a word from Ralgo, the instrument halted its uncanny progress. "Jupiter," he said slowly. world which your astronomers know from their spectroscopic tests is mainly atmosphered with ammoniated hydrogen at a temperature of 120 degrees below zero Centigrade. That certainly obtains over vast areas of the planet, the parts which, because of fiendish tempests and unutterable cold, are totally inimical to life of any type . . . But on another portion of the surface, known to you as the 8,000 mile Great Red Spot-which you see now in the mirror-Jovian scientists have made a part of their terrible world habitable. breathe, inside that dome, an atmosphere of pure oxygen and hydrogen."

"But," Fletcher said, "they'd burn without nitrogen, wouldn't they?"

"Only if water vapor were present as the mixing agent, which of course it isn't. They've taken good care to eliminate that . . . Inside that dome they are cut off from the tempests of their world, are working out a scheme of their own which has been handed down through generations. They have vast knowledge, these people, enormous scientific resources—and what is worse, they have the indomitable courage to carry out their aims."

"You mean—the shrinkage?" Dick whispered.

"In part, yes." Ralgo brooded a moment. "They desire the conquest of the universe. They have resolved to crush distant worlds under their own dogmatic sway, institute a reign of inflexible scientific control in which they will unquestionably be masters. I speak of distant worlds—so far distant they are invisible from this system, but the Jovians know of them . . . And the Jovians can win!

"But, for this conquest they need a ter-

rific source of natural power—the sun. They need his energy to drive their machines, to bring their aims to fruition. They knew that centuries ago, and that was when their scheme started . . ."

"But at their vast distance from the sun they can't utilize it, surely?" Fletcher questioned.

"That was exactly what they discovered," Ralgo replied. "To get near enough to the sun for their purpose meant being as close to it as Earth is—closer, if possible. They can't shift their planet; but they can use natural balances. First they reflected solar forces back from their distant world onto the planets of the inner system, forces which they had amplified and then converted—projecting them on electromagnetic beams—and these forces through the generations acted as a compressing agent on matter structure. Atoms began to close up—hence the shrinkage. In the end the planets will be destroyed—then what will happen?

"Jupiter's unopposed bulk will obey the pull of the sun and swing gradually in towards it. The outer planets will follow, and according to celestial mechanics, Jupiter will finally end up a trifling ninety million miles from the sun in an orbit slightly nearer than Earth's is now . . . The object will have been achieved—nearness to the sun to use the power. And it can be done—as we six have bitter reason to know . . ."

THERE was a momentary silence. Then Dick blurted out:

"But we can't let them get away with this! They're simply destroying this part of the universe to further their own ends! They—"

"Look at them for yourselves," Ralgo murmured.

The view had changed on the mirror. There was a vision of titanic workshops. crammed from end to end with orderly, vast machinery. The Jovians themselves, busy with their work, were singularly re-

volting to human standards. They were little better than flat disks, the flat side to the ground and supported on six blocky legs. For arms they had whiplike tentacles; for a head, a bulbous affair that seemed all eyes. Even through the medium of the telescope there was something about their slow, ordered deliberation that conveyed the idea of banal, pitiless intellect.

"They're horrible!" Fay screamed suddenly. "Utterly horrible!"

Ralgo nodded slowly, made a signal. The telescope shifted again through countless powerhouses, through the entire machine city of the Jovians under its protective dome. There seemed no place for resting or quiet: everything was concentrated on gigantic purpose.

"Originally," Ralgo said, "these master scientists were creatures of the ammoniated, tempest ridden lands. By degrees, though, even as earthly man has done, they emerged from those wilds to better things. They produced a more breathable atmosphere, mastered part of their world. Now you see the ultimate Jovians, convinced they can defeat the universe . . ."

"And so far as we're concerned, they will," Dick muttered. "We can't possibly fight against such inhuman monstrosities, particularly with their mastery of natural forces. Even you must admit that, Ralgo?"

The scientist shook his head. "No—I don't! My comrades and I slept through the generations for the very purpose of crushing these beings, of saving the universe from them . . ."

He turned, had the instrument switched off. The lights came up.

"Just why are you so anxious to overcome these creatures when with that spaceship you could travel far beyond their reach?" asked Fletcher slowly, and he nodded to the dismantled flyer.

"Our plan is—vengeance," Ralgo replied steadily.

"I don't get it."

"You've probably been thinking we belong to an early earthly civilization, or another world where the people are similar to you? You are mistaken. We are Iovians . . ."

"Huh?" Dick ejaculated. "But we just saw some Jovians, and—"

"We were like them once." Ralgo eyed the three in faint amusement. "Generations ago, as so often happens in a small community, there was a great deal of conflict in the scientific city you have just seen. Some scientists—my friends and I to be exact—wanted triumph to come from progressive scientific achievement and amity. Others, more powerful, desired it otherwise, were bent on the plan of conquest you already know. We were helpless against that edict—were outlawed into space and warned to never return . . . We cruised, found only empty worlds until we came to this one.

"Maybe it was chance that caused us to drop in this lushy valley. We perceived that to breathe your atmosphere and stand your gravity we would need physical alterations—so we patterned our bodies to the shape of the apelike men we occasionally saw in the surrounding jungles. It was easy with the surgical instruments we had aboard. Then we hollowed out these caverns, dismantled our space machine...

"We went into conference. There was a chance that our enemies on Jove would find their plan impracticable and be forced to abandon it. On the other hand, they might succeed, and if so only the passage of unnumbered years could show it. span those years? Not by ordinary waiting, for we would die and had no women with us to bear children. We could only rely on suspended animation and the chance that one day a living being would revive us . . . The rest you know . . . So, we seek vengeance—vengeance on the children of the men who outlawed us, vengeance on our world for daring to make so heinous an experiment."

"You six against all that lot?" Fletcher said dubiously. "I can't believe in that, Ralgo. Best thing you can do is pass this information on to our own people. We'll build space-machines and then go to war against these creatures . . ."

"Against their science?" Ralgo smiled faintly. "You'd be mown down like grass. No, there are other ways—simple but vastly destructive ways. Your world possesses one element which is lacking on Jove, and for that one element we are prepared to trade you all the scientific instruments we have here, barring the space-ship."

"But—but you can't mean all these valuable machines?" Dick gasped.

"Why not? We shan't need them in a while—and as I understand it your people have learned the folly of war and could make good use of these instruments. You have seen the telescope, which can further your astronomy—then there is synthetic food creation, cold light, atomic force heat borers, a myriad things. Each one is foolproof; as your engineers study them they cannot possibly hurt themselves from wrong connections. Space travel we shall retain."

"They'll—they'll net a fortune beyond dreams," muttered Fay breathlessly. "We've spent a good deal coming here and— But what are you going to do?" she asked quickly.

"Destroy!" With cold impartiality Ralgo turned aside.

CHAPTER VII END OF A RACE

RALGO and his comrades became so busy in the hours that followed that there was hardly any chance to question them on their scheme. All the three could do was watch events, and by degrees they beheld the erection of a small but exceedingly efficient space-machine from the machinery and plates that had been laid aside.

At intervals they slept, awakening to find further progress—until at length, possibly days afterwards, the space-machine was complete and mounted on massive runners. A small tractor, driven by atomic force, drew it slowly out of the cavern through a newly-fashioned aperture devised for the purpose.

Fay, Dick, and Fletcher followed to the exterior, stood breathing in the fresh, early dawn air, gazing out over the mists of the valley.

"There is not much more to tell," Ralgo said, after his five companions had joined him. "It is perfectly obvious that we are men without a planet—nor have we any wish to trespass on this world where you have your destiny to work out. Our course lies in duty to our own world, and if in that duty we sacrifice ourselves and save other worlds from the enslavement of science gone mad, what does it matter?"

"But you're not going to kill yourselves?"
Dick cried in horror.

"Only in order that we may kill others who deserve to die . . ." Ralgo smiled very slightly. "Death is not so terrible a thing when you understand science . . ."

"You spoke of an element that we have on Earth—which we are to give you in return for your machines," Fletcher said. "What is that element? Name it—it's yours, if obtainable. What is it you want that can possibly destroy the Jovians?"

"I have it already," Ralgo answered calmly. "It is water— H_2O , as you call it. In this ship, fixed over the nose trapdoor of the machine, are two large cylinders of pure water. Also on these containers are several detonators. When those containers are released onto the dome over the Jovian city they will explode and smash the dome, releasing the water. The rest will be scientific law. With the presence of water, the oxygen and hydrogen in the dome will unite with fiendish force, will be fired by the explosion of the cylinders themselves. There can be only one answer . . . Every living

thing in that oxyhydrogen stretch will be instantly burned to a cinder... The Jovian race will be exterminated."

"But look here," Fay broke in suddenly, seizing Ralgo's arm, "why do you need to sacrifice yourselves in this work? If you won't have Earth, what's to stop you going on living on Jupiter when your enemies are eliminated?"

"With these bodies, and Jove's gravitation? No, Fay; when we changed our bodies to Earthly form we took an irrevocable step. We cannot change them again . . ."

Ralgo stopped, stood looking at the silent three for a moment, then he said quietly, "If you are interested in this final move, you can follow our progress in the telescope. It is already turned on Jupiter. Depress the last switch on the right hand side of the board . . . That's all. And now—"

He merely gave another of his tolerant, wisdomly smiles, then turned and entered the airlock. It closed.

Five minutes later, blue smoke drifting on the hot wind alone announced where the space-ship had been . . .

It was several days, however, before the stupendously fast Jovian flyer made any appearance in the telescope—prior to which the three curbed their impatience as best they could by studying the machinery that had been left to them. They finally arrived at the conclusion that most of it would advance earthly science at least a hundred years, to say nothing of the untold financial benefit they would reap . . .

Then everything was incontinently forgotten as Fay, the first to notice the speck in the mirror that denoted the flyer over the dome of Jove, gave a hoarse shout.

"It's in view—a bit blurred, but maybe that's because the ship's not yet in the focus of the planet . . ."

Immediately Fletcher and Dick joined her. The three of them stood eagerly watching as the blurry speck began to assume clarity, until at last it was poised directly over that massive dome. It was obvious the Jovian scientists had noticed nothing so far.

Gradually the machine lowered—then suddenly from its nose dropped two faintly discernable specks. There was an aching pause: the three held their breath involuntarily, then they blinked at two dazzling flashes as the cylinders struck the dome beneath. What happened afterwards was a mad confusion—a glimpse of Hades.

Flame, incredibly bright, spouted outwards and across every portion of the dome, swept up to a bewildering incandescence as oxygen, hydrogen and water united in a common blast of fury . . . The space machine itself, without slackening momentum, plunged downwards and vanished in the smother . . .

The three before the mirror stared through half-closed eyes . . .

When at last they were able to look properly, there was only a burned-out black hulk where the dome had been—a hulk dotted with twisted, irretrievably ruined machinery.

"They made it!" Fletcher whispered. "Destroyed everything."

"As far as the efficiency of the water combination stretched, yes," Dick admitted. "Presumably the ammoniated hydrogen air has closed in now over the gap . . ." He took a deep breath, straightened up. "Well, I guess that lets us out. The sun, though further away, is still O.K. for our purposes, and that danger of disaster is removed . . ."

He swung round suddenly to Fay—but she was at the other end of the cavern.

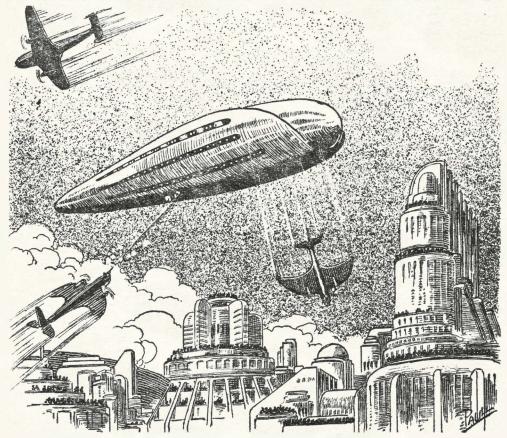
"Come here!" she cried excitedly. "Here's a radio set! We were wondering how to find our way back home. We don't need to wonder any longer . . . Come on—get in touch with New York. Send for Government representatives . . . Then we'll start to talk in big money."

"I think," said Fletcher gravely, "she's got something there."

THE NEW LIFE

by JOHN COLERIDGE

Lon and Mirna fight the evil civilization of the Twenty-Second Century for a right to happiness—for theirs is a forbidden love; but escape from the Air Patrol brings them into the capture of a mysterious ship, not of this world, where hooded men carefully guard a hundred kidnapped women!



He kept circling above the motionless ship.

CHAPTER I RACE THROUGH SPACE

Lips set, chin firm, the girl who had spoken those words pulled hard on the control stick to send the tiny airship upward at a steep angle. Her hand gave the throttle an almost savage tug. Then

she swung her eyes backward and down.

The young man beside her also looked for the pursuit they hoped would not be there.

But the girl pilot could not neglect her course and had to tear her eyes to the front. Ahead and above was the Fifth Level, bounded by the air-buoys of striped blue-and-white, between which careened a

scattered mass of swift aircraft. A moment later their ship eased into the Fifth Level lane.

"Did he follow?" asked the girl tensely, scanning the lane carefully.

"No. At least we've shaken him off. But for Jupiter's sake, Mirna, don't try to run away from the Air Patrol if they signal halt!"

But the girl could see no blue-andwhite moth-shaped airship in the lane, and when they passed an air-buoy, no red stop-beam shot to them.

"You see, Lon, we've escaped that too!"
The man said nothing; merely kept a sharp look-out on all sides. He seemed unwilling to admit that they had defied the law and won free.

"Head for Strato-outlet 17," he said presently. "The sooner we get into a strato-lane, the better."

It was accomplished in a few minutes. The girl pilot skilfully wormed the ship to the outside edge of the Fifth Level, shot up into the strato-outlet, and then between the bright red-and-white buoys of the strato-lane. The man had already snapped on the artificial air-control and tripped the cabin-sealing lever. When the air engine coughed and died, the girl switched on the rockets. She locked the vanes at dead level, set the blasts at minimum, and sagged limply into the man's arms.

But only for a moment did she display this exhausted reaction to the tenseness of the past hour. She sat up, dashed a suspicion of tears from her eyes, and smiled.

"So, Lon G. Otis, we've foiled the best efforts of my determined father."

"Then it was your father?"

"Certainly, dear; who else? But this is the first time he has set a—a human bloodhound on my trail." Anger flared in her dark eyes.

"And it won't be the last time," supplied the man. "I'm beginning to get discouraged—" "Lon!" the girl breathed, shocked. "You—discouraged?"

He turned away from her accusing eyes. "It isn't that I don't love you or want you, Mirna. But to have you means defiance of your father, of the law, of the iron-clad social code of today."

"But I am willing to break the code, and even leave my father—for you!"

The man faced her squarely. "Do you know what that means? It means we would have to become fugitives from law—would have to escape from the city. Let's face the truth, Mirna. No city of the civilized world—and that's almost all of it—could be our home; we would be outlaws. We would have to leave civilization and go to some out-of-way corner of the world to live a life of hardship, apart from the rest of earth's people. Perhaps you don't quite realize how hard that would be—"

He fell silent. The girl, too, could not speak and turned tear-glistening eyes on the few craft that dashed along the stratolane.

THEY lived in the 22d Century, these lovers whose hopes seemed dashed by the sternness of the social code of their time. The inequalities of the 20th Century had gradually grown to a new, and yet old, caste system among the civilized nations. The money-kings and captains of finance of that previous century had molded the future so that by the end of the next century their wealthy progeny had inherited control of government as well as industry. They had become Royalty. The masses were divided into two classes: brain workers and common laborers.

Not only did the Royal Class of money and power hold the world in its palm, but the original founders had drawn up a social code forbidding marriage between themselves and the two lower classes. Thus they were assured of always having the upper hand. Born in luxury, reared in plenty, living in the purple lap of absolute power, no new and more democratic blood could be instilled to foster a change.

Lon G. Otis was of the second class, a brain-worker; but he used his brain only to the advantage of the Royal Class. That class ordered affairs so that the labors of the masses resulted only in continued power and luxury for the ruling few. He, in common with the majority of his caste, saw the misery of the masses, but was helpless. Yet a disturbing thing had happened to this young engineer. He had seen and fallen in love with a daughter of the upper class. And what was still more calamitous, she had lost her heart to him!

For more than a year these two had been meeting clandestinely to find their mutual love growing instead of passing away. But the girl's father, a true aristocrat in spirit as well as position, had detected the affair. Their exciting chase through forbidden areas between air-lanes had been a result of the father's attempt to break up the secret night meetings by setting a spy on his daughter's trail. They had escaped him by the girl's daring violation of the air-traffic rules, and had been fortunate in not being apprehended by the strict Air Patrol.

But now a dark future faced them, for both knew the father would resort to more direct methods once he had learned Lon's identity.

Lon, in his middle twenties, was tall and broad-shouldered. Quick, direct blue eyes in a frank, open face belied the depth of his character. In an earlier age, his qualities would have quickly carved out for him a brilliant career. Here in this restricted age he could not rise higher than he had already reached. He was a willing worker, but there were times when his deepest thoughts seethed with revolt against the iron tyranny of the upper class.

THE girl beside him was radiantly beautiful and not merely through the use of cosmetics. Her surname of Haverton ranked high in the Royal Class. By nature she was spirited; daring shone from

her large brown eyes; vivacity danced in her lithe body.

But tonight she was greatly troubled. Up until this time the hazards of secretly meeting the man she loved had thrilled her rather than bothered her. Now, faced with the gravity of their situation by Lon's frank speech, she felt the first signs of an oncoming dark cloud that threatened to blot out their future.

"I'm thinking of you more than anything," said Lon, breaking a long silence. "You would never be happy away from civilization."

"With you I could!" cried the girl defiantly. "Any life with you would be better than life here in a city without you."

Lon shook his head.

"It would!" persisted the girl, yet her voice faltered. She was of an intelligence capable of seeing the truth of his words, "We can easily get away from civilization in this very ship."

"Don't go on," said Lon, putting a finger to her lips. "Anyway, what use for us to follow that course when life on earth will be wiped out in a decade or less!"

Mirna gasped. "What do you mean?" "Just what I say. Civilization and human life—all life—are doomed!"

Mirna showed her bewilderment. Lon went on, suddenly facing her and raising his voice. "What do you suppose the changes in normal weather in the past three years have meant? Your people, the aristocrats, refuse to credit it, but the earth is due for a terrible ice-age. An ice-age is a destructive thing. Each previous one wiped out all signs of then-existing civilizations.

"The aristocrats are secure in their life of power and luxury," he continued bitterly, "but they have no scientists among their ranks to tell them the truth, and they disbelieve the scientists of my caste."

"Lon, is it really true?" asked the girl. "Couldn't your scientists be wrong?"

"Hardly. What has been discredited

by the aristocrats has been accepted in my caste now for many months. There are even some who feel glad that royalty, too, must die with us. Even I sometimes feel that way. It almost seems as if the God of all things had put in a finger to end the tyranny that is called civilization today."

He put a hand on the girl's arm. "I have avoided saying these things to you, Mirna, because I didn't want to hurt you. My people and the poor slaves of the lower caste have always hated your people. That is why the masses have taken the news of earth's doom so dispassionately. They feel almost glad—"

"Oh, Lon!" sobbed the girl. "Wretched as conditions have been in the past century, still it is worse to think of that doom over our heads. Isn't there anything can be done?"

"I'm afraid not, Mirna; it's inescapable."
They talked of other things then, small things, but their conversation had no spirit. Mirna finally turned the ship about to return to the city. When she had landed at a transport field, she turned to the man.

"Then, Lon, if life is to be so short, let us have our love till the end. Don't worry"— she went on as he opened his mouth— "about my father. I'll contrive to escape his watchful eye somehow, and pick you up here on our regular nights together."

She gently pushed him from the cabin, revved the motor and roared away toward the center of the city where the nobility dwelled. Lon turned dejectedly from the field. Despite her loyalty to him, and her buoyancy, he felt that soon their bubble of happiness would burst. Her father would step in soon and end it, beyond the power of either of them to prevent it.

CHAPTER II TRAILED BY SPIES

IRNA landed the ship in her father's private field, turned it over to attendants, and entered

the Haverton living quarters. They were the epitome of magnificence and luxury. Soft lights spread a gentle glow over small tinkling fountains, carven ornaments, vases of perfumed flowers and beautiful furniture. But she passed this without a pause. She had known nothing different all her life.

At the door to her chambers she met her father. Stern, arrogantly molded features with an overtone of ruthlessness were his heritage from those Haverton ancestors who had reaped a mighty fortune and come to control all aircraft. He was tall and thin. Cold blue eyes peered from beneath the drawn-together emphasis marks that were his bushy eyebrows.

"Mirna!"

The girl, first faint, drew herself up and stared back defiantly at his heavy frown. "Yes, father?" she said.

"This is the first time I've mentioned it, but it has come to my notice that you are engaged in some clandestine affair with a man of the middle class. Is it true?"

The girl flung up her head without answering.

"You bring disgrace on our honored name," went on the father coldly. "Your mother is fortunate to be in her grave, unknowing of this. You must be insane to betray your class pride. But I shall put an end to it. From now on consider yourself under restraint. I have a guard who will stand before your door and inform me when you wish to leave your rooms. Furthermore, you will no longer be allowed the use of our family aircraft. You have proven yourself untrustworthy, going to the extent of violating traffic rules to escape the person sent by me to catch the culprit who is disgracing our name. Who is that man?"

Mirna pressed her lips tight.

"You will not tell. But I shall find out in other ways. When I do, he will be punished and put in such a position that he can no longer intrude on royal decency." Mirna trembled suddenly. But quietly she said, "You will kill your own daughter if you have him put to death."

Haverton opened his eyes wide. "You little fool!"

"Not me—you!" screamed the girl, losing control. "I love him; you can't change that. Nor can you end our affair, for the coming doom of earth will soon shake loose all moral codes!"

"Doom of earth! Has that vile, low-caste lover of yours filled your mind with the mad hopes of the ignorant masses?"

"I'd believe him sooner than you," cried the girl. "And I'm glad—glad, too, as they are, that it must all end—"

"Girl, you are mad!" hissed the angered aristocrat.

Mirna, laughing hysterically, dashed through the doorway into her room and slammed the door. Haverton, his face dark with suppressed anger, made a step as if to follow her, but instead wheeled and strode away.

The doom of the earth that Lon had told the girl about, despite the disregard of the luxury-lulled nobility, was actually in progress. Three years before, the climate of earth had suffered great change. Winters had become severer, summers cooler. Gigantic storms in the tropics had arisen, never before equalled in destruction. Tidal waves of vast proportions had inundated all coasts.

THE scientists, all middle-class workers, had quickly investigated the cause. The alarming truth came out that earth had somehow slipped from its prescribed orbit and was drawing away from the sun. In a year's time it was noticed that the axis was also shifting, so that in time the tropics and polar regions would exchange places.

The astronomers at the same time noticed that all the planets and even the satellites were also changing orbits and shifting axes. They announced that the

age-old balance of the solar system had been strangely disturbed, and that if continued, would result in complete collapse. But long before the ultimate end, the human race on earth would die from the havoc of the ice-age that would result.

In characteristic mental laxity of degenerate nobility, the upper class refused to credit the dismal predictions of the earnest scientists, saying it was a plot to disorganize civilization. They could not, however, refute the evidence of weather change. This they optimistically prophesied would soon halt. As proof of their contention, they brought up the old theory of ice-ages. This old rule stated no ice-age was due for another fifteen or twenty thousand years. So the scientists were scoffed down.

It was the second day after his wild ride with Mirna that Lon found his premonition confirmed—the premonition that his love affair with her could not go on much longer. That day he had been annoyed to find himself watched by a hawk-faced man. Ostensibly on a tour of inspection, this man had hovered around Lon as he worked in his electrical laboratory, saying nothing. In the evening his predatory face had gleamed momentarily from a patrol-car window, watching Lon climb the steps to the small apartment which was his home.

A spy on his trail! Lon had no doubt as to who had given the man orders. The thing he had long feared, but which he and Mirna had avoided by careful planning for a year, was now happening. It would be only a question of days and then he and Mirna would be forced apart for ever.

The next day he was shown that the separation was already in force. An official call came for him in the afternoon, ordering him to report to the divisional police station. Here he was booked as a suspicious character, and informed that he would be under surveillance till he acquitted himself of the charge. Crime and treasonable plotting were not allowed to gain headway in

that time. A complex spy system had been organized by the Royal Class to prevent organization among the two lower classes.

Highly indignant, but helpless to resist, Lon was forced to bear the ignominy of this charge. Then, before he was allowed to depart, he was conducted to a private office. His heart sank as he faced a man in the scarlet and black of the Espionage—an organization as powerful as that of the police. Had they found out everything? He squared his shoulders defiantly, though, as the officer bored him with sharp and accusing eyes.

"What is the meaning of all this?" demanded Lon, showing a bravery of spirit he did not feel. "Why have I been charged as under suspicion, to be spied upon by your men? I am not a revolutionist, nor have I plotted against the government in any way."

"You are trying to act the part of not knowing why you have been put under official suspicion," returned the officer suavely. "Yet you do know."

"I do not," said Lon flatly.

"Then I will tell you." The spy-chief grinned maliciously. "I am not permitted to name the lady, but you have been meeting her unlawfully, quite regularly, and for some length of time. She is of the Royalty. Her father, lenient and noble-spirited, will not order your arrest and punishment as matters stand now. In fact"—the officer leaned forward—"if you were to admit your part in this affair and promised to never again see the lady, you would be relieved at once of espionage. This message came from the father of the lady in question. There is your chance, my young friend."

Lon saw the trap immediately. They were not sure he was the right man yet. If he were to confess his misdemeanor, and even though he promised to discontinue the affair, he would that quickly be arrested. His punishment under the law would then be demotion to the laboring caste!

Lon clenched his fists, a purple anger flooding him. How evil was the system under which they lived! And how he hated the leering man before him, whose uniform marked him as a hard-hearted minion of the upper class tyrants.

Conquering a desire to leap at the officer and choke him, Lon turned to the door. But he paused and turned suddenly. "I have nothing to confess," he said evenly. "As for your vermin spies on my trail, I have nothing to fear from them."

Lon grinned to see the leer turn to an angry scowl on the officer's face. Then he left. As he flung out of the building he was promising himself that he would beat to a pulp the first spy on his trail. Yet he knew, even in his helpless anger and dismay, that he could do no such thing without the gravest of consequences.

Spies dogging his footsteps! Could he risk going to meet Mirna at the airport? Tomorrow night was their prearranged time. Yes, by the stars, he would risk it, if only not to disappoint her. Perhaps he could give his followers the slip like Mirna had done up in the air-traffic.

CHAPTER III BATTLE IN THE BLUE

HEN it is inevitable?" asked Lon of his scientist friend. The other nodded. "The orbital expansion of the earth has ceased. But the seed of destruction will grow. The shifting of the axis and the increased distance from the sun will precipitate a super-rapid ice-age. Former ice-ages took thousands of years to come about. This one will be upon us in a short ten or twelve years."

"Can nothing be done to save even a small part of the human race?"

"We are trying, we scientists. Two things are possible: either burrowing into the earth and living in artificial caverns till the ice-age leaves, or departing from the earth altogether. The first is a hazardous undertaking, and the time is far too short. We do not know how long the ice-age will last but it will probably be hundreds of years. Even present-day science quails at the thought of such a gigantic task as making a self-contained home in the bowels of the earth. As to the second possibility, the men who could most help are gone."

Lon looked up curiously. "You mean those hundred scientists who disappeared nine years ago?"

The other nodded. "They, curiously enough, represented the flower of science, especially the science of rockets."

"No one. They left in absolute secrecy. No doubt they are in some odd corner of earth, living life as they wish. You know, of course, that it was the tyranny of the aristocrats that drove them away."

Lon pondered a moment. "Isn't it possible that they foresaw the coming doom and left civilization for the express purpose of preparing for it?"

"Very possible," agreed the scientist. "We all know how assiduously the artistocrats searched for them, thinking they had left in order to prepare a revolt campaign against their rule. Why, for five years the Air Patrol, a special corps of them, scoured the entire earth. The united nations of Europe, Asia and Africa joined the western world in the quest. Yet never a sign of those hundred was found. It is most baffling."

Lon shrugged. "The nobility still disregards the threat of doom?"

"Yes. When it was reported that the earth had finally ceased to wander away from the sun, the Royal Class immediately took that as absolute assurance that all would be well. Lon, it is remarkable how narrow-minded they have become! It seems that the two centuries of their luxurious rule has degenerated their minds to the extent that they can no longer reason. or listen to reasoning."

"They will die too," supplied Lon with-

out feeling. "What matter whether they realize it or not? They are as powerless as we."

He left the scientist then and wandered out into the prim, plain streets that composed the portion of the city in which lived the middle class. He wandered through almost deserted avenues, apparently without aim. This was the evening he was to meet Mirna at a certain transport field. Yet he must first shake off the spy or spies he knew must be on his trail.

ON resorted to tactics he had learned in his earlier years while a member of a secret revolutionist group which had been later broken up by the Espionage. Boarding an elevated train that took him to the amusement center of the city, he transferred to a local car that stopped at every loading platform. Such was the cleverness of the men on his trail that he did not know where they were, or who they might be among the crowds pressing close to him.

As the local train began to make its stops in the most crowded sections of this part of the city, Lon put his method into practice. Pulling his hat low he got off at a particularly crowded platform, in the center of a milling group of people. Then he casually pushed his way into the same train, but on the next car. He mingled with a group ready to get off at the next stop. When the train ground to a halt again, he repeated his maneuver. He did this five times. And in all that time he had been squeezed tightly in the crowds, with new faces constantly pushing to the front.

Sure now that he had shaken his trailers, and laughing to himself at the ease of it, he boarded a train that would take him to his destination. But all his trouble had been for nothing. Arriving at the air-field, he did not find Mirna, nor did she show up in the next two hours.

"Something has happened," he muttered. "Her father not only put spies on my trail, but must have prevented her coming. I

guess that puts finis to everything for us."

He left the air-field despondently. After walking till long after midnight, in a black mood of depression, he suddenly told himself he was not beaten yet. He would do the one thing left—go to her, since she could not come to him. He knew it was dangerous—the law was strict with underclass trespassers in the patrician section—but he would try it.

The aristocratic section of the city was the hub. Surrounding it completely and separating it from the circle of middle-class dwellings was a high stone wall. As the aircraft and all weapons were in sole possession of the ruling class, this wall was a sufficient barrier to mobs and rioters. But a lone man could clamber up in places where the stone had crumbled to allow a foothold.

Carefully, from the top of the wall, Lon surveyed the scene at his eyes' command. It was like looking from a jungle to an Eden. On one side of the wall was the drabness of unadorned middle-class dwellings—on the other a vast expanse of park and garden, shimmering softly in the full moon. In the dim distance he could see the vague outlines of the nearest of the palatial homes of the aristocrats, some of them veritable castles.

It brought a numb ache to his heart, it was so beautiful. But it brought burning bitterness, too. He, and millions like him, must live in plain surroundings, drab streets, and uncomfortable houses—while these parasites of the ruling class lived in a comparative heaven! And further beyond the middle-class city was the abomination that made up the miserable homes of the lowest class. They, por souls, lived in hovels.

Lon shook emotion from him. He must be wary. Seeing no sign of the police who patrolled the patrician city, he dropped to the street level and scurried into the shadows of the trees that lined an avenue. Keeping always in shadow, he walked uncounted miles. He knew exactly where he was going, for several times Mirna had sailed the airship they were in over her home to show him what it was like. He remembered vividly the outlay of homes.

When the Haverton mansion loomed before him, Lon breathed easier. He had escaped the watchful eye of the police, who, in these troublous times, patrolled the Royal City against any possible assassins. No one knew he was here. It should be easy to communicate with Mirna. He followed a line of flowering shrubbery to that part of the mansion that Mirna had once pointed out to him as her suite of rooms.

THERE was a light streaming from one of the windows. Lon drew in a full breath and prepared to run across the moon-flooded lawn between him and the window.

At that moment a light in the sky caught his eye. It was merely a dim glow of green, but it was descending rapidly.

Lon watched. With a suddenness that startled him, a black shape, bearing the green light, dropped out of the sky, glinting somberly in the moonlight. It hovered a moment above the Haverton mansion, then floated lightly as a feather downward, to land on the lawn exactly between Lon and the window.

The watcher passed a hand before his eyes. What hallucination was this? He had never seen such a ship before. Built like the body of a stream-lined airplane though it was, it had no wings! More, it had no propeller and he had heard no engine-noise from it! What amazing ship was this? Where had it come from? And—most important—why was it here?

Lon's thoughts were cut abruptly short by the opening of a sliding octagonal doorway of the strange ship. From it stepped two figures clothed in black, with masks over their features. After glancing around the open lawn—not seeing Lon, who had drawn behind the shrubbery—they approached the window.

Lon, seeing all this, sensed that something decidedly strange was underfoot. His first thought was to rush out and shout, thus bringing out the Haverton servants and perhaps a nearby policeman. But another thought prompted him to stand still and watch.

The two figures now stood at the window. One of them raised his arm, pointing at the glass, an instrument in his hand. There was no sound, no indication of anything happening, yet the next moment they had both leaped lightly to the sill and clambered into the room. It came to Lon that the glass of the window had been made to vanish completely! Was it robbery or abduction?

He must circumvent this, whatever it was. The fact that they entered a window of Mirna's room boded no good for the girl. Then he noticed with a shock a third masked figure standing beside the ship, ceaselessly looking around. In his hand he held what was plainly a shock-pistol, such as the police carried.

Now Lon was in a quandary. If he rushed out there, unarmed as he was, the guard would use his shock-pistol on him. If he began shouting and raising a clamor from where he stood, no one might hear him, for the buildings were an appreciable distance away. Before he had time to think of a third possibility, the figures again appeared at the window.

Lon needed but a glance to see that one of them carried in his arms a limp, girlish figure that could be only Mirna! With a wild shout, Lon rushed out at them. The masked figures glanced at him, startled. Then with hurried motions they all leaped into their ship. The octagonal door clanged shut in Lon's face, and even as he pounded and clawed at the metal, the ship rose gently. Gathering speed, it raised into the silver blackness of the sky.

Lon, in stunned surprise, watched the

alien ship's dark shape melt into the blueblack vault above. But next moment he was running at top speed toward the Haverton airship hangar. His shouting of a minute before had apparently aroused the household, for he saw various figures flying about. One of them, a burly man, lunged at Lon, apparently thinking him the cause of the whole thing. Lon avoided him easily and raced on, glancing upward over his shoulder to see where the wingless ship was. He was able to see the green light it carried. But it grew fainter and smaller steadily as the ship gained altitude.

L ON stopped before the door of the hangar to find it locked. With a curse of vexation he broke a small statuette off its base and flung it through a nearby window. Then he scrambled in and ran quickly up to the ship that Mirna always used, and which she had taught him how to fly. He started the motor, knowing that the roof opened automatically when the noise beat on its audio-sensitive lock. Then he pulled at the controls.

Like an agile insect, the tiny airplane leaped upward and into the night sky. Lon could see below many figures looking up at him, waving their arms and shouting. Even Haverton himself was there, shaking a fist. But Lon had no time to conjecture what they thought of him for so high-handedly confiscating a Royal ship. He turned his eyes upward.

He could see nothing of the ship. But he knew it had gone straight up, at least till it had become invisible. Anyway, upward was the best bet, and upward he went as fast as the motor could manage. He peered steadily ahead, casting a quick glance below and around at times to see if any of the snoopy Air Patrol were chasing him for using high speed at low levels. For long minutes he saw nothing and began to fear that he had lost the trail altogether.

Then suddenly he saw a dim speck of green that grew brighter steadily. It

must be the alien ship! At the same time he saw with sinking heart one of the green-and-white moth planes of the Air Patrol zoom up at him from the First Level, which he had passed a moment before. What should he do? What could he do?—the Air Patrol had super-fast ships and also weapons. He ground his teeth in rage.

"You won't stop me, you hell-hound!" he shouted uselessly at the inexorably oncoming ship.

With that he turned off the helicopter and brought the front motor to roaring life. Turning nose upward at a sharp angle, he jerked open the throttle. Looking back, he saw the blunt-nosed moth ship fall back momentarily, then loom up again at high speed.

Lon knew the range of their weapons. If he could twist and turn and maneuver enough to keep out of line of the guns, he might win free of them. Then if he could put on a burst of speed and catch up with the alien ship, and put the Air Patrol on its trail...

The next few minutes seemed like a vivid but impossible dream. Lon, using all the skill at his command, made his ship perform like a mad thing. Loops, twists, wide high-speed curves, anything and everything he could think of he used to baffle the striped moth ship. At first the Air Patrol ship shot to him the red beam, which meant stop. Then, when the miscreant refused to halt and instead attempted to flee, the minions of the law brought their guns into play.

Lon, still manipulating the controls like a demon, felt faint as the livid streaks of trail-fire bullets spun by him, often missing him by mere inches. Then at times the pale violet of a shock-beam swung by so close that he shuddered and shrank back in his seat. It could not last long, he knew. Sooner or later—

He had almost forgotten the alien ship in the excitement of escaping the Air Patrol. Out of the corner of his eyes he suddenly saw it again, so close that he wondered if it had stopped or was coming down. As Lon flashed by the Second Level, hounded by the green-and-white moth ship, another moth ship leaped from an air-buoy landing to aid its sister ship. Now with two after him, Lon knew he had no chance.

He wondered why the alien ship was hovering about. If only the Air Patrol would see it and chase it too. But what if they did, and suppose there were resistance and they were shot down—Mirna, too, would die! Lon was in misery now and heartily wished he had not given chase to the alien ship at all.

He found himself suddenly on the other side of the wingless mystery ship. One of his gyrating swings had carried him there. The two moth ships, widely separated, came up at a furious rate. Evidently they had at last spotted the wingless ship, for one veered toward it, and the other at Lon. Within them were grim-faced Air Patrol men—men whose greed for small luxuries and influence had drowned their gentler emotions. They were the Air Patrol and they were dangerous opponents in this day of harshness and class hatred.

It all happened in a few seconds. The guns of the moth ships spluttered fire-bullets as they zoomed closer to their prey. The alien ship, Lon noticed, had ceased all motion and hung there magically. Suddenly one of the moth ships ceased its gunfire. Then its engine died and the prop stood still. Unpowered, it lost altitude and glided downward, obviously still under the control of the pilot. Then the second moth ship sped to attack this strange enemy and a moment later it, too, became silent and glided earthward.

Quite bewildered, Lon circled his craft around the adamant ship without wings, and tried to think. What marvelous, invincible craft was this which could disarm and unpower the troublesome Air Patrol and send them down like spanked children? And now, what was there left for him to do?

He kept circling above the motionless ship, unable to initiate a new move. He knew now it was within their power to disable him and send him on his way.

And whoever or whatever was in that strange craft—Mirna was in their power! For what purpose he could not guess. A seething frustration at this inexplicable turn of affairs rose in Lon. He was about to recklessly turn his ship and try ramming the other in pure desperation, when the wingless wonder broke from its invisible mooring and swung toward him. Lon was in a daze as it loomed large.

He was about to jerk at the control to shoot away, when a tingling sensation came over his whole body. His nerveless fingers slipped away from the guidestick as a complete paralysis followed the tingling. And something pressed on his brain. A cloud of ink was falling over him, blotting out his sight, numbing his brain . . .

He slumped to one side of the seat, unconscious.

CHAPTER IV THE CHOICE

ON awoke from blankness to find himself in a small metal chamber whose roof came together over the center of the floor. He sat up in the couch on which he lay and looked around, puzzled. At the peak of the indrawn roof was a light globe. One side of the room was flat, bearing a transparent port-window. The rest of the wall space curved around him in a perfect arc. At one indented spot was a tiny, curtain-concealed lavatory.

Standing on unsteady feet, he dashed to the port and looked out. It was broad daylight, yet the stars shone dimly and the sky was a deep blue-black. Lon knew immediately that he was in the upper reaches of the stratosphere, perhaps 20 or more miles above ground. He and Mirna had been this high several times before in their numerous trips in her tiny ship.

Lon tried to see more of the ship he was in by pressing his face against the port glass, and succeeded in glimpsing the bulging walls of metal on either side. But the size of it astounded him. If the whole ship was built in like proportion, it must be capable of holding at least a hundred passengers! In that bulge of wall he could see rows of ports exactly like his.

What was this all about? How had he come here? What had happened after he went senseless in his ship while hanging above the wingless ship? And who were these people?

Lon paced the narrow confines of his prison cell in a whirl of thought. But he could make nothing of it. He examined the walls of his room for possible escape. There was just one door, tight shut, and no means of opening it from the inside.

Realizing the security of his prison, Lon stepped again to the port-window. Sunlight glinted brightly on the metal walls. He turned his eyes again to those ports within his range of vision. If these were a series of tiny prisons, he should see faces at those other ports. Suddenly he involuntarily cried aloud. Mirna's face peered out of the third port from him! Almost at the same moment she saw him. Surprise, bewilderment, then joy came over her face. Then she disappeared.

Lon heard the door open, and gasped aloud as Mirna came running in and threw herself into his arms. After a while Lon held her at arm's length.

"Quick, Mirna. You must know more about this than I. You opened my door. Can we escape somehow?"

The girl shook her head. "I'm afraid not. I can open any door in this corridor from the outside. But I can't—and none of us can—open the door at the end of the corridor, which leads to the air-lock."

"None of you?" queried Lon. "How many of you are there?"

Mirna looked at him queerly. "Lon, there are over a hundred rooms and right now most of them are occupied—each by a woman!"

WHOLESALE abduction, like in the wild days two centuries ago, thought Lon. Could it be for the purpose of a tremendous ransom? Or, since they were all women, was it some other, more gigantic, scheme. But who or what could be behind this?

"What do the other women know about all this?" asked Lon.

"Not much more than I do," answered the girl. "Except that some who've been here a few days say they are treated with utmost respect and decency. The only men they've seen are a few of those masked men."

Though restless to do something, Lon had to pause to think.

"In the hands of mysterious masked men," he said at last, "who have a miraculous wingless ship and also this huge oversize air-buoy, fitted out as a liner. What in the universe can the whole thing mean? Here we're prisoners. Back in the city we would be separated. For the life of me, I can't figure out whether we're worse or better off than before!"

"It's all about the same to me," said Mirna in weary tones. "Father had kept me a prisoner in our home for a week. And here I'm a prisoner, too." Then her tone became lighter. "But at least here you and I—"

Lon interrupted. "Mirna, I want to see the door at the end of the corridor. Nobody's going to keep me a prisoner if I can help it. Come on."

The corridor proved deserted. As they passed a small cross-corridor, Lon paused to question the girl about it.

"Those of the women who aren't in their rooms," whispered Mirna, "are in a general lounge at the end of that corridor. I was in there this morning. It's a beautiful and comfortable room. Those masked men seem

to have planned everything elaborately, whatever their plans are."

They passed dozens of doors on either side. Lon's room had been at the extreme end, where the corridor ended abruptly in blank wall. At the other end was the door that led to other parts of the huge ship.

They reached the door and Lon grasped the handle, to find it locked. He looked his disappointment. But suddenly the handle turned from the other side and the door swung open. Lon lunged at the masked figure that appeared and clipped him on the jaw with a hard fist. The masked man staggered back, then raised a shout that was chopped off by another sharp blow from Lon's fist. A quick, powerful jab to his heart floored the masked man.

"Quick, Mirna, follow me!"

He jumped through the door to run into the arms of three more masked men. Without a word Lon brought his powerful shoulders into play, knocking one masked man against the wall with a thud. He turned on the second and jabbed a half dozen quick blows to face and chest, sending him reeling.

The last masked man had taken a step backward and raised his arm. Lon cursed at the same time that he sank unconscious beneath the shock-pistol aimed at him.

When he came to, he found himself in the same little room in which he had first awakened some hours before. He tried the door despondently—it was locked.

Wondering if they were going to starve him to death, Lon peered out the portwindow for a chance glimpse of Mirna at her window. But there was no face there, even though he went back time and again.

It was just as Lon was calculating the effect of the couch-frame against the portwindow, that the door suddenly opened. A masked man stepped in. In one hand he held a shock-pistol. Lon grinned as he saw that his chin, which was not covered by the mask, was bruised.

"You will precede me, out into the corridor."

At a wave of the pistol, Lon complied and walked to the further end of the corridor, followed by his guard. Passing through, they went down a larger passageway and from there into a large room. In this room was another masked man—and Mirna! She smiled to him.

ON gave her a quick nod, then turned grimly to the masked man seated behind a desk with many buttons and levers cn it.

"I would appreciate," he said with ironic politeness, "an explanation of all this, particularly why we've been imprisoned here."

The masked man nodded. "Exactly," he said, his voice friendly. "First of all, you wonder who I and my masked companions are. Do you remember the hundred scientists who left civilization nine years ago, renouncing allegiance to any government on earth?"

Lon and Mirna stared at him in amazement, too shocked to speak.

"Yes, we aboard this ship are of that hundred," continued the masked man. "We foresaw the coming ice-age nine years ago. Our instruments detected the dark, invisible star which approached the solar system, and which was to distort the orbits of the planets by its giant gravity, pulling them partly away from the sun. And because civilization was so corrupt, we made no move to warn the rest of the world. Instead, we decided to take steps to preserve our little group and let the mass of humanity come to its inevitable doom without needless forewarning. We could not save them anyway.

"We left, creating such a stir as is already history, and selected a new home, and founded a community of our own. But what good is a state without posterity to inherit it? Accordingly, these women have been abducted—as you may call it—to become the future mothers of our children. In fact, in the larger sense, to carry on the human race!"

Lon had sufficiently recovered from his first surprise to ask: "But just how is your community to escape the ice-age which is going to cover the whole earth with ice and storms in a few more years?"

"Because," smiled the masked man, "our new home and community is not on earth but on the planet Mars! That planet, having no great seas, will suffer little change through the expansion of its orbit. It will harbor life when all earth is covered with a vast sheet of ice. There is air there, thin but highly oxygenated. There is water at the poles, enough for human need. And our science will give us food and warmth through the long, bitter period that will follow.

"Of the marvelous inventions and discoveries we made in these last nine years, I will say nothing. This ship is one result of it—a giant space-ship that will take us to Mars as soon as our work here is completed. We will join there the other half of our hundred, who are even now preparing our community-home for the coming of its future mistresses."

Suddenly Lon looked at Mirna and then back at the speaker. "And just how," he asked curiously, "do I fit into the picture?"

The masked man smiled as if in amusement. "Last night," he said, "when you so persistently tried to save this young lady from some fate you couldn't know at the time, you won the admiration of those aboard our air-flyer. Seeing you attacked by the Air Patrol, we descended to help you-drove them away and took you in after rendering you unconscious for purposes of secrecy.

"I will be frank with you. This young woman was intended to be the wife of one of our hundred. But it will be easy enough for us to get another, and let you marry her—that is, if you want each other."

The scientist smiled at the form in which his answer came. They were in each other's arms, asking one another if it could be true. Finally Lon turned again to the other man. "But how about the Mars question in our case?" he asked.

"You have your choice in that," returned the scientist. "Despite our masks—which we wear because of a figurative vow never to show our faces on earth again, after leaving it because of its tyranny—despite them, we are not lawless in our tactics. We will give all these abducted women free choice to return to their old homes, if they so wish. But I rather doubt, all things considered, any one of them will want to return. Anyway, in your case, too, we offer you a safe return to the city, or the New Life on Mars. Which is your choice?"

BUT before Lon could answer, a buzz sounded in the room and with a word of apology, the scientist tripped a lever on his desk. An excited voice came from the speaker over which was the televised vision of one of the masked men.

"Dr. Johnson!" said the image. "Professor Michel, at the B-6 screen, reports a large fleet of aircraft coming through the ten-mile cloud layer! They are heading straight this way, under rocket power. It must be the Air Patrol!"

The masked Dr. Johnson gave an involuntary gasp. Then he asked: "And our space-motors are not yet repaired?"

"No! It will take a few more hours before the motors are ready for use!"

"Then we must give battle!"

"We must!" repeated the image. "Each of us must get to our detailed ship, as

planned, as quickly as possible, and oppose the Air Patrol, if they are bent on battle!" "Right!" And the scientist snapped off

the switch.

He turned to Lon and Mirna with eyes that were burning strangely. "Somehow, we've been discovered, despite our many precautions. The Royal tyrants have sent up their minions, no doubt with orders to kill and destroy. We hoped to avoid this. We are scientists, not military butchers. Unfortunately, our space-motors are under repair, else we would leave. Well, battle it is!"

"But you won't stand a chance!" gasped Lon. "The Air Patrol has hundreds of ships in this city, and you have only—"

"Twelve," supplied the scientist. "But it won't be so unequal as you think. Our twelve ships are invincibly armed, and heavily armored—in fact, invulnerable. Our big concern will be to distroy the Air Patrol fleet before they think of attacking this vessel. That is our only worry. The best thing for us to do, of course, will be to attack immediately—engage them in the fight which must be victorious for us before they discover this space-ship miles higher."

As the scientist ran past Lon toward the door, Lon grabbed his arm,

"Dr. Johnson," he said. "If you need a spare gunner, lead me to the Air Patrol. I want to do my bit toward earning a place in your community."

And that was his answer to the choice between old Earth and the New Life.

FREE PAUL PAINTING!

The publishers of this magazine will give, ABSOLUTELY FREE, the original Frank R. Paul painting for the cover of this magazine, to the person sending in the most interesting letter commenting upon SCIENCE FICTION. All letters should be sent before the next issue appears—to

EDITOR, SCIENCE FICTION, 60 Hudson St., New York

STRANGE by SPEYTON HENRY MENTAL PHENOMENA

N a quiet college laboratory, two young students are seated, back to back. One has before him a deck of odd-looking cards, face down on the table. He picks one up, stares at it fixedly, and then raps on the table with his pencil. The youth behind him, who was seemingly asleep, bestirs himself, and, without bothering to open his eyes, mutters, "Wavy lines."

This cabalistic phrase is carefully noted down by the dealer who then turns up the next card. "Star" is the magic word to be taken down this time. And so the game proceeds, until all of the twenty-five cards have been stared at, and twenty-five calls have been written down, in a haphazard list of stars, crosses, circles, squares, and wavy lines.

What goes on here?—a new, two-handed game of solitaire in which the kibitzer has at last been assigned an honorable part? Far from it! These young men are neither gambling nor killing time. They are taking one of a long series of scientific tests which has been in steady progress for over a year. They are out to disrobe a ghost that has haunted scientific graybeards since Moses heard a voice on the mountain.

The question is—Does man have mysterious powers of the mind—power to see hidden things, to read others' minds, to fore-tell future occurrences? Scientists in every field, whenever confronted by this unearthly question, have shuddered in their professorial beards and hurriedly taken themselves elsewhere, to the tune of an eloquent silence.

OF recent years, however, hardy-souled psychologists in a half-dozen universities have simultaneously decided to grap-

ple with the ghost, in order to determine whether he is a true, miraculous spook, or just an out-and-out fake. Under strictly controlled conditions, allowing no deception, they tested hundreds of students for telepathic, or mind-reading, power. In their tests, the reader, or dealer, concentrates on each one of twenty-five cards, and the subject, seated out of sight of the reader (or, in many cases, in another room, or even in another building), tries to tell what the cards are as they are turned up—whether they show a star, a circle, a cross, a square, or three wavy lines.

Over a million such tests have already been made, and the compilations published in reputable journals. What have they proved? By pure chance, or guesswork, the average receiver would get right one card out of five, or five out of twenty-five. But one receiver called correctly every one of the twenty-five cards! Another, out of a total of 17,250 trials, averaged eight correct calls per twenty-five cards. At one college, about twenty-five students have maintained a startling average, calling the cards correctly under all sorts of circumstances.

In short, the tests have proved conclusively that there is some power by means of which we can sometimes become aware of things which are completely hidden to our ordinary senses. Telepathic communication is not only a possibility, but an actuality. How that power operates, no one knows, anymore than we know what electricity is. Its operation has been designated as Extra-Sensory Perception, familiarly known as E. S. P., and there it has been left, a marvel to be gaped at by savants and yokels alike.

The cynics and scoffers who deride every-

thing that they cannot understand still refuse to believe the scientific, irrefutable, flawless evidence that has been piled up under their very noses. "Bunk!" they shout—"Pure nonsense," and having thus easily disposed of the entire question, proudly shut their minds against further argument. In their ludicrous obstinacy, they have placed themselves in the position of the farmer who, attending a circus, saw a giraffe for the first time. He incredulously examined the elongated animal, and then turned away and spat in disgust. "Shucks!" he said, "it's a lie. There ain't no such animal!"

But those who deny the existence of the wonderful giraffe of E. S. P. would probably be stricken with apoplexy in denying the existence of the much more unbelievable feats performed by man's mysterious mind. Into what spasms of disbelief would they be thrown by the following incidents, all substantiated by incontestable evidence? A sleeping telegraph operator is awakened by the vision of a train wreck, and he rushes a rescue crew, much against their will, to a point some twenty miles away, where they find the wreck just as he had described it.

A soldier in Texas, asleep at his post, is suddenly roused by the voice of his mother, who is in Kansas, just in time to roll out from under the blow of a Mexican knife.

Mark Twain sees a sharp vision of his brother, lying in a metal casket, on the cover of which are three roses, a white one flanked by two red. An emergency summons later sends him on a long trip to search for the body of his brother among the victims of a wreck, and he finds his brother's body, lying in the only metal coffin among a score of wooden ones, and as he stands there, bowed in sorrow, an old woman asks for permission to lay some flowers upon the coffin, and places thereon three roses, one white, flanked by two red.

David Belasco, in New York, hears one evening a whisper in the voice of his mother, who is across the continent. Later he receives notice that she died, at just the moment he heard her voice.

A college newspaper writer, who is also a substitute football player, writes up the complete story of the year's big game, a week before it is scheduled to be played. He tells how, in the last minute of the game, with his team losing, he will be called into the game, whereupon he will pick up a fumble, run some ninety-odd yards, and thus make the winning touchdown. story gets out, and for a week the red-eared football player has to take the kidding of the entire college. When the game is finally played, however, he, a third-string substitute, is called from the bench in the last minute of play, and immediately scoops up a fumble and wins the game, just as he had predicted.

Monsieur La Harpe, shortly before the French Revolution, predicted from a dream the unlikely, violent deaths of many prominent personages. When the Revolution broke, all those mentioned met the exact fates he had foretold.

In England, in 1812, a Mr. Williams described in detail an assassination taking place in the House of Commons, as seen by him in a dream. Shortly afterward, a member, Mr. Percival, was killed, the assassination matching, detail for detail, Mr. Williams' dream.

A LL of these incidents, and hundreds more, equally startling, are verified and authenticated by indisputable documentary evidence. Every scientist worthy of the name has admitted the wide-spread prevalence of such phenomena. Evidence has piled up until it can no longer be disregarded. Even after the chaff of spiritualistic faking, and self-hypnotic suggestion has been discarded, there remains a mass

of conclusive data. The ghost has been disrobed, and mirabile dictu, there is something strange and weird beneath the veil of mystery. To raise the old cry of "Bunk!" after having been shown such evidence, denotes nothing but the possession of a hermetically-sealed mind.

Then are we to regard such occurrences as miracles, and go on our way shaking our heads in open-mouthed awe? "Not at all," say the scientists. "We can, to a certain degree, explain them. There is something under the robe, but it is neither bunk, nor miraculous ghost, but the good solid flesh of a normal function." And then science gives its conclusions, which have been drawn from the following observations—

In the first place, there is ample evidence that these mysterious powers of seeing into the future, across space, and into the minds of others, are but simple, natural processes to primitive peoples. An Eskimo can find his way through fog or snow as unerringly as a homing pigeon. An African Hottentot or an Australian Bushman knows all about every explorer who comes upon his isolated village, without the aid of anything other than the mysterious "grape-vine," which is a perfect example of pure, applied telepathy. Among these uncivilized savages, telepathic communication is not only common, but it is actually controlled! aborigine tunes in on some distant person's thoughts as easily and unreflectingly as we might call up our Aunt Jenny in Hoboken. Attillio Gatti, the Italian explorer, intrigued by the mental feats performed by his "boys," demonstrated to his own complete satisfaction that telepathy, which is such a marvel to us, is, to an unclothed, scrawny, flea-bitten African an easy process worthy of no attention.

This first generalization is strengthened by the second, which demonstrates that in people whose groups enjoy a high type of civilization, but whose own minds are on a lower plane, there is also a high frequency of extra-sensory power. Epileptics, afflicted with a physical derangement of the mind, are often known to have, preceding their periodic seizures, visions which are truly remarkable. Dostoievsky, the great Russian novelist, who made a careful study of his own magnificent, but epileptic mind, reported that these visions were so wonderful in their vastness and grandeur, that one second under their influence amply compensated for a lifetime of sickness and pain.

Thus, it seems that telepathy and kindred powers are not ghosts at all, but normal powers, employed by our ancestors, but long forgotten and abandoned by us. That is the conclusion drawn by the psychologists, and accepted by most clear-thinking laymen. H. G. Wells has expressed the opinion that telepathic powers would be a hindrance to the development of individuality, and that early man sloughed off the power so that the individual might "insulate" his brain from the group mind currents.

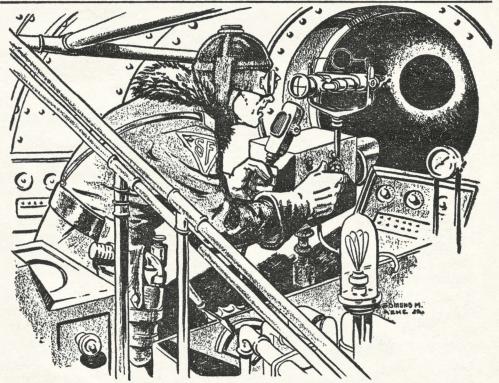
As for the weirdness and mystery of being able to peer behind the veil that hides the future, even this is regarded as a logical and natural process. For we know now that Time is no more of a fixed limitation than is Space. And, if a mind can read a card at a distance, and thus burst the ordinary bonds of Space limitation, it is no more than natural that the same mind should be able to see something in the future, and thus burst the ordinary bonds of Time limitation.

Thus, it seems that the ghost has been laid. Science has found that telepathy and pre-cognition exist, and therefore cannot be dismissed as bunk. On the other hand, they are tattered remnants of a once universal, natural function, and therefore are not to be regarded as miracles. They are neither fish of delusion, nor fowl of mysticism, but good red meat of actuality.

ECLIPSE BEARS WITNESS

by EPHRIAM WINIKI

Dale was only a television technician—but his history-making stratosphere flight to "shoot" the longest eclipse on record, allows him, with the help of Evelyn, the beautiful stowaway, to unveil the greatest mystery of the century—using the heavenly bodies as pawns!



"Full speed ahead!"

CHAPTER I THE GIRL'S STORY

o, LADIES and gentlemen, we look forward with absolute confidence to a record of an eclipse infinitely superior to any yet made. In this scientific year of 1998, aviation wedded to television will lay the foundation stone of supreme achievement in the study of solar phenom-

enon. . . . My friends, I give you Howard Dale, in whose hands will rest the task of bringing to interested millions the first two-hour record of a total solar eclipse. . . ."

A fitting conclusion to a grand speech, was this, trimmed as usual with all the garnish of a master orator. The speaker, Denham Cutts, President of the World Aviation Combine, San Francisco, mopped a bald head and waved to the young, dark-haired

scientist who rose from his chair among the officials.

Howard Dale was thirty-five, athletic of build, lean and intelligent of face, with the high forehead and keen dark eyes of an idealist, and yet a man of action. . . . He advanced to the microphone with every evidence of assurance, faced the floodlights, television cameras, and enormous audience in the Combine Hall before him.

"Actually," he said, in a quiet, well modulated voice, "my part in this research is merely to utilize the knowledge of other men-not only the men who have made beam-television transmission the perfect science it is today, but also the one man who laid the basis of air travel by rocket ship, enabled us to build ships capable of traveling at fifteen-hundred miles an hour by rocket propulsion in the rarefied heights of the upper atmosphere. That honor belongs to the late Doctor Ralph Glendon, who, as we know, had such confidence in a new machine he designed that he fired himself to the moon a year ago. . . . Unhappily, never returned, and that secret of real space-travel is still barred to us-"

"What about the writings and lectures of his daughter?" shouted a voice from the audience. "She says he's alive—that there are even buried cities in the moon . . ."

Dale raised his hand to quell the rising murmur of voices.

"Science has given its answer to the observations of Evelyn Glendon," he answered gravely. "Without proof, modern science cannot be expected to believe— But to return to the point at issue. Traveling in the almost airless heights existing a hundred miles or so above the earth, moving at fifteen hundred miles an hour, our ship will keep pace with the umbra of the moon's shadow and we shall televise back to Earth a record of the eclipse lasting for nearly two hours, or more; a distinct improvement, you will agree, over the former twelve-minute deadline permitted for viewing an eclipse from a fixed standpoint on earth. . . . At our

great height, tremorless, cloudless observation is a certainty. . . ." Dale paused, smiled modestly, then concluded, "I am happy to be the television engineer in charge of this magnificent achievement. February 26, 1998, two days hence and the date of the total solar eclipse, will go down in scientific history."

He bowed to the cheers of the audience, walked from the platform and made his way towards the private officials' exit. . . .

A S HE hurried along the opulent corridor leading to his private apartment in the immense, self-contained building, Dale became aware of light footfalls rapidly pursuing him. He went on with easy, swinging strides, until at length a girl's breathless voice hailed him.

"Mr. Dale! A moment, please!"

He stopped and turned, slightly surprised as he recognized the trim, smart costumed young womanmoving towards him. He had seen her oval face and blonde hair too many times in newspapers and scanning screens not to recognize her. . . .

"Hello, Miss Glendon!" he exclaimed cordially, as she came up. "Something I can do?"

The girl's clear blue eyes were bright with indignation. "There certainly is!" she retorted. "Firstly, you can apologize for your statements about me out in the hall. Who are you to tell me I'm all wrong when I say my father still lives, that he's discovered cities under the surface of the moon?"

Dale said nothing, waited expectantly for her to continue. She went on speaking with a cynical touch to her voice.

"I don't expect you to believe me any more than the rest of these scientific bone-heads when I tell you that dad has radioed to me by short wave system, ever since he landed on the moon a year ago. He and I are the only ones with the particular wave length..."

"I've heard you make that statement before," Dale acknowledged quietly, "but it isn't very convincing when you won't permit anybody to see this short wave apparatus, is it? Oh, yes, I know you have relayed to the world what you claim is your father's voice speaking from the moon—but you know what science thinks. That it is just a phonograph record. . . . And do you verify matters by letting anybody see the apparatus you use? You do not!"

"Would you, if you had the secret of a perfect short-wave radio apparatus entrusted to you?" she demanded.

"So that's your reason?"

"It is. I gave dad my solemn promise the secret would never pass out of my hands. Why, even in this Combine there are certain people who'd give their eyes to see it—plan out something on the same lines, use it for all kinds of vicious purposes. No, the secret of a radio that can communicate over 240,000 miles remains mine, Mr. Dale . . ."

The girl paused, suddenly dropped her cold poise and became beseechingly feminine.

"I tell you, Mr. Dale, everything I've ever said is truth. It has been father's voice I've relayed—not a phonograph record made beforehand. What is more, when dad gives me the final details of construction for another ship, space will be open to anybody . . . You see, I'm only getting dad's radio messages in snatches. Good though the apparatus is, reception and transmission are constantly interfered with by the Heaviside Layer. There isn't the penetration there ought to be. But, if I could only afford a machine that would move my receiver a hundred miles above the earth I'd have the chance to get the full final details of a new rocket ship, identical in design to the one dad used. . . ."

"Interesting," Dale murmured, unmoved.
"I last heard from him three nights ago,"
she went on eagerly. "He promised to give
me the final communication, with complete
details, at the time of the total eclipse. The
absence of light in the moon's umbra
shadow will, he believes, make his communi-

cation crystal clear. . . . But it'll take perhaps thirty minutes to give it—longer than any eclipse lasts, unless . . ." She stopped, looked up with demure innocence as Dale compressed his lips.

"Are you daring to suggest you come on the eclipse research ship?" he demanded. "You surely must think me a first class chump. Why doesn't your dad come back to Earth with his invention if he's alive? Why all this radio business?"

"Why should he come back all this way when he's making important discoveries?" she snapped back. "Likewise, what's wrong with my coming aboard the ship? I've a right to prove myself correct. I'm asking you as a fellow scientist to do something I can't afford to do. I told dad I'd find some way to get his message at total eclipse. I was thinking of you when I said it..."

"Charming," Dale commented, smiling bitterly. "I'm very flattered, of course, but I'm afraid I can't help you. It's more than my job is worth. Just the same as I'd get fired if I dared agree with your views that your father still lives and that there's a lost civilization inside the moon..."

His words made the girl look up quickly. "You—you mean, you do believe me?" she cried. "You're not like the others?"

"Unfortunately, Miss Glendon, I'm just a paid scientist—a television engineer," he sighed. "If I dare disagree with the views of the powers that be—publicly, that is—I'd find myself broke and out of a job. That's no pleasant prospect in this commercialized age of 1998. But my private sympathies are with you. . . . I do believe you, but daren't say so. At least not until you provide proof. And I guess nothing short of actual photographs or your father's return to Earth will convince science as a whole. . ." He looked at her seriously. "You see my position?"

"You don't know what it means to me to have even one person believe in me," she said quietly. "I'm sorry for what I said a few moments ago. . . . But surely you can

take me with you? I'll give science all the proof it needs. Please!"

"No use," he shrugged: then with sudden earnestness, "Just why doesn't your father come back? That's all you need..."

She hesitated on an answer, bit her underlip, then turned very suddenly and went away without another word up the corridor. . . .

CHAPTER II INTO SPACE!

ALE could not help feeling rather disgruntled at the way Evelyn Glendon had taken exception to his adherence to duty. As he had pointed out, disbelief in her statements was the bulwark of his job with the Combine; no true scientist of 1998 was prepared to listen to the vaporings of a girl even if her father had been the inventor of the first rocket-ship.

The moon, scientifically and visibly, was dead—and so, science believed, was Doctor Glendon himself. Stories of short wave radio reception, of vast scientific knowledge left by a dead race inside the moon's thin husk, was all hot air, the effort of a hard-pressed young woman to scrape together easy money by the brilliant memory her father had left behind.

Some wondered, the majority doubted, but a select few—Dale among them—believed. That was what made it so hard.... Only one thing really puzzled him—the girl's desperate desire to complete radio reception from the altitude of the ship. If she had gotten this far, she could surely finish! Somehow, he felt, the whole thing had been a fabrication, but where the flaw lay, he could not determine. The trouble was, he secretly liked the girl quite a bit....

He had no further word from her, nor was there any sign of her among the milling sightseers who spent the remaining two days in examining the research ship from end to end. On the morning scheduled for departure, she was still absent, nor did Dale have the opportunity, being with the officials of the Combine, to look around for her.

The research ship, 300 feet of beryllium steel, tapered at both ends and sprouting rocket-tubes fore and aft, was covered with a protective alloy for the nullifying of dangerous radiations at high levels. It lay poised in its cradle at an angle of forty-five degrees, pointing to the gray, somber dawn of the February sky.

Around it, held back by cordons of police swarmed a multitude of people, early risers determined to witness the take-off. In front of them, mounted on trestles, cranes, and every conceivable object that gave a high point of vantage, were newsreel men, television experts, press photographers—all the breed of men and women whose job it is to give the news of the world to the world.

As usual, President Cutts was in the forefront of the Combine officials, gave his
speech in his pompous, dictatorial style,
only repeating what the world already knew
—that the total eclipse of the sun would be
relayed by television from a hundred-mile
altitude back to earthly receivers, thence
relayed to every private and public receiver.
... Within all the big scientific institutions,
astronomical experts would be grouped before giant scanning screens, making notes,
taking movie films, observing a two-hour
total eclipse for the first time in history.
Definitely, the whole thing represented a
conquest of speed over time....

Dale was inwardly thankful when the speech was over and he was allowed action. The ship's crew, under the command of bulldog Commander Bradman, filed away to the various controlling sections of the craft. The handling of the vessel was no part of Dale's work; his connection with it was limited to giving orders for maneuvering for positions and angles, afterwards to be determined and acted upon by Commander Bradman. . . .

A T 8:00 to the very second, the blasts roared through the groundward rocket

tubes, hurtled the slender craft upwards towards the gray sky. Within the television transmission room Dale stood before the broad radiation-proof window and gazed outside. Beside him, "Shorty" Blane, tow-haired transmission assistant, watched Earth falling rapidly away below. The vast mob of people became couched in a minimizing square cupped in the heart of a sprawling, lofty city.

Then suddenly they were hidden from view as clouds embraced the ship in dense white mist. The two men felt the floor thrusting against their feet as the vessel's speed slightly increased in the diagonal leap against the pull of gravity and air resistance.

They stood motionless, tensely waiting, as the clouds thinned out and the vessel plunged through the 7-mile-high troposphere into the stratosphere. The risen sun, blindingly brilliant, shone through an atmosphere that externally registered well below freezing point. The sky had become dark violet.

Without pause, the ship climbed higher to reaches that were violet black, gaining speed as the air became thinner. It hurtled through the 38-mile stratosphere layer and burst suddenly into the dazzling, warmer beauty of the auroral draperies. Outside the window, concealing even the sun's brilliance, crackled and twisted incredible electric energies, shooting stars, fragments and pieces of meteoric matter, the eternal hurtling dust in the Earth's upper atmosphere—dust that was mostly mickel iron, reduced to flaming streamers by the frictional impact of the atmosphere.

Here and there, meteoric pieces hurtled dangerously close, bounced off the vessel's stupendously thick hull, and she went onwards with scarcely a check to her ascent into the seething, boilingly hot fury of the ionosphere, immediately below the Heaviside Layer, a belt known by the stratosphere pilots as "Hell's Gulf." The external thermometers gave a reading equaling the boil-

ing point of water, heat produced by the dazzling sun's invisible rays beating on the Heaviside Layer immediately above. . . .

The whole great gap was a mass of brickbats and bolts of energy, terrific solar radiations which, but for the proofed walls and windows of the ship, would have incinerated the occupants, or failing that, have turned them white as Albinos with the storm of radiation.

"Pretty, isn't it?" murmured Shorty laconically, handing over colored goggles from the rack.

"Yeah—from this side of the window."
Dale slipped the glasses over his eyes and stared out upon the last few miles of the gap, felt the ship rocking and swaying with desperate power as it fought its way upward for the last twenty-five miles.

The air was thinning—the ebon dark of space was replacing the gray black of the rarefied heights. The whole gulf of infinity loomed ahead, frightening in its majesty. Far below, a seemingly incredible distance, the earth was no longer flat, but a bulging planet—

Then the ship had cleared the shield of the Heaviside Layer and was free in the depths of space, 100 miles above the globe.

Dale studied the sun carefully. It blazed with savage intensity, backed by its streaming corona, lashed with prominences. But at the lowest right-hand corner the first "bite" of the encroaching moon was becoming manifest.

Dale turned and snapped on the controlroom microphone.

"Quarter speed, and stand by for orders," he called sharply.

The ship began to slow down and cruised with leisurely ease in the airless ether. Dale waited for a moment, then switched on the Earth radio contact.

"Okay, Earth?" he called quickly.

"Ready and waiting," came the clear response from the speaker. "What are your readings?"

Dale studied his dials, then replied, "Alti-

tude one hundred miles, speed one hundred miles an hour. Eclipse shadow will shortly overtake and then transmission will begin. No trouble. Quite a few brickbats flying around, but not likely to do any harm. Stand by."

He turned aside and carefully checked over the machinery—the telescopic television projector itself, the X-ray photographic apparatus, the numberless instruments. . . . When he came to the solar micrometer, he found Shorty regarding it pensively.

"Something the matter, Shorty?"

"Eh? Oh, no—except—— Well, there's a chain of pretty deep sunspots in action. Take a look . . ."

DALE bent over and studied the sun's dimmed, reflected image, already half-obscured by the moon's flawlessly notched edge, giving supreme testimony of absence of lunar atmosphere. What remained of the sun's disk was plainly mottled, far more so than Earth plates had ever shown it through the blanket of atmosphere.

"Yes, they are pretty deep," Dale admitted, straightening up. "Nothing unusual about them, though. It's the sunspot period just about this time."

"Think they'll interfere with transmission?"

"No reason why they should. You might as well take a reading of them—depth, area, and so forth. We can see how they check up on Earth plates. . . ."

Dale glanced at his watch and then turned back to the window. The flooding glare of the sunshine was dying, blocked by the fast moving bulk of the moon. Already the dim, uncertain shadow of the penumbra was in evidence, reaching out across the void.

Shorty finished his sunspot calculations, filed the reading in the cabinet, then began to fuss around anxiously, his keen gray eyes studying the vital machinery from every angle.

The complicated television projector had

its telescopic receiving lenses firmly locked into a special section of the ship's wall, so that every image received would be absolutely free of distortion, would be transmitted back to the Earth receivers along the carrier wave already being generated by the softly humming machines.

At last Dale drew the control room mike to him, stood watching as the last crescent of sun began to become swallowed up.

"Full speed ahead!" he snapped out then he swung to the Earth transmitter and yelled, "Stand by! Be ready for reception!"

Both for him and Shorty there was an unexpected, indefinable thrill in watching the umbra of that total eclipse sweep through the distant void, a cone of darkness, point earthward, darker than space itself . . .

The ship began to strain enormously as the full blast of the rocket recoil sent it skimming with great speed through the empty gulf. Dale divided his attention between the drawn scale map on the wall beside him, and the narrowing sickle of extinguishing sun. Everything now depended on accuracy, the demonstration of carefully worked-out mathematics to maneuver the ship directly into the center of the umbra as the shadow first contacted Earth directly over Midway Islands in the approximate center of the Pacific Ocean-thence pursuing its 1,500-mile-an-hour rush across the United States, the Atlantic, the English Channel, and so on to Europe. . . .

As the ship hurtled faster and faster in its leap to join up with the shadow, the remaining segment of sun closed more slowly. Dale became a dynamo of action, snapping out orders, watching tensely, the strain of the anxiety he felt clearly written on his drawn face. Shorty remained silent, stubby fingers poised over the switches of the television projector panel.

The crescent began to close; Baily's Beads became transiently evident, then—

"Now!" Dale shouted, and at that command, every man who heard him knew exactly what to do.

The television machine started up, whirred steadily, a mass of rotating fan blades and complicated inner lenses. The generators throbbed. Shorty stared at the pilot scanning-screen and found the image of the totally eclipsed sun dead centered.

"O. K.," came the voice of the Earth operator. "Reception perfect. Nice going, Dale...."

Dale contacted Commander Bradman again. "Maintain present speed. No divergence whatever. We mustn't move out of the umbra..."

"Right!"

Dale sighed with relief, then turned to look out on the astounding glory of the eclipse. Though space makes the prominences and corona always visible, they could not be viewed with any ease by reason of the sun's unshielded, blinding glare. Now, with his dark glasses off, he and Shorty stared in awe-struck delight along the central track of the shadow cone.

No earthly spectro-heliograph had ever revealed so perfectly the awesome marvel of that ruby chromosphere and prominences. No eye from an Earth position had ever before seen the corona so magnificently revealed—a blinding haze of pearly light sweeping out for millions of miles into the coal black of space. Traveling along in the track of that shadow was an unforgettable experience.

The cabin now was in almost total darkness. What light there was came from distant starshine and the small relief bulbs in the ceiling.

CHAPTER III POWER LEAK!

OR THE space of fifteen minutes, the transmission of the eclipse proceeded perfectly. Ever and again the delighted voice of the Earth operator broke sharply from the speaker. Then Shorty, back at the machinery, looked up with a

sudden start of anxiety, his gaze following the path of the fan blades in the projector.

"Say, it's slowing down!" he gasped.
"The image 'll be badly blurred!"

Dale swung around from the window, strode to the machine and studied it earnestly. The speed of the fans' rotation, essential to flickerless transmission back to Earth, had noticeably slowed down.

"What the—?" he began in bewilderment—then he raised his eyes as he became aware for the first time that the lights in the roof had lost their brilliance. The generators too were not humming as powerfully as of yore.

"The current's leaking somewhere!"
Shorty cried hoarsely, jerking around from a survey of the meters. "Look here, we're down to nearly half our normal output—"

"Hello there!" bawled the Earth operator impatiently. "What's gone wrong? Reception's falling off— Images blurred . . . Remedy immediately!"

"Okay, keep your shirt on!" Dale snapped, then he turned to join Shorty in looking at the output meters. "I don't get this at all," he muttered. "Our current's being absorbed at a terrific speed—"

"No; I don't think that's likely. More likely a faulty contact or something in the power room. I'll take a look . . . Tell Earth to stand by."

Dale turned swiftly and grasped the handle of the metal door leading to the small but efficient generating chamber in the nose of the ship. Then he stepped back in surprise as the door refused to budge.

"Hey, Shorty, what's the idea in locking this door?" he demanded, glaring around and fumbling in his pocket for duplicate keys.

"I don't remember—" Shorty hesitated, puzzled, then he broke off as Dale savagely wriggled his key in the lock. On the other side of the door there came a distinct clink

of a second key dropping to the metal floor—then the door swung wide.

DALE strode within, only to stop in amazement as he found that the light was on. Instantly, his attention was forced to a slim figure seated amidst the droning machines.

"Evelyn Glendon!" he gasped, astonished. "What the—"

He began to stride forward, then stopped again as he caught sight of a small revolver in the girl's steady hand. Bewildered, he gazed at it, then to the complicated but compact radio device on the folding table in front of her.

"'Morning, Mr. Dale," she said laconically, her blue eyes bright and determined. "Since you didn't see fit to give me a break, I took one for myself. It wasn't difficult. Remember the sightseers? I made myself one of them, brought my apparatus aboard in an ordinary valise, and hid it in here. Then I concealed myself in the wall cupboard overnight, waited until the journey got under way . . . Pity I overlooked the fact of your duplicate keys, but I guess my revolver equals matters up."

Dale was trying to collect his scattered ideas when Shorty came whirling in. Catching sight of the girl, he pulled up short, rubbed his untidy head in perplexity.

"Gosh! Miss Glendon!"

The girl smiled with complete self assurance, waved the revolver suggestively.

"I suppose my hooking my radio to the power feed made your transmission output drop?" she inquired casually. "That's a pity, of course, but I think my work is a darned sight more important than any solar eclipse."

Dale looked back at her apparatus, studied it carefully. Then he looked at the girl sharply.

"I thought you said you wanted to come aboard to get a final reception from your father?" he demanded. "That thing there is a beam radio transmitter—remote control device... And what is more," he went on, more slowly, "this—can't go on!"

He charged suddenly in one straight dive, caught the girl utterly unprepared with his whirlwind tactics.

The revolver flew out of her hand and in her effort to reach it, she fell to the floor. Instantly Dale whirled her to her feet, pinned her arms to her sides. She kicked and threshed wildly, lashed out at his shins with her feet.

"Okay, take it easy," he grinned, looking down into her hot, infuriated face. "Young ladies can't do just as they like aboard a research ship . . . Shorty, disconnect this radio apparatus and get the transmission going again. Maybe we'll grab a few minutes for you at the end, Miss Glendon—"

"That won't do!" she screamed desperately, fighting like a wild cat. "Let me go, you big gorilla! This isn't—isn't what you think! It means my father's—whole life! Everything!"

She relaxed from the sheer helplessness of wasted effort. Dale still held grimly onto her, watched as Shorty cut out the contact of the radio. Instantly the generators in the television room hummed as of yore. Shorty gave a satisfied nod and went out . . .

"Reception O.K!" intoned the Earth operator.

Slowly, Dale released the girl, allowed her to fall back slackly against one of the machine rail guards. In silence, he picked up her fallen revolver and pocketed it.

"You might have known you couldn't make it," he said coldly.

She didn't answer him. She stood in a half-slumped position, blond hair tumbled dejectedly over her face... Then all of sudden she looked up with blazing eyes.

"I hope you feel satisfied when you realize you've probably cost my father his life!"

she flamed bitterly. "Yes, this is a beam radio for remote control—and that yarn I handed you about getting a message was so much bunk. But it sounded logical. Whether I'd used this equipment or an ordinary transmission and reception radio wouldn't have made any difference in regard to power. Either would cut your output to half and you'd never have known the difference . . ."

"Then why the duplicity?" he cried. "In any case I couldn't have allowed you to cut our power down like that. Or maybe you didn't realize it would take so much?"

"No . . . I didn't."

"Suppose," Dale said quietly, "you tell me what it's all about? Why you have need for such trickery?"

"What's the use?" she muttered hopelessly. "The chance is gone now, and dad—" She stopped brokenly, her eyes misting.

CHAPTER IV "I THINK YOU'RE NUTS!"

OMETHING stirred inside Dale at her obvious grief. This wasn't play-acting. He moved forward and caught her by the shoulders, forced her to look at him.

"Do you mean you were guiding your father by remote control?" he asked slowly. "Is that it?"

"Yes." Her voice was low. She went on mechanically, "You see, he's desperately ill—so ill he can't trust himself to drive his ship back home again. He has spells of unconsciousness, and space travel will probably make him unconscious most of the iourney because of gravitational strain... He—he told me about it some little time ago, and in his last message, he said he intended to convert his radio equipment for automatic remote control of his driving panel. He gave me the details of the transmitter necessary for the job . . . That's it

there. But down on Earth the Heaviside Layer interferred with its action. I just had to be beyond the Layer . . . That was why I tried to get your permission to come aboard."

"But why couldn't you have *told* me your real reason?" Dale asked in bewilderment. "I would have been more willing—"

She gave a wan smile. "I don't think you would. You see, dad is suffering from a severe form of radium poisoning, highly contagious. He contracted it on the moon. His ship, too, is affected in the same way . . ."

Dale stared at her blankly. "But, good heavens, girl, do you realize what such a thing might mean? Think of the danger! Not only those who might come into contact with him, but even metals if they were to touch his ship . . ."

"There you are! I guessed you wouldn't let me do anything if you knew the truth. For myself, I was prepared to take the risk. I'd made arrangements so there wouldn't be any possible chance of contagion. Of course, I might have caught it, but—"

The girl suddenly straightened up, firm little chin projecting stubbornly.

"I guess it would have been worth it!" she declared proudly. "Father would have brought back the proofs of the scientific knowledge that awaits us inside the moon, and— Well, as it is, I don't know what's happened, but I can pretty well be sure that your cutting off the radio control would cause father to fall back into the moon's gravitational field. It's a very unlikely chance that he'd be conscious, judging from what he told me."

Dale shrugged, said quietly, "I'm sorry for that, of course, but don't you think that your father would be better off dead? Don't you think, if he's in the condition you say, he would prefer death to risking bringing contagion and probably a metal plague back to Earth?"

"Yes; of that I'm almost sure. He would never have attempted to return but for

learning how science refused to credit his lunar messages. He knew that I was taking the rap, so he decided to come back with proof. Long ago, he gave me the details of a rocket-ship able to conquer spaceplans for a ship similar to the one he used, only with improvements suggested by his own experiences. Trouble is, I haven't the money to do anything about it. What cash there was in dad's fortune was absorbed in that first machine of his . . . As you know, I've tried ineffectually to interest scientists and so secure a financial backing . . . Without proof, they won't even listen to me, and I suppose I can't blame them. Guess that proof's gone forever now . . ." The girl sighed heavily. "Well, I've done my best. You might as well hand me over to Commander Bradman and finish the job."

DALE thought for a while, then asked slowly, "How exactly did your dad contact radium poisoning, anyway?"

"Well, piecing dad's messages together, it seems that the moon got into its hollow internal state through the action of radioactivity. The outer husk of the moon's pumice rock is only two miles thick. Some of the radioactive areas still exist in parts of the moon's interior, just as there is a much younger radioactive center in our earth's core. Traces of connecting links to these radioactive areas, on the moon, are seen in the bright streaks and rays. Those denote the surface outlets . . ."

"Go on," Dale invited, thinking.

"Well, once he got to the moon, father naturally investigated the under-world. There is no air, of course, and he went around in a space-suit of his own manufacture. Unfortunately, it wasn't proof against radioactive radiations. His suit went rotten, but being near his ship, he got back just in time to avoid disaster to himself—only to discover that he'd got a disease like radium poisoning, only difference being that it's more virulent and contagious. He found that his ship was affected too, being pitted

and eaten away. Naturally, being so tough. it could last a long time, but he describes it as a sort of progressive rust . . . It seems he was desperately ill before he hardly realized what was upon him. Also, he told me that it seemed obvious to him that the lunar inhabitants had had the same trouble to combat, because when he made later investigations—in the ship, of course—he discovered that their underworld cities are proofed in every direction by dense, peculiar metal which prevents radioactivity getting past . . ."

"But there are no Selenites left?"

"No. Only their vast heritage . . ."

"Hmm . . ." Dale stroked his chin. "Proof," he muttered. "That is what we've got to have if scientists are ever to believe . . ."

"We might get private enterprise—" the girl began, then Dale cut her short with an inspired gasp.

"Wait a minute! I believe I've got something . . . Dense material!"

"The-the lunar cities?"

"Yes..." He stopped, stared at her with gleaming eyes. He glanced hurriedly at his watch. "Maybe I'm screwy," he breathed; "But if not, we'll give the scientists looking in on this eclipse absolute proof that you and your father are right!"

The girl stared amazedly. "But—but how can—?" she started to stammer, only to break off as Dale gripped her arm and whirled her into the neighboring transmission room.

"Everything O. K.?" Dale inquired, as Shorty looked up in mild interest.

"Sure. From the sound of things, every darned scientist on Earth is geting the thrill of his life."

Dale glanced at the girl, gave her a significant smile. "In a few minutes, they'll get an even bigger one," he murmured. "Shorty, get me that reading you made on the sunspot chain—you know, the one we were discussing before the eclipse started . . ."

SHORTY looked puzzled, but he went to the recording cabinet and handed over his card of computations, watched, in some surprise, Dale's gradually deeping expression of excitement.

"By gosh, yes it is a chance!" he whistled at last. "The present depth of those major central sunspots is roughly 216,000 miles, about a quarter the depth of the sun itsself. That means they go down a heluva way into the sun's inner structure . . ."

"So what?" Shorty asked, baffled.

Dale didn't answer immediately. He tossed the record to one side and went to the window, gazed out on the still total eclipse, then back towards the umbrated Earth.

"Directly over the midwestern states. heading eastwards," he murmured, apparently to himself. "We've about an hour's transmission left. That'll do perfectly."

He looked at his watch, then contacted the Earth operator.

"Everything O. K., Earth?"

"Perfect. Reception ceased for ten minutes but it's O. K. now. Every scientist sends congratulations."

"Yeah?" Dale grinned rather cynically. "Tell 'em all that they haven't seen anything yet. The big exhibition is about to commence."

"Meaning what?"

"Tell them I've got a girl aboard this ship—the one that every scientist has seen fit to unreasonably persecute and discredit—one Evelyn Glendon. She standing right here beside me—"

"Mr. Dale, you really shouldn't do this!" the girl herself broke in anxiously, coming forward. "You're only asking for trouble, and—"

She broke off and turned sharply as a gasp floated from the speaker.

"Well, I don't know what you're doing there, Miss Glendon," the Earth operator said, "but you're making it awful tough for Dale. Hey, Dale! You there? Don't you realize that this eclipse research is a secret? No outsider is allowed to—"

"Will you shut up and let me speak?" Dale demanded sourly. "Tell all scientists that I'm going to try and prove that everything Miss Glendon has said is true. I'm going to prove that the moon has got buried cities, and if that is proven, science will have no alternative but to give Miss Glendon full support! Since every scientist is watching the screens, tell them to keep on watching. In a few minutes they'll see plenty . . . And you might give me a relay hook up so I can explain things to them by radio. Stand by . . ."

"All right—but I think you're nuts!"

CHAPTER V X-RAY THE MOON

ALE cut the Earth contact and turned to Shorty.

"Stop the television transmission," he ordered briefly.

"Huh?" Shorty stared like a man told to commit murder.

"Oh, don't stand there gaping, man!"
Dale roared. "Time's getting short!
Hurry up!"

"Maybe you are nuts," Shorty murmured, as he obeyed the order. The whirling fans became still. The driving unit stopped its steady humming.

Without a moment's hesitation, Dale unscrewed the massive, lensed front of the televizor extension, swung it on one side, then between it and the telescopic extension to the wall he fixed the huge X-ray screen, normally used for photographic observations on distant stars. With vigorous movements, he bolted the whole thing together again.

"Say, what in thunder's the idea?" Shorty demanded. "That X-ray screen's no use without X-rays to operate it. If you want to play around why don't you fix it in the camera and—"

"Start up again!" Dale interrupted him briefly.

Baffled, Shorty threw the switches. The machine went into action as before. Dale swung around and stared at the pilot scanning-screen, Shorty and the girl looking over his shoulders.

"The—the eclipse isn't there!" Shorty yelled in alarm. "It isn't even recording! Dale, you—"

"The eclipse is there," Dale corrected. "Look through the window if you've any doubts. The difference here is that the moon is rendered transparent. See those heavy dark markings in the center of the circle? They're inside the moon—"

"Inside!" cried Evelyn. "You mean that's what dad saw?"

"Just that!" Dale contacted Earth again, spoke sharply. "Hello Earth! Got that hook-up ready for me?"

"Shoot!" the operator invited.

"Attention all scientists!" Dale intoned. "Howard Dale speaking from the eclipse research ship. You have had ample time, ladies and gentlemen, to record the normal eclipse, therefore I take the liberty now of replacing it with the first complete X-ray of the moon ever made . . . Listen, please! You see a circle of hazy brilliance caused by the sun behind the moon, but it is not too intense for careful study. Gaze well! In the center of the circle you behold sprawling dark markings.

"Those are the lunar cities mentioned by Miss Glendon from information sent to her over short-wave radio from her father. She has told me that the moon's outer rock husk is only two miles thick—but these cities, in order to combat the effects of still undead radioactive substance existent in the moon, are of extremely dense material . . . Please remember that, in view of what I'm shortly going to tell you . . . The view is clearer than normal, of course, for two reasons. One is the absence of air both here and on the moon, and the other is the telescopic apparatus

attached to the televizor, shortening the moon's apparent distance . . ."

Dale paused for a moment and caught a glimpse of Evelyn and Shorty watching him tensely.

"This feat is made possible," he went on, "by violent X-ray activity on the part of a field of sunspots. The existing field goes down some 216,000 miles into the sun itself. As you are all aware, at a temperature of millions of degrees, radiant energy consists of X-rays, temperatures such as exist at the depth I have given. If all the atoms and electrons in the sun were suddenly abolished, the X-rays confined in the interior would scatter through space with the speed of light; some 300,000 years supply of radiation would be instantly lost. Normally, however, the atoms dam back this flood, catching and turning away the ether waves as they try to emerge, absorbing and re-emitting them in a new direction . . .

"But, in the case of intense, deep-seated sunspots, immense amounts of radiant X-rays escape, pass out into space—and in such a case as the present one, when there is a direct gravitational line between sun, moon, and earth, radiations are drawn strongly in one direction. In effect, the sun becomes the anode of an X-ray machine, the moon is the subject, and my barium platino-cyanide screen between telescope and televizor is, as in the normal way, the resolving medium. Also remember that in space, at this height, there is the same effect of a vacuum as that produced artificially by a Crookes tube . . ."

"Nice going!" whispered Shorty.

"I have said," Dale went on steadily, "that Miss Glendon's reports of her father's observations distinctly state that the moon has been hollowed out by radiant energy, but that the cities are proof against it. That is why they are of a metal dense enough to be visible against the haze which constitutes the thin husk of the moon's shell. Remember that that shell is only

porous pumice rock, offering but little resistance to the power of solar X-rays... Before very long, indeed, the moon is likely to break up into cosmic dust...

"There, ladies and gentlemen, right before you, is the proof that Miss Glendon is right! Incidentally, she has the secret of perfect space-travel, such as her father used . . . All she needs is the cooperation of the scientists who have so far not seen fit to heed her. Science must conquer space, must find new ways of combating the moon's dangerous radioactive interior, if the secrets of a lost and mighty scientific race are to be probed . . . Gaze—for yourselves!"

ALE turned away, trying to imagine what sort of effect his words had had back on Earth. Evelyn came forward and caught his hand. Her blue eyes were bright with hope and gratitude.

"This—this is marvelous, Mr. Dale!" she breathed, staring at the pilot screen and its unmoving picture. Then she frowned anxiously. "But—but suppose they say it's all a fake?—another of my tricks? They might even suggest you doctored the X-ray plate or—"

"I guess that isn't very likely, Miss Glendon!"

All three turned sharply at the voice, to behold Commander Bradman standing in the doorway. He came forward slowly, a smile on his bronzed, rugged features.

"I've been listening to your speech to the scientists, Dale," he explained. "But I thought I'd better come along and verify things for myself..." He glanced across at the girl and she smiled rather nervously.

"If only other scientists had the brains of this young man here, there'd be far more progress in the world," he commented. "For my own part, Miss Glendon, I've always felt it was an injustice the way you were treated . . . Now I'll add my bit . . ." He strode across to the Earth microphone, switched it on.

"Commander Bradman calling!" His booming voice had an arresting ring about it. "These few words will serve to verify that every word Howard Dale has broadcast is truth. Miss Glendon is here, and the present X-ray eclipse is perfectly genuine. If any of you are inclined to suspect trickery, or that this has been done without the knowledge of the ship's crew, refer to me . . . We await your reply. gentlemen."

Bradman turned aside, smiled a little. "I had another reason for coming along," he commented. "We're moving rapidly to ward the eastern coast. I wondered if you intended to follow the eclipse shadow right across the Atlantic to Europe, or whether you propose casting it off and pursuing a leisurely journey back to San Francisco."

"That depends on the answer we get from Earth," Dale answered. "If they've had a long enough recording—"

He broke off, raised a hand for silence at the Earth speaker began to liven. There was a brief interval, then the thick pompous voice of President Cutts became audible.

"Your communications have been re ceived. Dale—also yours, Commander Bradman. If Miss Glendon is there, will you kindly ask her to speak. There are one or two questions scientists wish to ask...."

Dale silently moved the girl forward. She spoke rather timidly.

"Yes, Mr. Cutts? This is Evelyn Glendon."

"You say you have full details of a special rocket-ship, and only need financial backing?"

"Yes, sir."

"Why doesn't your father return to Earth?"

THE girl explained the reason slowly, repeating exactly what she had told Dale. At the end of it, Cutts gave a satisfied sigh.

"That was the point that baffled us,

Miss Glendon... Lastly, did your father presume that Selenites vanished from the moon when the air gave out—or is there air inside these buried cities?"

"There is no air. Either the Selenites died for that reason, or else migrated to other worlds."

"And left all their secrets behind?"

"Whatever the reason for their departure, their secrets are left behind. We surely don't need anything more?"

"Nothing more," Cutts agreed. "I have received radio reports from various scientists scattered about America—in fact in various parts of the world—and they all tender to you, Dale, their sincere thanks for the scientific achievement you have brought about, the first visible X-ray revelation of what exists inside the moon. With that revelation, there definitely goes all trace of doubt regarding Miss Glendon's assertions. . . ."

There was a significant pause, then Cutts spoke quietly.

"Science cannot exactly apologize, Miss Glendon, so it will do the next best thing—give complete cooperation. . . . On behalf of all scientists, I am asked to tender you congratulations!"

The voice ceased and the speaker muted. Dale looked at the girl breathlessly.

"It worked!" he cried. "It convinced them! And thanks to you too, Commander."

"Forget it," Bradman said, smiling.

"Say, what do I do?" asked Shorty. "Keep the transmitter going?"

"After this!" Dale yelped. "I'll say not! We're turning around and heading back for Frisco. If the scientists haven't seen enough by now, it's their own fault. . . . Besides, when we can conquer space in the style of Dr. Glendon, we can pursue any eclipse, any time. . . . O. K., Commander, let's go!"

Bradman nodded and went out.

Within a few minutes, the machine drifted out of that abysmal shadow. A shaft

of bewildering light stabbed across infinity. . . . Brilliant glare began to flood across the transmission chamber.

Dale turned to the girl, found her looking through the window with her eyes narrowed against the returning blaze.

"Happy?" he whispered, and she nodded slowly.

"Yes, I'm happy—except for thinking about dad. If he does return, we shall soon know. If he doesn't . . . Well, his honor has been cleared. He hasn't died in vain. Thanks—to you."

Dale smiled. "I guess you need somebody to look after your interests and help you," he murmured. "Not just now and again, but all the time. Unless you see anything against it..."

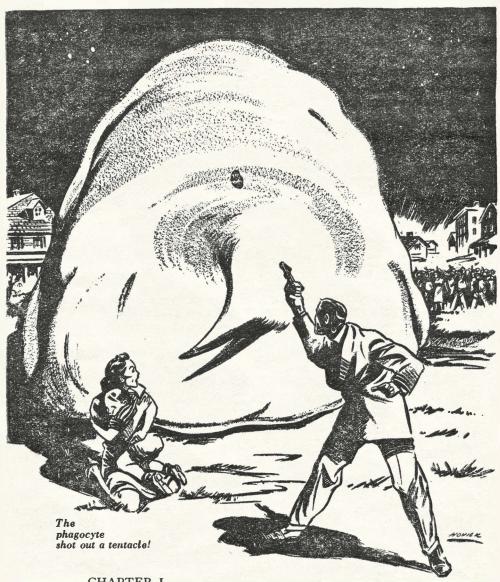
"I'm afraid I don't," she admitted shyly, then averted her eyes from the savage glare of sunshine and looked demurely down toward the cloud-wrapped ball reaching up from below. . . .

THE END

BIBLIOGRAPHY

- 1. The eclipse referred to—the total eclipse of the sun of February 26, 1998—is stated in Chambers Encyclopedia, and will cross the Pacific Ocean, United States, etc., generally following the route described. Beginning at about 8:30 a. m., February 26. 1998, is approximately (as nearly as figures can prove) a Tuesday. In case of doubt, actual day has been omitted.
- The atmospheric layers up to 100 miles are extracted from "Through Stratosphere to the Moon," by Gerald Heard.
- 3. The theory of the moon being hollowed out by radioactivity, and also that such a condition may still exist in deep-seated parts of the satellite, is extracted from "Lunar Possibilities," by J. Fornier D'Albe. He assumes the craters to have been caused—bright rays also—by this very happening.
- 4. The description of X-ray activity is, save for a few interpolations, a verbatim extract from Sir Arthur Eddington's "New Pathways in Science"—pages 140 and 141. The possibility of sunspots being deep enough to emanate X-rays in the quantity and power suggested is of course stretched for the purpose of the story—though, according to Charles Gibson's "Scientific Ideas" (page 278), it is not entirely improbable, and may account for certain past geological changes.

THE SCOURGE OF A SINGLE CELL by BOB OLSEN



CHAPTER I LIFE AND DEATH!

"MUST see him!" an excited feminine voice pleaded, "Life or death may depend on it!"

The door rattled as if two persons were struggling for possession of the knob; then it flew open and a flushed and panting girl burst into the sacred confines of Caslon and Underwood's Advertising Agency's conference room.

Startled by her sudden entrance, the men who were seated around the table turned, and seven pairs of eyes glared at her. But A great scientific experiment goes wrong, and there comes into being an insatiable monster—a one-celled horror that grows and grows, absorbing all living creatures! Caslon despairs as it threatens him and Evelyn—for no bullet can stop it!

the looks of anger and annoyance faded from their faces when they saw how beautiful she was as she stood there with her profuse, pomegranate-hued hair disheveled and her large, blue eyes glowing with fear.

The youngest of the men, who was seated at the head of the table, stood up and exclaimed, "Why, Evelyn! What does this ..."

"She forced her way in here, Mr. Caslon," his secretary interrupted him from the doorway. "I tried to stop her but she insisted on seeing you."

"That's quite all right," Caslon said.
"I'm sure Miss Merrill must have a good reason for interrupting us."

"Indeed I have!" the girl exclaimed. "Oh, Roy, I'm in a horrible jam! I need your help! You must come with me at once!"

Caslon hesitated an instant, then strode toward her and placed a protecting arm about her slim waist. Over his shoulder he said, "Sorry, gentlemen. I'm afraid you'll have to carry on without me."

They were dashing through the reception room and had almost reached the outer door when Caslon's partner jumped to his feet and shouted, "Roy! Come back here! You can't walk out on us like this. Don't you realize what you're doing—how important this meeting is?"

Caslon stopped and looked inquiringly at Evelyn.

"I'm awfully sorry, Mr. Underwood," she gasped. "I need Roy's help desperately—immediately. I can't tell you why—but it's for something that is far more important than your conference could possibly be."

Then she grasped Caslon's arm and dragged him toward the elevator.

As they waited for the car, she suddenly exclaimed, "Oh, dear! I nearly forgot!

You'll need a weapon! Have you a gun in your office?"

"Certainly not. What use would I have for a gun?"

"Then you'll have to get one. Do you know where you can borrow one quickly?"

"Not offhand. But if a gun is needed, I'll find one somehow."

As they stepped into the elevator, he added, "By the way, what kind of a gun shall we need?"

The operator must have heard him, for he cast an alarmed look at Caslon and started the elevator upward. Halfway to the next floor, he recovered from his confusion and reversed the power.

Answering Caslon's question, Evelyn said, "It will have to be very powerful. Do you suppose you could get a big game rifle—the kind they use for hunting elephants?"

"Elephants!" Caslon exclaimed. "Is that why you called me away from an important business meeting—to help you shoot elephants?"

By that time they had reached the street floor.

A S THEY hurried out of the elevator, Evelyn pleaded, "Please trust me, Roy. I know it all sounds crazy. But you must believe me when I tell you that I'm really in trouble. Human life is at stake—perhaps scores—perhaps hundreds of lives! I came to you for help because you are the only one I dare to ask!"

"O. K.," Caslon responded. "I don't need to tell you that you mean more to me than my business or anything else. I'll try not to fail you."

Firmly squeezing the hand which held her arm, she murmured, "I know I can depend on you."

"Thank you, dear. And now for the gun. There's a sporting goods store in the next block. Let's hope they are not all sold out of elephant guns."

When it came to purchasing the gun, Caslon's training in salesmanship stood him in good stead. Perhaps it may seem strange to use the term "salesmanship" in referring to what was distinctively a buying transaction. Nevertheless it required a great deal of real selling before Caslon could persuade the store manager to let him have a powerful gun and a box of high caliber cartridges without a permit and to accept his personal check for it.

Five minutes later they were in Miss Merrill's car, speeding along a road which carried them in a southeasterly direction from Los Angeles.

"And now, my dear," Caslon remarked, "Perhaps you can tell me what this mysterious mystery is all about."

"Before I explain, may I ask you a question?"

"Certainly. What's on your mind?"

"I'm worried about your business conference. Was it really as important as Mr. Underwood said it was?"

"Oh, yes," Caslon affirmed. "The baldheaded guy who glared at you so rudely is the president of the Western Television Company, which happens to be one of the biggest advertising accounts on the Pacific Coast. The fellow with the Hitler moustache is his sales manager and the tall chap with the store teeth is chairman of the board. Perhaps you noticed the scholarly looking individual with the concave glasses and avacado-shaped cranium. That was Doctor Remsen, our technical advisor. As you know, his specialty is super-sonics, but he's also good at television. We've been working on the Western Television account for seven months and we finally persuaded them to consider an advertising plan which our organization worked out for them. The purpose of the conference was to present the

details of the plan to them. That of course was my job."

"Couldn't Mr. Underwood substitute for you?" Evelyn asked.

"Hardly. Dick takes care of the accounting end of the business. He knows very little about merchandising and still less about media and copy and layouts."

"Does that mean that I ruined your chances of getting the account?"

"Please don't put it that way, Evelyn."
"But you have lost the account, haven't
you?"

"Probably," he replied. "But don't let that worry you. There are other advertising accounts—but there's only one Evelyn Merrill. And, unless you want me to explode with suspense, please tell me what the mystery is all about."

CHAPTER II THE HUNGRY CELL

been helping my grandfather, Professor Davis, with his research work in biology," Evelyn began.

"I ought to know it," Caslon responded.
"You've had so many dates with your bugs and germs that I've hardly had a chance to see you during the past three months. I can't tell you how much I've missed the wonderful times we used to have together."

Evelyn sighed. "You'll never realize what a sacrice it meant to me. But I owe so much to grandfather. It wasn't easy for him to finance the education and scientific training he provided for me. The only way I could repay him was by helping him with his research work."

"I understand." Then Caslon asked, "Is your grandfather involved in this trouble of yours?"

"Yes," she replied. "You see, we have been experimenting with phagocytes."

"I'm afraid you'll have to translate that

for me," Caslon confessed. "I'm a bit rusty on my biological terminology."

"Phagocytes are the white corpuscles of the blood," Evelyn explained. "The first part of the word means 'eat' and the last part means 'cell.' They are also called leucocytes, meaning 'white cells.'"

"Ah, now it all comes back to me," Caslon exclaimed. "The phagocytes are the guardians of the blood stream, who eat up the bad disease germs."

"That's the idea precisely," Evelyn said. "Unfortunately, the disease germs sometimes get a head start and multiply so rapidly that even with their enormous appetites the phagocytes cannot eat them rapidly enough and the murderous microbes get the upper hand."

She paused a moment and then went on: "Some time ago, grandfather started working on a line of research which he hoped would eventually eradicate all disease germs. His idea was that if human white blood corpuscles could be made to grow larger and could be stimulated so that they would multiply more rapidly than disease germs, the battles would always be won by the phagocytes. Do I make that clear?"

"I think I get the idea," Caslon replied.
"Did your experiments produce any results?"

"Indeed they did," Evelyn declared. They produced results which were far different from what we expected. Horrible results. Unspeakable results! That's why I had to call on you for help."

"You mean-"

Evelyn interrupted him by explaining, "Perhaps I should tell you that, in an effort to increase the fighting strength of leucocytes, grandfather tried the effect of various glandular extracts. You know, of course, that there are certain hormones which stimulate the growth of organisms."

Caslon nodded, and Evelyn continued, "It did not occur to either of us that growth-promoting hormones might also disrupt the reproductive functions of the

leucocytes; but that's what happened."

"You mean the phagocytes practiced birth control?"

"Not exactly. Phagocytes, being singlecelled organisms, reproduce by division. After reaching a certain size, they split in two and each half becomes an individual and starts to grow until it reaches the maximum size and divides into two parts and so on. Do you follow me?"

"I'm right behind you," Caslon assured her. "But you haven't cleared up the mystery yet."

"There's really no mystery at all," she asserted. "Here's what happened. After being treated with a certain combination of glandular extracts, one of the phagocytes started to grow very rapidly. Instead of dividing and redividing, it remained as one individual. In a very short time, it had grown to a considerable size."

"How could it do that without food?" Caslon asked.

"That's just the point. It had to have food. Its appetite was so enormous and so vociferous that it devoured every living thing it could get hold of."

"How? What? Where?—" Caslon questioned in a puzzled voice.

EVELYN continued. "Grandfather's laboratory is a small wooden building on his ranch near Hynes. That's in the dairying section, you know. In his experimental work, he uses live insects, guinea pigs, rabbits and other animals which he keeps in cages on the shelves of the laboratory. When the phagocyte started to grow, it first devoured the insects, then the smaller animals, and finally the larger ones. It came very near making a meal out of me. Grandfather and I got out of the laboratory just in time."

"Is this monster phagocyte still in the laboratory?" Caslon asked.

"I hope so. We locked the door, and the creature was inside the building when I left to call you. And, by the way, did your secretary tell you I tried to get you on the phone?"

Caslon answered, "Why, no."

"I thought so. She certainly had her nerve!"

"Miss Sloan was merely doing her duty," Caslon defended the girl. "On account of the importance of the conference, I instructed her to cut off all phone calls. Naturally I was not expecting you to phone me. Otherwise—"

"It really doesn't matter," she cut in.
"I merely mentioned it so you would understand why I crashed the door of your office to fetch you."

CHAPTER III IMPENDING CATASTROPHE

OR a minute or two Evelyn drove along in silence. Then, without warning, she swung off the main highway. With the gravel rattling against the fenders, the car bumped jerkily along the dirt road, coming to a screeching halt before a small wooden building about a quarter of a mile from the thoroughfare.

A slight, ashen-haired man, whom Caslon recognized as Evelyn's grandfather, came running to greet them.

"Thank God you are here!" he exclaimed. I was afraid you would arrive too late!"

"Are you having trouble, Mr. Davis?" Caslon asked anxiously. "Is there any danger of the thing getting out?"

"Plenty of danger," Davis panted. "Already it has broken two window panes. Fortunately, there were sharp, pointed fragments of glass left in the sash, which repelled the phagocyte when it attempted to escape through the openings."

While he was speaking, an ominous, splintering sound came from the laboratory.

"What was that?" Caslon gasped.

"Sounds like the monster is attacking the door," Davis replied. "Look! That flimsy panel is beginning to crack already! Did you bring a gun?"

"It's in the rumble seat," Evelyn told him.

Before Caslon had time to get out of the car, Davis had appropriated the weapon and had run with it to the door of the shack. Evelyn shouted to him, but he paid no attention to her. Holding the muzzle of the gun close to the door, he pulled the trigger.

There was a thundering roar, and the recoil of the powerful rifle made Davis stagger backward. Apparently the high-calibered bullet served only to weaken the door, which was already partially demolished. With a splintering crash, one of the panels gave way. Through the opening, a ghostly, quivering horror oozed. It was like a bloated, translucent python, except that it had neither mouth nor eyes. As it flowed swiftly through the opening it spread out, becoming fatter and fatter. until it resembled a huge, flabby jelly-fish.

Davis had retreated a few steps, but he was less than a yard away from the monster when he raised the elephant gun and fired a second shot.

Into the jelly-like mass of protoplasm the powerful projectile crashed. Through the transparent substance of the thing, the three horrified spectators could see the bullet, as it came to a sudden stop a few inches from the surface of the creature. Then, as if it were being dissolved by some super-strong acid, it rapidly dwindled in size, completely disappearing within a few seconds.

Apparently neither of the bullets had injured or even retarded the monster. With a weird, slithering motion, which was half like an animal and half like the fluid rush of a breaker on an ocean beach, it thrust itself toward Professor Davis.

Yelping fearfully, the scientist dropped the heavy gun and started to run away. He was half way to the car when a long tentacle shot out from the main body of the phagocyte, coiled about one of his ankles, and tripped him.

A LL this had happened so quickly that neither Caslon nor Evelyn had time to do anything. It wasn't until Davis had fallen that Caslon was able to shake off the spell of horror which had almost paralyzed him. Flinging open the door of the car, he dashed to the prostrate scientist. Lifting this frail body in his strong arms, he tried to snatch Davis away from the monster's terrible grip. The tentacle seemed to stretch slightly, like a thick band of rubber. Then it contracted, drawing the two men slowly but inexorably toward it.

Caslon heard a feminine scream and the next instant Evelyn was beside him.

"Keep out of this!" he shouted to her. Get back into the car!"

Instead of obeying, she picked up a switch which happened to be lying at her feet. It was a broken branch from a Bougain Villea shrub. Bristling with thorns, the stick cut her hand cruelly. Nevertheless, she gripped it firmly and lashed at the tentacle with the improvised weapon.

Tortured by the thorny whip, the phagocyte released its hold so suddenly that Caslon and Davis tumbled along the ground like a couple of unhorsed jockeys.

Scrambling to his feet, Caslon dragged Evelyn and her grandfather to the car, bundled them inside, squeezed in himself, and slammed the door just as the phagocyte oozed across the running board.

Over the hood of the automobile, the dire monster glided. Pressing its ghastly body against the windshield, it thrust out several menacing tentacles, which probed every crack and orifice, searching for an opening through which it might get at the living food within the car. Speechless with horror, the three human beings stared at it through bulging, hypnotized eyes.

Finally the giant phagocyte abandoned

its gruesome quest and plopped back to the ground. From the places where its body had touched the car, every vestige of paint had been removed, exposing corroded metal streaked with slime.

It soon became apparent that the leucocyte's relinquishment of its human prey was due to the diverting of its attention by another living creature. About fifty yards from the car a female goat was tethered. Munching contentedly on the tattered pages of a science-fiction magazine, it seemed to be oblivious of the impending peril.

As if guided by an aerial form of chemitaxis, the monstrosity oozed swiftly across the field, propelling itself toward the goat as accurately and surely as if it were being directed by perfect vision.

Like a blanket of living jelly, the translucent mass of protoplasm flowed over the luckless animal, enveloping it completely. After a brief period of muffled bleating and convulsive struggling, the goat became quiet and motionless.

For several minutes, the phagocyte rested while the body of the goat was being digested. Caslon availed himself of this interval to recover the gun, which Davis had dropped when the monster had attacked him. An examination of the weapon disclosed that the metal parts were badly corroded where the body of the phagocyte had passed over them. The firing mechanism would not work.

"What are we going to do now?" Evelyn asked when Caslon told her of this catastrophe.

"I don't know," Roy confessed. "It's quite obvious that we can't kill the monster with rifle bullets anyway, so whether or not the gun will work doesn't seem to make any difference."

"But what are we going to do?" she repeated. "We must do something!"

"Yes," he agreed. "We must do something. I have an idea—maybe it's crazy. There's just the wildest chance that it—

But we've got to work fast. Tell me quickly, Evelyn—where's the nearest telephone?"

"There's one at the service station, about a mile west of here," she told him. "Jump in the car and I'll drive you there."

When Caslon took down the receiver of the service station phone, Evelyn heard him ask for a Los Angeles number. A moment later he said, "Let me talk to Doctor Remsen!" Then he lowered his voice and she was not able to hear any of the conversation.

CHAPTER IV THE VIBRATOR

URRYING back to the laboratory, they arrived there just as the phagocyte, its gruesome meal of goat flesh completely assimilated, spewed out a pair of horns, four hooves, some matted hair and a few partially digested particles of the animal's bony structure.

Grown to a shapeless mass more than five feet in diameter, the phagocyte resumed its insatiable quest for more food. This time it headed for a cow-barn which stood not far from the fence which separated Davis's ranch from that of his neighbor.

When he realized the monster's purpose, Caslon sprinted desperately across the field, hoping to reach the barn in time to turn the cows loose; but, so swiftly did the leucocyte move that Roy was not able to overtake it.

Half an hour later, after having digested the bodies of twenty-two helpless cows, the phagocyte had attained enormous proportions. Towering to a height of twenty feet, like an animate hill of gelatin, it flowed across the fields in its ruthless hunt for more and more living food.

By this time, hundreds of automobiles were parked along the road which ran past Davis's ranch. Attracted by the unusual sight, at least a thousand spectators gazed in horrified amazement as the unspeakable monstrosity devoured mules and horses and cows and any other animals it could find.

From three directions came the eerie wail of sirens. Presently, several automobiles and motorcycles from the sheriff's office arrived on the scene. Obviously they had been summoned by phone calls of excited dairymen.

Armed with revolvers, rifles and machine guns, a posse of officers opened fire on the monster. Their barrage of bullets spattered harmlessly into the viscous substance of the phagocyte, having no more effect on it than a boy's peashooter would have on a rhinoceros.

Thus, the task of attempting to scotch the terrible monster was taken completely out of Caslon's hands. Realizing that dire consequences might result if their responsibility for the phagocyte became known Davis and Evelyn and Caslon discreetly mingled with the crowd, seeming to share in the general excitement, like any other casual spectators.

As the phagocyte, swollen to the dimensions of a large building, finished digesting the bovine occupants of the fifth dairy barn. Caslon heard someone say, "They've called out the National Guard." Later he overheard another significant remark: "The artillery from Fort McArthur ought to be here any minute."

More than two hours actually did elapse before one of the motorized batteries from San Pedro arrived on the scene. By that time, the monster had covered a trail of devastation which had brought it right into the town of Hynes.

Warned in advance of the approaching scourge, all the human inhabitants had evacuated the town. However, there were many dogs and cats and hens left behind and these were quickly devoured by the hungry phagocyte, which flowed like molten lava through the streets and into all the buildings.

ONFRONTED by this preposterous, unprecedented problem, the artillery officers could do nothing. Since the body of the phagocyte was spread out over the entire town, wedged tightly between the stores and houses, it was impossible to blast the creature with the big guns without destroying most of the buildings. This the soldiers did not dare to do, for fear that there might be some human beings still alive in the houses.

Taking advantages of the interlude during which the phagocyte, temporarily satiated, rested while it digested the scores of domesticated animals which it had engulfed, Caslon borrowed Evelyn's car and hurried back to the service station from whence he had phoned to Doctor Remsen.

After five or six minutes of anxious waiting, he was relieved to see the scientist's dilapidated jollopy come to a rattling stop beside him.

"Hello, Doctor Remsen," Caslon called to him. "Did you bring your super-sonic projector with you?"

"Yes," Remsen replied. "I have two of them right here--all adjusted and ready to operate. Where is this organism concerning which you phoned me?"

"It's at Hynes, about two miles from here," Caslon informed him. Then in terse, excited sentences, he told the scientist what had happened since the telephone call.

"Now it's as big as a mountain!" He concluded "—a vicious, murderous, animate mountain of protoplasm with an insatiable appetite for living flesh! Do you think your super-sonic projector will be able to scotch a monster like that?"

Remsen shook his head and said, "Obviously, it is impossible to predict with any degree of certainty what effect the high frequency sound vibrations will have on the creature. However, I think there is a reasonable possibility that the supersonic beams may help to restrain the

monster, even though they might not kill it outright."

Pointing to a large crow which was perched arrogantly on a nearby telegraph pole. Caslon said, "How about testing your projector on that bird?"

Following this suggestion, Remsen connected his strange weapon to the storage battery of his car and aimed the projector at the crow. At first nothing happened. Not the slightest vestige of a ray could be seen. There was nothing audible to indicate that the machine was in operation. Slowly, Remsen played the projector back and forth, as if he were trying to spray the telegraph pole with a hose. Suddenly, the crow seemed to explode noiselessly, sending feathers and bits of flesh flying in all directions.

"Well—I'll be—" Caslon gasped. "What happened?"

Remsen explained: "High frequency sound vibrations are very powerful. They literally shook the crow to pieces."

"I hope it will do the same thing to the phagocyte monster," Caslon shouted as he ran back to Evelyn's car and started the motor. "Let's go!"

CHAPTER V IN THE MONSTER'S ARMS

S THEY drove toward Hynes, their progress was impeded by throngs of hysterical people, who crowded the highway. Their eyes distended with fear, most of them were hurrying away from the stricken town. Hoarse cries of men mingled with the shrill screams of women. Caslon heard someone screech, "The monster is coming! It will devour all of us!"

When they finally penetrated the mob of terrified fugitives, they saw a horrible sight. Oozing from the streets of the town to the surrounding fields, a huge, ominous glacier of hungry protoplasm was flowing toward them. Apparently it was still somewhat lethargic from the effects of its recent meals, for it moved slowly, but with every passing instant it seemed to gain momentum.

Although it had neither eyes nor mouth—although there was nothing about it that resembled any creature previously known to man, nevertheless its appearance was unmistakably menacing. Suffusing its quivering, shapeless contours, were features which clearly expressed murderous, hateful greed!

Thrusting one of the super-sonic projectors into Caslon's hand, Doctor Remsen cried, "Here, you take this one. All you have to do is to point it and squeeze the trigger—just like a pistol. There's about two hundred feet of wire in this coil. Take care not to get it tangled or broken. While you are getting started, I'll connect the other projector to the storage battery of your car."

With the projector tightly gripped in one hand and the coil of wire in the other, Caslon strode across the field to meet the horrible, living mountain of protoplasm.

As he reached the summit of a small knoll from whence he could look down into a hollow which was not visible from the road, Caslon saw a horrifying sight.

Directly in the path of the rapidly approaching monster a baby girl was playing. Apparently she had become separated from her parents and had been overlooked in the mad flight of escaping human beings.

Between Caslon and the child a familiar figure was racing. From her thick, red hair, which streamed behind her like a breeze-blown pennant, he recognized Evelyn. The hungering monster was but a few feet away when she reached the baby, snatched it up and started to run back with her precious burden. She had taken less than a dozen steps when she slipped and fell.

As if it sensed a delicious morsel of living food, the phagocyte shot out a flat,

pointed tentacle, which flowed across Evelyn's body, pinning her and the baby to the ground.

At that instant, Caslon pointed the supersonic projector at the place where the tentacle joined the main bulk of the monster, and squeezed the trigger. Though he could neither see nor hear the super-sonic beam, a weird, tingling sensation in his wrist told him that the lethal rays were being projected by the device.

IKE a heap of snow being dissolved by a powerful stream of hot water, the tentacle seemed to melt away, releasing Evelyn from its dire embrace. She staggered to her feet and started to flee from the frightful thing, but Caslon called to her, "Hold it, Evelyn! Better stay close to me. I believe it will be safer than trying to run away."

With the invisible, soundless beam of energy which streamed from the supersonic projector, Caslon desperately lashed at the menacing wall of death. Wherever the ultra-rapid vibrations blasted the creature, the jelly-like substance cringed and melted away, but the disintegrated portions were quickly replaced by more living protoplasm, which seemed determined to surge forward in spite of the force which was opposing it.

By using superhuman vigilance and speedy action, Caslon managed to keep a few yards of clear space between the murderous wall and the human beings he was battling to protect. Suddenly, Evelyn uttered a scream of warning. Snatching a quick glance over his shoulder to see what had frightened her, he was horrified to discover that the two flanks of the monster had flowed around in wide circles and had united, completely surrounding Caslon and his two companions.

Spinning like an adagio dancer, he swept his beam around in a spiral, thus carving out and holding clear a cylindrical haven within the very body of the monster. By whirling rapidly, first clockwise and then counter-clockwise, he actually succeeded in widening the ring of protoplasm which surrounded them.

"We're gaining!" he shouted triumphantly. "We'll fight our way out of this devil's trap yet!"

He had hardly uttered these words when the tingling sensation in his right wrist began to falter, warning him that something was wrong. Suddenly the projector went completely dead. H tugged at the wire leading to the storage battery of Remsen's car. The loose end trailed like a snake across the ground. The wire had become completely severed by the corrosive digestive fluids of the monster.

Slowly and inexorably, the cylindrical walls of protoplasm began to ooze into the vacant space.

"You and the baby crouch down into as small a space as possible. I'll try to cover you with my body.

Although Caslon was not addicted to profanity, he could not help screaming an oath as he felt the horrible mass of protoplasm flow over him. Where the viscous, clammy substance touched his bare hands and face, he felt an excruciating smart, like the burning of a strong acid.

Through his mind flashed tormenting thoughts: "What a way to die!—swallowed and digested by this unspeakable monster while we are still alive!"

Suddenly, when he had abandoned all hope of rescue, he felt a convulsive trembling. Almost instantly, the blanket of jelly which surrounded him and his two companions seemed to melt away. Miraculously, they were free!

Feeling like a man who had died and been brought back to life with a heart injection of a powerful drug, Caslon staggered to his feet. Running toward him he saw Doctor Remsen. With a voice which he did not recognize as his own, Roy gasped, "What happened?"

"The monster is dead!" Remsen announced. "I killed it with my super-sonic projector."

Caslon stammered, "The one you used must have been more powerful than the one you gave me."

"No, they were both equally powerful."
"Then how in—"

"Here's what happened," Remsen interrupted him. "Remembering that the monster behaved like an enormous ameoba, I deduced that, like any other single-celled organism, it must have a nucleus. Sure enough! Through the transparent substance of the creature, I could faintly distinguish a throbbing, opaque globule.

"Instead of trying to restrain the entire creature from advancing, like you attempted to do, I simply plowed a narrow path right into the center of the monster. In this way, I reached the nucleus and blasted it with the projector. With its nucleus destroyed, the phagocyte died instantly."

A FEW hours later, when they were reading the newspaper extras, Evelyn said fervently, "Thank God that the only creatures which the phagocyte devoured were dumb animals. Had any human lives been lost, I should never have been able to forgive myself."

"Yes," Caslon agreed. "With all those crowds of people around, it was a miracle that none of them were killed by the monster. But why should you feel any more concerned about that than anyone else. After all—"

"If you knew all the facts you would understand," she declared. "There happens to be a very cogent reason why I was personally responsible for everything the leucocyte did."

"What do you mean?" he asked.

"I didn't tell you everything," Evelyn said. "You see, Roy, that horrible monster was really a phagocyte which grandfather obtained from a drop of my own blood!"



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N THIS department, we present our readers' views of the future—both the scientific and social developments that are likely to come about. How do you think science will change the world? We want your opinions for publication in this feature.

ASTRONOMY CLUB

UR astronomically inclined readers will be pleased to note that Abraham Oshinsky, 2855 W. 25th St., Brooklyn, N. Y., is forming an Astronomy Club. Interested persons in and around Brooklyn may write directly to Mr. Oshinsky.

NO TELEVISION MOVIES

by GENE RISHER

OUR statement that television looms as a dark threat to the very existence of the theater must have been made in one of your off moments. If the public so much wanted movies in their own homes, they could have them for about the same price, or less, than a television receiver will cost, in the form of a projector with sound and film available from many libraries scattered through this country.

I have been a motion picture projectionist for eleven years, have operated both sound and silent pictures. I can remember the apprehension felt in the theater when radio first felt its popularity, yet we all realize that it was the radio which made the movie really great—made it the world's third greatest industry.

It is hardly to be thought that an advertiser would pay for the production of a movie epic just to entertain his audience once—or that the producer would sell to the advertiser first and thereby limit his income from the theater owner. The F. C. C.

demands that a station shall identify itself once every thirty minutes, if possible, and if not, said station positively must give identification once each hour. How, may I ask, will they televise a movie feature, insert advertising and station identification in a onehour program when only about one in ten of the movie features runs less than an hour? Four major movie producers are even now conniving to make features so long that double billing will be impossible. Taking the above into consideration, it is more practical to think that, if and when television becomes a practical reality, eight to fifteen minute cartoons, comedies and technical subjects will be the fare in so far as movies are concerned with the exception of Pre-vues of the features about to be released. The television will make an exceptional means for the advertiser of motion pictures, for when you or I see the highlights and hear snatches of the songs in a movie via television, then we shall decide that immediately it comes to our neighborhood Flicker Emporium, we shall be there to see it. The theater has long used radio to a great advantage, so television shall be a boon instead of a threat.

But we have heard the cry of "Wolf" so often from the television world that it is old stuff now. They have to a certain extent overcome the problem of definition, but in overcoming the problem of distance and network transmission they are no nearer to the solution now than they were three years ago. When that problem is overcome, then there remains the problem of competing with radio as an advertising medium and the problem of time and suitable subjects for a program, not to mention that for coverage, there must be sufficient receivers sold. By the time the above has all come to pass, the movies will probably have mastered the art of three dimensional projection and will not even be annoyed by the novelty stage of television. At the present time, television is little more practical than the experiments tending to break down the atom. But you may wager that when it is practical, the movie fraternity will use it to an advantage. So don't shed any tears for the movies yet-the world's third industry will not die easily.

VISITATIONS FROM SPACE?

by ALLAN SOMERS

AVING heard all this hocus-pocus talk about invaders from Mars and other belligerent planets, I have decided to give a few of my conclusions on this long-discussed topic. I am open to criticism from all your many readers and would be pleased to hear some of their views.

In the first place, there are no recorded facts that intimate Earth has ever been a guest of alien marauders before. In the near three thousand years that man has known anything about history, no hint of such an event has offered itself. I admit

that some of those ancient civilizations have accomplished feats of mechanics that today would try the patience of renowned engineers, but has there ever been evidence of a higher science come to Earth?

I firmly believe that some species of life does exist on the heavenly bodies of our solar system and the countless myriads of other galaxies; these worlds were not placed there by the Creator to shed their light on our infinitesimal abode. But, however, are the forms of living things on those bodies as far progressed in science as we? Have they been existing as long or longer as the genus hominum?

Now; in answer to these questions, I draw these basic conclusions; either these forms of life (if any) are still beneath the level of earthly intelligence, or so far above it that they have reached Utopia, the world without cares.

Taking the former belief to be veritable makes man the supreme race of the Universe, the attitude many have taken since time began. It is the hypothetical reasoning I am going to reject. One can't believe it and still keep a scientific approach to the question.

Are all living creatures on other worlds equally as intellectual as man? The answer to this is also in the negative, spontaneously.

There still is the third and final presumption; various of the outer celestial bodies have civilization so far ahead of ours that they have abandoned all thoughts of bloodshed and conquest. Perhaps they are pitying mortal man for the sanguinary metamorphosis he is traversing. I only wish that such worlds exist, for it means that wars are only a passing development in the transcendence of a race.

THE POWER OF THE ATOM

by JAY OSCAR

OHN DEAKYNE wrote a letter lambasting "atomic power." As you will no doubt recall, he said, "Let's see

what is meant by atomic power. This is supposed to be energy to be released by the destruction of the atoms. In other words, the proper bombarding of an atom will knock it for a loop, explode the nucleus, and throw the electrons and protons every which way—thereby creating a lot of energy."

Mr. Deakyne is right as far as he goes in this direction, but I am afraid that he doesn't go far enough. We have just exploded the nucleus and thrown the protons and electrons every which way, but have we destroyed the attraction which, under ordinary circumstances, holds the protons and electrons in their places? We decidedly have not! So instead of one gigantic wave shattering, all-consuming explosion, which, as Mr. Deakyne says, might be the cause of a novel flareup (which is a rather unsound theory, because I don't believe for one instant that any physical being could live in such a terrible heat that the electrons in their orbits in the atoms are forced out of their orbits entirely and the atoms become ionized. Of course, if anyone can absolutely prove differently, I shall be quite willing to believe him-I am not that narrowminded), the protons and electrons form other atoms of an entirely different order. Go ahead and laugh now if you like, but please hear me out.

According to an article by John W. Campbell, Jr., "Dr. Hahn has discovered that the addition of a neutron to uranium produces a higher element. This one does not pay off in nickels. It doesn't discharge a few minor articles and get comfortable again. It shatters utterly with a violence unimaginable; it discharges two immense atomic particles with a stupendous, furious energy. Instead of chips such as helium nuclei, a complete barium atom and a complete atom of the rare element masynium blast out. The energy of this explosion appears to be about 200,000,000 electronvolts. For pure concentrated violence, that represents the fury of ten mile-long lightning bolts crashing out of a single atomic diameter."

THE EXISTENCE OF MATTER

by RICHARD SKINNER

ALL particles of matter, beginning with the smallest atom, and ascending the scale on into infinity, encompassing the entire universe, exist only in the imagination of a thinking entity.

Bear with me a moment and I will prove to the most skeptic mind that the above statement is true, both literally and figuratively speaking.

The entire universe was conceived in the mind of, or the thought processes of the Omnipotent. He was the Creator. He created the universe and since He created it from absolute zero (there being no other matter to build from), it stands as an infallible fact that it was created solely from. and of, His imagination.

It therefore follows that we, as human beings, and a counterpart of our Maker, have the power to create, by mental process alone, a like duplication of His achievements. Being as it were, we were created in His image, we are Him, or a tiny infinitesimal part of Him.

Can there be a result without a cause? To begin, the WHYS? are always questions, and the BECAUSES are always the answers to the WHYS?. Why is this so? Because it is so; and why is that so? Another because. You will finally arrive at the time when there is no answer to the last WHY?

That is Infinity. When Infinity is reached, time, space, and matter cease to be, or exist. You cannot give a because to the last why, which means a result without a cause.

Agreed, then, there cannot be a result without a cause, we must conclude the obvious, that there is no universe.

Since matter comprises the universe, and there is no universe, there is no matter.

SKY TRAP

by CARL JACOBI

"Wings" Thorpe had a two-fold mission—to rescue the girl he was to marry, and to discover the whereabouts of a huge stratosphere ship that had disappeared from the face of the Earth! Little did he suspect the super-scientific methods of the enemy until he came upon the spider-webbing in the sky!



Passengers-women and children-first!

DARWIN. AUSTRALIA, Mar. 16—(MP)—by radiopress—The Piccard III, giant stratosphere passenger plane of the Columbia Stratolines, en route on her maiden trip with 418 persons, San Francisco to Darwin, was overdue at the Royal Drome here at noon today by two hours and twelve minutes. Radio communications with the ship ceased when the operator aboard gave his last position as a few hundred miles beyond Johnston Island, near the Hawaiians, latitude approximately 15

degrees N., longitude 165 degrees W. At that time the plane was functioning perfectly.

Aviation officials were at loss to explain the delay, as the Piccard III was equipped for all emergencies. Her hull carried enormous pontoons, surface gyroscopes, and she was propelled by non-explosive Zonium motors. The Piccard III is the largest stratoliner in operation, having accommodations for 550 passengers and a crew of 14.

DARWIN, AUSTRALIA, Mar. 17—teleflash—Tragedy is feared to have overtaken the *Piccard III*, Columbia stratoliner, on her maiden voyage to Australia. At ten o'clock this morning the ship was more than 24 hours overdue at the Darwin Drome. Sixteen defense strato-cruisers and two surface planes of the Australian Patrol left here to comb all Pacific air lanes.

PAGO PAGO. SAMOA, Mar. 17—(MP)—An unnamed night operator at the Samoan radio station, KS64, reported to American officials here today that he believed he had received an SOS from the still-missing Piccard in the early hours of the morning. The message, the operator stated, was unreadable because of a peculiar magnetic interference. The story has been discredited, since the operator insisted his direction-finder placed the lost plane's position as somewhere still in the stratosphere.

WASHINGTON, D. C., Mar. 18—In an international radio address today, the President of the United States asked that ocean-going ships and surface planes of all flags be on the lookout for possible wreckage and survivors of the ill-fated *Piccard III*. The Pacific Air Fleet, it has been reported, may take off from Sacramento to begin an organized search for the liner.

CHAPTER I

"WINGS" THORPE

WELVE men, dressed in the white uniform of pilots first-class, stood in the San Francisco office of Stephen W. Monroe, general manager for Columbia Stratolines, West Coast Division. Monroe, florid-faced and massive, was gnawing a cold cigar as he leaned far across his desk and addressed them collectively:

"Those are your orders," he was saying. "The *Piccard* must be found. The company is interested foremost in rescuing the passengers and crew, if any of either are still alive. If not, we must have a positive explanation for the ship's crashing. You all know that if she fell into the sea in such a way as to damage her pontoons and sink, the spot would be marked by an illuminated buoy which would automatically shoot to the surface. Look for that buoy!

"Each man will have full control of one of our emergency cutters, capable of cruising at surface or stratosphere altitudes. Take sufficient supplies for a week's flight. Report to the base station here by radio hourly. That's all."

There was a moment's hesitation; then twelve lean hands moved to salute. The white-clad pilots began to file out into the inner corridor. Monroe rose to his feet, stepped quickly around his desk and grasped the last of the men by the shoulder.

"Not you, Thorpe. I want to speak with you alone."

Thorpe—"Wings" Thorpe to the men around the Columbia hangars—turned and looked up heavily. He nodded, followed the manager back into the room and slumped into the proffered chair. A young man in his early twenties, with clear grey eyes and square-cut features, he sat there opening and closing his hands, the picture of despair.

"Hit you pretty hard, didn't it, Thorpe?" Monroe began. "Engaged to be married, I understand. The girl—Alice Bradley—was stewardess. That right?"

Thorpe writhed in his chair. His lips twitched.

"Yes, sir." he replied jerkily. "This was her first trip. She worked in the ticket offices on first floor until a few days ago. Then she decided she wanted to fly and applied for a position on the new liner. I... I've got to find her, Mr. Monroe. I've got to find that plane. If it takes me five years..."

M ONROE nodded slowly. "Know how you feel," he said. "And I'm going to help you all I can. Your two-year record with our organization has been more than satisfactory, and in appreciation, I'm putting at your disposal the Silver Star. That's the fastest cutter the company owns.

"But there's something else I want to talk to you about. You know a man by the name of Hunter—Wade Hunter?"

Thorpe's drawn face darkened slightly. "Yes," he said coldly.

"So I thought. Well, Hunter is now chief technician for our biggest rival, the Red Star Line. Formerly he was employed by us, but I was forced to hand him over to the law when I found him attempting to steal plans for a new cabin oxygenrevigator we were building. Now that he's in power again, he's made it a point on

several occasions to swear revenge against Columbia. Thorpe, take a look at this."

A newspaper was passed across the desk, and the pilot, after casting a glance at the headlines which still screamed of the liner's disappearance, found himself reading a quarter-column article at the bottom of the page, encircled with a red-penciled line.

The item, written by the leading political scribe of the day, was terse and to the point. It prophecied the passing of the Harkness Mail Bill by the Senate within forty-eight hours, an action that would definitely authorize the future transportation of foreign mail by stratosphere plane instead of the now-obsolete amphibian. And it closed by stating that it was still a matter of question in official circles which of two prominent organizations would be awarded the contract, Columbia or the Red Star Line.

Thorpe pursed his lips. "You mean . . ." he began.

"I have only suspicions," broke in Monroe. "But I'm telling you confidentially that it's my firm conviction that Red Star under the influence of Wade Hunter purposely arranged the disappearance of the *Piccard III*. A liner like that doesn't vanish without leaving a trace. And their motive is clear. By making it appear that our organization is dangerous and unsafe, they hope to win the government mail contract for themselves. I have information that they've been hard hit financially and need this to put them on their feet."

Thorpe looked at the big manager questioningly. "But..."

"Where do you come in? Right here. I've had the Red Star hangars watched since the *Piccard* failed to arrive in port. A surface plane landed there at 9:45 this morning from points unknown. In it were two men, Wade Hunter and a Doctor James Galyard. He's research scientist for Red Star Lines and an unprincipled man if there ever was one. They went immediately to the executive offices, stayed there one-half

hour, then re-entered their plane and took off.

"My detective followed them in his own plane. They headed north, flew up as far as Mount Shasta, near the Oregon line, and disappeared.

"Now then"-Monroe spread both his hands flat on the desk and clamped his teeth hard on the cigar—"Thorpe, I'm putting this case in your hands. You were successful once before in a bit of investigating work for the company. This seems to be right in your line. Your search flight for the Piccard will not be interrupted. I realize how you feel toward Miss . . . Miss Bradley. But stay out only two days. If you find nothing, don't return here; land at our freight hangar at Alturas. That isn't far from Mount Shasta, and I want you to try and find the whereabouts of this man Hunter, and the scientist with him. Doctor Galyard. Maybe I'm crazy, but I'm positive their movements have something to do directly with the missing Piccard.

CHAPTER II CUBES IN THE SKY

INGS THORPE handling the precision controls, the Silver Star turned her graceful rocket prow downward and raced from an altitude of 45,000 feet into a world of thick, cumulus clouds. The automatic hydrographer on the instrument panel buzzed loudly and pointed its twin needles to latitude 15 degrees north, longitude 165 degrees west. It was the approximate point the liner had last been heard from, and as the clouds suddenly gave way to a wide expanse of open sea, Thorpe flipped open the floor observation glass and surveyed the scene below him

But he did it with a look of hopelessness in his eyes. For two days now he had flown and re-flown over this part of the Pacific. He had started from the field at Honolulu and headed south by west, then north,

making a huge ellipse. He had skimmed the surface of the ocean, hoping against hope that his eyes would detect no gleaming light in a crystal globe, the release-buoy which would show definitely that the *Piccard* had sunk beneath the waves. He had even climbed into the stratosphere, up to an altitude of almost 60,000 feet, and drifted idly, eyes strained into the measureless distance, well-knowing that such a maneuver was futile as well as absurd. But Thorpe was leaving no loopholes in his search.

Fastened in a slot in the vision-glass before him was a small photograph, a picture of a young girl with blond, tousled hair and laughing blue eyes. To Wings with Love from Alice, it read, and the words stabbed back at him like a cruel knife. It wasn't fair to take her from him when they were on the verge of their happiness.

Mechanically he reached for the radiophone at his right, pulled forward the swing-bracket microphone and turned a switch.

"L5 calling KWR1," he said in a dull. lifeless voice. "L5, Cutter Silver Star, Thorpe pilot. calling KWR1, Columbia Drome base. San Francisco. Calling KWR1."

Presently a point of light lit up on the panel, and the speaker droned an answer. "KWR1. Go ahead L5."

Sadly Thorpe gave his official report. A report of failure. He had found nothing, though he had cruised west almost as far as Port Moresby. Now with the time limit of his search over, he was heading back to California and would land as ordered at the freight hangars at Alturas.

FOR a moment, a feeling of resentment welled up within him against Manager Monroe and his orders. Wade Hunter might be a bitter enemy and the Red Star Line an unscrupulous rival, but after all it seemed stretching a point to think either of them could spirit away a huge liner, its

passengers and its crew without leaving a single trace of evidence. Flying to Alturas now seemed like running away from the fight.

Three hours later his landing-beam eye warned him with its high-frequency hum that he was approaching the Alturas field. He cut off power, nosed the ship downward, and drifted toward the hangars.

"Refuel her and see that she's in condition to take off at a moment's notice," he directed the machinists who surged around him.

Then he wound his way through piles of freight and knots of loading men to the elevator that would take him to the lounging room on the second floor. Reaching the club-chamber, he chose a cogswell in a secluded corner, closed his eyes and slumped back wearily. But sleep was impossible in his present mental state, and presently the entire train of recent circumstances began to pound through his brain.

Wade Hunter, eh? Yes, he remembered the man—a suave, dark-faced individual with a silken voice and eyes like twin gindlets. They had taken their final air tests at the government examination grounds to gether. At that time the number of first class positions was limited, and there had been hot rivalry between the men. In the last event, someone tampered with Thorpe's plane, loosened the valve on the heat-brakes with the result that he almost cracked up landing on the field. Although he had no definite proof, Thorpe was convinced Hunter was the man responsible.

But the thoughts were unpleasant, and getting to his feet, Thorpe paced slowly to the window. If only it had been some other plane than the *Piccard!* If only Alice had kept her position in the ticket office!—then he could flash the Frisco drome and see her pretty face on the television screen. Outside the clouds had drifted, and the sun shone dazzingly in an azure sky.

And then quite suddenly the Columbia pilot was standing rigid, hands clenched

against the high window-sill, eyes focused on a glittery something far off in the western heavens. For a moment, he stared incredulously. Then, wheeling, he shot a question to a man sprawled in a nearby chair.

"Mallory, do you know if there's a pair of binoculars here in the room?"

The man looked up from his book lazily. "Sure," he said. "End cabinet next to the door. What's up?"

Without answer, Thorpe strode to the point directed and hurried back, the glasses held tensely in his hand. With the magnitied vision, he scanned the heavens once more. A moment passed.

"Mallory, come here. Look over to the west just beyond the third hangar and tell me if I'm crazy. What do you see?"

The freight pilot responded with alacrity. He squinted through the binoculars, looked a moment and frowned.

"Odd," he said. "Looks like a big steel cube—prism, rather, with a huge tube hanging from its lower end. And it's rising straight up like—like a balloon! I never saw anything like that before."

One more fleeting glimpse of the strange object in the sky was awarded Thorpe as he snatched back the glasses. Then the thing crossed into the glare of the afternoon sun and disappeared.

Mallory shrugged. "Some advertising stunt, maybe. I wouldn't worry about it."

Thorpe agreed with a slow nod, but there was a strange gleam in his eyes when half an hour later he descended again to the lower floor and headed down the road for the town of Alturas. He hiked directly to the company's town garage, found the man in charge and showed his credentials.

"I want a Filmore electric runabout," he said tersely. "Be using it maybe for several days. See that the generator is okay."

There was a short wait. Then the car wheeled down the automatic ramp, and Thorpe slid into the seat behind the steering wheel. Through the Alturas night traffic the electric hummed slowly, turned right, then left, and nosed into the highway. Once clear of the town, Thorpe pushed over the rheostat, and the motor leaped to a low-pitched, mile-eating whine.

E DROVE at an even pace without destination. It seemed senseless, this tracing the two Red Star men, Hunter and Doctor Galyard, without the slightest clue to point to their guilt. Even if he did discover their whereabouts, he couldn't challenge them openly, accuse them of shanghaiing the *Piccard*. Such an accusation would be an absurdity.

Twenty miles further on, the highway branched into two forks, and remembering Monroe's instructions, Thorpe swung into the west lane, heading in a general direction toward Mount Shasta. Darkness was closing in now. Automatically the solar-condenser headlights clicked on, spreading a soft glow before him.

The miles hummed by; the lights gradually increased their power. And then, all at once, there loomed ahead a side road leading away from the pavement. At the entrance a weather-scarred sign said in faded print: Short Cut To The Flats. Drive Slow.

Thorpe drew up and mused a moment. He would come to nothing by remaining on the highway. If Monroe's suspicions were in any way correct, the plane in which Hunter and Galyard had disappeared had probably landed in some wild and unsettled district. Here as well as any other place was a likely spot to begin his search.

A moment later the electric was rolling down the lane, winding in and out through a forlorn region of second growth. As he went on, the going became steadily worse, and Thorpe was forced to reduce his speed to a monotonous jarring crawl. Several times the road branched into other roads, all stretching before him in a network of confusion.

Two hours later he saw it. The car drawn

over to the side of the road, he had settled back against the upholstery, intending to catch a much-needed scrap of sleep. Pale moonlight from a three-quarter disc up in the eastern heavens shed a ghostly luminescence over the countryside.

It appeared abruptly like some strange geometric phantom, sailing quietly through the night sky—a huge steel prism, that in defiance to all laws of gravitation, slowly gained altitude! For a full minute, the thing remained in his vision, metal sides glinting in the lunar light. Then suddenly, as though endowed with new life, it shot upward at terrific speed and disappeared.

A chain of wild thoughts began to surge through the pilot's brain. Was there any connection between these floating things and Wade Hunter? Any relation to the missing *Piccard?*

Thorpe locked the car and began to stride across the fields toward a distant hillock, from the other side of which the prism seemed to have come—but when he reached the summit, he murmured an exclamation of disappointment.

He was on the outer boundary of northern California's lava beds, and the view ahead was a desolate stretch of volcanic open country unmarked by house or habitation. He lit a cigarette, stood there in thought. Then, smoking furiously, he stepped down and moved into the uneven way ahead.

CHAPTER III IN CAVERNS BELOW

RoR half an hour he stumbled forward, skirting the edge of the lava floor. He was about to give up in disgust when a startled gasp jerked from his mouth, and he flung himself flat downward.

Materializing out of the half-light ahead, a huge steel-sided bulk shot toward him—a gigantic prism, it was, fully thirty feet in width, advancing a few feet above the ground under its own power, the third of

the strange mechanisms Thorpe had seen that day.

Sweeping with lightning speed, the mighty object plunged by, missing the pilot's head by inches. There was no mistaking the thing this time. Thorpe had seen that it possessed three dimensions, incredible power and walls that unquestionably had been manufactured by man.

His heart was pounding and a queer buoyancy was surging through him as he picked himself up and continued straight into the lava bed. He walked fast, and presently a darker blot in the blackness loomed up faintly. A moment later the Columbia pilot was on hands and kness. eyes striving to pierce the blackness of a shaft that extended downward gently from the lava floor into the bowels of the earth. From its depths came the murmur of voices. and—Thorpe stiffened—the drone of machinery.

Cautiously he began to descend, feeling his way with outstretched hands. Perhaps twenty, thirty feet the floor led downward—he couldn't be sure. A quick snap of his pocket flash revealed a winding corridor stretching out before him. It was all natural formation, a lava cavern with scoriaceous, slightly eroded walls.

The distant drone of machinery had become a pulsating reality now, and the stench of strong chemicals was overpowering. The corridor widened, turned, and Thorpe leaped behind a niche in the wall. staring at the scene below him.

It was a huge grotto dazzlingly illuminated on all sides. The room was filled with tiers of strange machinery; dynamos, generators, and monstrous equipment. Three gigantic pistons pumped in and out. Above this was two great vats of some shining crystal composition—and leading straight up through a vent in the cavern's roof, a herculean chimney of sheet steel.

Two men stood beside a desk in the center of the chamber; a short, stocky man with greying hair, and a tall. hawk-faced man attired in the red and brown uniform of Red Star lines. Thorne's heart leaped. The men were Doctor Galyard and Wade Hunter.

On a massive control-board, a red light suddenly appeared, and with a movement of his hand, Galyard shut off the power. The machinery ceased in a pall of quiet.

Hunter burst forth in a roar of profanity. "Damn you, Galyard," he said. "I tell you you've got to increase the antigravity power. Those prisms aren't rising fast enough. They float just above the ground for twenty, twenty-five miles. People are beginning to notice them. We'll have the whole of northern California here if we don't do something."

Calmly the scientist lit a cigarette. "And I'm telling you," he replied, "that if you don't like the way I'm doing the job, get someone else. Sending those prisms up as fast as we are, the anti-gravitor is under too heavy a load now. If I increase the power, I'll have to cut down the output or she'll blow up."

Thorpe edged a bit closer, straining his ears. Wade Hunter consulted a pocket notebook, spoke again:

"You're positive, Galyard," he said, "that with this disintegrator we can destroy all evidence of the field when the time comes?"

Galyard smiled. "Quite positive," he replied. "There won't be a shred of the thing left. Coronium is not a lasting element as we have used it. But it's three days now. Why don't you take another Columbia ship?"

A STEALTHY step sounded behind Thorpe. Even as he whirled and raised an arm instinctively, a heavy blow crashed down upon his head. He fell back, staggering, cursing himself for not thinking of the obvious fact, that the place would have a guard posted. Then he struck out madly, trading fist for fist with an ironarmed figure there in the shadows.

Shouts filled the air; running steps. Before Thorpe realized what was happening, a second blow hit him; the heavens seemed to split open with a maze of blinding lights, and he sank into oblivion slowly.

He awoke in darkness. Hours seemed to have passed, and the memory of what had happened existed in his brain as only a whirl of confusion. He tried to struggle to his feet. Lashed wrists and ankles prevented him, and he lay back groaning. Vaguely he realized he was in some side cave of the lava cavern. Hollow and muffled through the intervening walls came the drone of distant conversation.

An eon of mental torture passed. Then a glaring light clicked on above him, and a familiar figure stepped into the cave through an entrance a few feet away—Wade Hunter. He moved to the pilot's side, swayed on the balls of his feet.

"You're seven different kinds of a fool, Thorpe. You should learn to keep your nose out of other people's affairs. It was most unfortunate that you discovered our presence here. Now, I'm afraid, the Columbia lines will be needing a new pilot soon."

Thorpe strained at his bonds. "What have you done with the *Piccard?*" he gasped. "You . . . you can't get away with this!"

"The *Piccard?* If you're really anxious to know, Thorpe, I can arrange your passage to her present location—in one of those steel prisms you saw floating in the sky. You'll get somewhat of a surprise, but you'll never return. Red Star Lines, you see, couldn't afford to have you talk."

He punctuated his words with a heavy kick and strode back to the entrance.

For twenty minutes after that, Thorpe lay motionless listening to a flow of conversation that reached him from the machine cavern. Then frantically he began to work at his bonds. A bit of past training came to his aid now, the rope and

knot test that figured in every pilot's examination. Obsolete since the days of the Heppler zeppelins and super-dirigibles when mail bags came fastened on long hemp cables, it had never been removed from the test papers.

Five minutes later Thorpe was ripping off the last thong and nursing his limbs back to circulation. He crept slowly to the cave's single entrance and moved down the black connecting passage until he stood once again, loking out upon that strange chamber. The machinery was silent now. but high up between the two crystal cylinders, red fluid in a glass gauge was pulsing rhythmically. Hunter and Doctor Galyard were at the desk ten feet away, bending over some kind of a chart.

On the near wall, a black box came into Thorpe's focus, and he breathed an exclamation of satisfaction—a switch-box, the door open revealing fuses and a master switch. It might control the current of a hundred things, and by a remote possibility it might be the cave's light cut-off.

Thorpe reached up and yanked it open. Thick blackness swoped down like a velvet curtain, and two voices before him broke out in instant profanity. With a leap he was in the machine cavern, racing for the exit-passage on the farther side. Fifteen, twenty steps he raced untouched. Then a hand reached out of the darkness and seized him by the throat.

"Not so fast, you damned sneak! You're not going to . . ."

Thorpe slammed out both fists in quick succession. He ducked to the side, followed with one more triphammer thrust. Then like a sure-footed gazelle, he was running again. He reached the farther wall, clawed for the passage that would lead to the surface, found it and rushed up the incline.

He was gasping hard when he emerged into the cool open air and stumbled out upon the lava bed. A grim smile of exultation came to his lips. Momentary success was his, but a greater and more remote danger lay somewhere ahead, danger to the one girl in the world—Alice. If he could believe all he had heard there in the cavern, she was still alive, but any moment might take her from him forever.

CHAPTER IV THE WEB AND THE RESCUE

doors to Hangar Number Twelve stood open, and the blue hull of the Cynthia, 1,000-ton fast strato-freighter gleamed in the sun. Unloaded as yet, she was due to race down the runway at 7:05 on a non-stop flight to the Mandarin drome at Shanghai and ports along the South China Sea. Pilot, co-pilot and radio operator stood at one side, talking idly.

At 6:35, twenty minutes later, the Cynthia's six Zonium motors burst into simultaneous roar. Loading men stared incredulously. There wasn't a scrap of freight in the ship's holds, and only four men in place of the usual crew of eight had climbed into the control cabin. Out along the steel runway red lights appeared. and a dozen bells jangled, clearing the way. The electric anemometer suspended in the gloom of the hangar's ceiling flared into brilliancy, its double gauge showing wind velocity and wind direction. machinist stood before the control box of track one, ready to release the mooring blocks.

"Cast off!"

Like a blue-breasted gull, the *Cynthia* sped down the runway, gathering momentum, racing into the morning sunshine. She rose gracefully, zoomed past the tower clock and headed south-west.

In the control cabin, Wings Thorpe was talking earnestly to the radio operator.

"Henderson," he said. "I want you to disregard the transmitter entirely. Forget your hourly base reports. Keep your ears glued to the receiver, and let me know the instant you notice any peculiar magnetic disturbance. Tune to low wave-lengths first. If you hear nothing, go higher. Keep your dial rotating from cosmic ultra-violet to solar infra-red, if necessary. The disturbance will be in the form of a low-pitched hum like a generator interference." Thorpe whirled.

"McFee!"

"Yes, sir." The Cynthia's pilot glanced up from his controls.

"Keep well in the stratosphere. 45,000 feet. Call out when the hydrographer says we're over the Hawaiians. I'm going back in the lower freight hold."

At 800 miles per hour, the huge stratofreighter tore westward along the Pacific air-lane. Her motors were singing rythmically, her instrument dials pulsing to perfect performance.

Back in the freight hold, Thorpe was laboring with the release-catch of two huge spools mounted on each wall of the plane. Rope-cable spools, they were, each containing thousands of feet of ironized quarter-inch hemp, manufactured to stand a three-ton strain. He uncoiled a hundred-foot length off the right hand spool and wiftly cut it to foot and a half sections. Then he reeled parallel cords the distance of the hold and began to lash strong immovable connecting links at intermittent distances. In a short while, his work began to take on a finished appearance

It was a rope ladder, one that would support a heavy load under all conditions and would reach almost three times the iength of the freighter's folding entrancestairway. An hour passed. Time hurried by. His arms were aching in their sockets, but he was nearing the completion of his labor when the co-pilot appeared at the companionway.

"We're over the Hawaiians, sir," he reported. 'Johnston Island in a few moments."

Thorpe nodded, followed the man down the connecting passage and entered the control cabin once again. He looked questioningly at the radio operator.

"Nothing yet, sir. But reception is bad. There's a lot of static."

A WORRIED frown crossed Thorpe's face. Could it be that he was wrong in all his hopes and plans? Had the conversation which had come to his ears there in the lava cavern been so much balderdash purposely contrived to throw him off the track?

He motioned the operator aside and slid into the seat before the sensitive instrument. Slowly he swung the dials, ears strained for some unusual sound in the headphones—cracklings of static, the government weather reports from Key West, an ocean-going tramp still using antiquated Micro CW—there were plenty of manmade interruptions in the air, but nothing that Thorpe was listening for.

Then suddenly he heard it—a low, almost inaudible hum at first, a faint vibration in the phones, gradually increasing in sound and pitch!

"Turn helm," Thorpe said to the pilot. "South by west."

"South by west she is, sir."

The hum in the receivers grew to a pulsing roar.

"South by south west. And hold it." "Steady she is, sir."

Thorpe slipped off the headphones. seized a pair of binoculars and trained them through the vision-glass. The Cynthia was streaking through the stratosphere like a long, blue bullet. Dazzling sunshine shone above. Below a faint blur of white marked a rolling carpet of cirrus cloud formation.

And as he looked, Wings Thorpe gave a low whistle of amazement. There it was, far ahead, suspended in the rarified air like an optic scar, the object of his search. But even his wildest imagination had been unable to prepare him for such a colossal and awe-inspiring sight as this!

Stretching on a two-mile front, extending back into the dim distance almost as far as the eye could reach was a titanic floating mass of tightly packed black cables. Interwoven and cross-interwoven with all the entanglement of a brobdingnagian spiderweb, the coils thick as a man's wrist, formed a great barrier there in the sky, a stratospherian sargasso. And yet in violation to all laws of gravity, it remained motionless 45,000 feet above the surface of the earth!

To the right and to the left that mass continued unbroken. It was a thing impossible, a trick of the sight, an atmospheric fantasy! And yet as they came nearer, the very solidity of it shown with stereoscopic clearness.

Pilot McFee shut off power and rubbed his eyes. "In heaven's name, sir," he gasped. "What is it?"

Thorpe clicked his teeth together grimly. "I'm not sure," he said, speaking half to himself. "Some strange combination of organic and inorganic chemistry. Ferrous oxide mixed with something unknown. Those coils have all the quality of iron, yet they are living plants, living kelp deriving sustenance and growth from the elements in the air. Keep well above it."

Motors idling to a bare steerage way, the *Cynthia* moved slowly over the tangled cable mass. And looking down they could see other things now. At intervals, half-buried in the ocean of coils appeared the upper half of the same enormous steel prisms Thorpe had watched rising from the lava bed the night before. Between the prisms, the surface of the mass seemed to sag downward as if depending on them alone for support.

THE co-pilot suddenly glanced at the instrument panel. "We're falling, sir," he announced. "Something is drawing us downward."

Thorpe started and with a quick movement switched on the storm-balance motors. "They'll keep us at our altitude," he said "Those coils have a magnetic attraction, . . . Look!"

As one man, the four pressed their eyes to the front vision-glass and stared out before them. For a quarter-mile, the iron-like kelp island stretched blank and for-lorn. Then at the farther end where the sheer blue of the heavens began once again they saw a strange sight.

Ensnarled beyond all hope of escape, buried deep in the cables lay the white bulk of a strato-liner. On her bow in clear letters was the name: *Piccard III*. And as they approached the white-uniformed figure of the pilot appeared at the side port of the wrecked ship, waving his hands frantically.

The radio operator choked. "By the Lord Harry," he cried, "I don't know where we are. But we've found her. And those aboard . . . they're alive!"

Forward motors stopped, storm-balance motors alone keeping them at their height, the *Cynthia* drifted nearer. Anxious and haggard faces now appeared at the observation windows of the *Piccard*. A rocket shot out of her control room, exploded in the sky in a smoke cloud of welcome. Presently the rescue ship was directly overhead.

Thorpe pushed a lever and watched the hermetically-sealed entrance-cabinet slide into position. Then from a rack along the side wall, he drew forth a crystal altitude helmet.

Seconds later he was leaning far out into the rarified air, slowly guiding the ironized rope ladder down toward the *Piccard*. A sudden tug, and he saw that it was fastened at its lower end. The Columbia pilot's heart began to pound as he watched the passengers begin to climb upward. Had any of them or the crew been injured when the ship crashed into this—this ghost trap? Was Alice still alive . . .?

Passengers—women and children—first. One by one in slowly mounting procession, they came up that improvised ladder. One by one they reached the entrance-cabinet and were helped into the interior of the freighter. But at last it was the crew's turn, and a moment later Thorpe almost screamed for joy when he saw a familiar head of golden curls showing through a crystal helmet. He reached downward, lifted the girl into his arms and ripped off the air-protector.

"Oh, Wings! I knew you'd come. It was . . . it was horrible! Four days we've been cooped up in that plane. Wings, what is this strange floating island? What caused . . .?"

Thorpe kissed her. "I can't explain now, Alice," he said. "We're together again. That's all that counts. Are you sure you're all right?"

She nodded and brushed a handkerchief across moist eyes. "Oh, darling, I'm so happy."

Thorpe passed his arm around her and led her toward the passageway. "Go into the control room," he said, "and I'll have you served some coffee. After this, young lady, you're going to stay on terra firma." There was a tremulous note in his laughter betraying his emotion.

A grey-haired man, clad in the Columbia uniform of liner captain, came up the ladder last. He removed his crystal helmet, grasped Thorpe's hand.

"Fine work, Wings," he said shortly. "We're all aboard. No casualties, I'm glad to say. But what in the name of all that's scientific is this thing we've barged into? Looks like someone pulled up the New York elevated and a couple of suspension bridges, mashed it all together, and hung it here in the stratosphere."

A bell rang, the ladder was drawn up, the passengers and crew of the *Piccard* made comfortable as possible in the freight holds, and the *Cynthia* headed toward California. But the *Piccard* herself was left behind. Empty and abandoned, the crack Columbia liner lay there, tightly ensuarled

in the sinewy cables. A portable derrick could not have extricated her.

And Thorpe, casting a last look at her from the *Cynthia's* stern observation port, realized how near he had come to failure. For suddenly, without warning, the floating kelp mass seemed to run together like heat jelly. Its cables twisted upward as if endowed with sudden life, blurred and lost their proportion. Before his eyes, the whole thing changed to an evanescent slime, to a thick miasma. And presently it disappeared.

CHAPTER V PRISON IN THE STRATOSPHERE

TITH the Cynthia speeding over the Pacific toward home, Wings Thorpe sat in the stern cabin opposite Alice Bradley and tried to answer questions as fast as she put them.

"All I know," he said at length, "is from the conversation I overheard there in the lava cavern. Red Star Lines originally, of course, desired a thing necessary to their financial status, the government mail contract. Wade Hunter wanted revenge against Columbia. And Galyard, the scientist, by his devilish inventions had the means of obtaining both.

"But it has all gone beyond that now. Hunter has become drunk with power and is fighting blindly to gain more. In some way Galyard found or compounded an element whose spectroscopic analysis is the same as coronium, the element heretofore known to exist only in the corona of the sun. He experimented with this substance, and by mixing it with ferrous oxide, vegetable protoplasm, and other chemicals, succeeded in producing a sea which, when surrounded by rarified air, would become fertile and grow—a combination of organic and inorganic chemistry, so to speak.

"A large number of these seeds, Galyard found, would produce a heavy mass of

kelp-like coils deriving nutrition from the elements in the air. Urged on by Hunter, it occurred to him that if he could keep such a body suspended in the stratosphere, he would have an effective trap to ensnare the Columbia liners. He solved it by constructing those steel prisms. Hollow shells, they were in reality, each containing thousands of coronium seeds, shot up from the surface of the earth by radio-energizing their weight to nothing.

"When those prisms reached a certain height, they stopped. The spout at the bottom opened, and the metallic seeds poured forth. Instantly they developed to rootlets, to iron-like vines, twining themselves on the steel sides of the prisms for support. Appearing suddenly before a liner traveling at high speed they were certain to cause disaster."

"But I don't understand what kept the prisms themselves from falling," broke in Alice.

Thorpe hesitated. "I'm afraid that's a secret of Galyard's," he replied. "Probably if the interior of one of them was examined, you'd find some manner of super-induction coil with a Dorian paramolecular core, the whole thing carefully tuned to the transmitter apparatus installed there in the lava cavern. It's difficult to conceive of the enormity of the scale upon which Galyard was working. With his machinery, he manufactured the coronium seeds, built the steel prisms, kept the prisms afloat after they had reached their height, and then, when the sargasso mass in the stratosphere was of large enough proportions, moved it about at will.

"It was Hunter's intention to snatch, in this manner, other Columbia ships, to make himself temporary king of the stratosphere. He only used the disintegrator to destroy this field he had created because at the last moment he thought he could keep it from my discovery."

Henderson, the radio operator, suddenly appeared at the doorway. His face was

stern, and a grim light shone in his eyes.

"I just talked with the Frisco drome," he said huskily, "and there's the devil to pay, sir. Manager Monroe's been kidnaped!"

Thorpe stared, then jerked to his feet. "Monroe—kidnaped!"

"Yes, sir. The Frisco op said it was done in broad daylight. One minute Monroe was walking across the grounds toward his office. The next, two men had thrown a sack over his head, carried him to their plane, and made off. You'd better come into the control room, sir. There seems to be an unregistered station on the air, and they're asking for you."

THE moment Thorpe took his place before the radio instrument and projected his image on the television screen, a familiar voice rasped in the speaker.

"Thorpe, this is Wade Hunter speaking. Yes, your old friend, Hunter. You won the last hand, Thorpe, but you won't win this one. We've got Monroe, and we mean to keep him. If you try any funny business, his life won't be worth asking about. I'm warning you, keep out of this. Otherwise . . ."

There was a steely glitter in the Columbia pilot's eyes as he flung over the switch to answer.

"You're crazy, Hunter. You can't get away with this. What are you trying to do?"

"A simple business proposition," came the silken voice again through a burst of static. "We intend to keep Monroe until the upper officials of Columbia agree to remove all strato-ships from the same air lanes flown by Red Star. We will be quite generous. We lay no claim to the African, Arctic or Antarctic routes, but the European, Asiatic and South American routes must be strictly Red Star's. Agree to this, and Monroe will be returned. Inform the government authorities, and it will be war to the bitter end. That's all."

As the receiver died into silence, Alice moved close to Thorpe's side, an anxious frown lining her brow. "What are you going to do?" she asked.

Thorpe shook his head slowly. "I don't know...yet," he said. "But something must be done immediately. I..."

"Wings," the girl grasped the Columbia pilot fiercely by the hand, "I can't let you run into any more danger. We're together again. You can't realize what I went through when we were marooned up there in those cables. To think that I would never see you again was even more terrible than the cleath that was facing me."

Thorpe drew her toward him tenderly. "I know, darling," he said. "But a man's life is hanging in the balance, and I'm the only one who's in a position to save him. I'll take the Silver Star and . . ."

She bit her lips as he talked on, trying to destroy her fears. "All right, Wings," she said quietly when he had finished. "And I'm going with you."

T WAS the Columbia cutter, Silver Star, lights extinguished, Zonium motors muffled to a low throb, that sailed slowly over northern California at an altitude of 50,000 feet in the stratosphere.

Grim-faced, lips set with determination, Thorpe sat before the controls, his brain striving hard to form a plan of procedure. Two feet away, still attired in her white pea-jacket and skirt, the uniform of a liner stewardess, Alice Bradley twisted and turned the dials of the radiophone.

"We're just about over the lava cavern," Thorpe said at length. "I'll drop down and let fall a flare. But I'm afraid it won't do any good. I only came here because it seemed the logical starting place. It would be absurd to think Hunter is holding Monroe in the cave—what with my knowledge of its location."

He reached for the elevation rudder, shot the ship downward and suddenly

jerked his head around as the radiophone burst into life under the girl's touch.

"Sheer off, Thorpe. This is the last warning. My atmosphone shows you are above us. If you or anyone else attempts to enter the lava cavern, your friend Monroe will be instantly killed. He's pretty close to you, Thorpe, floating there in the sky. If you look about a bit you'll see one of our prisms suspended directly above our head. Monroe is inside. side also is a large quantity of coronium seeds, the seeds which produced that mass you found over the Pacific. I'm giving you just three hours to decide, Thorpe. If at the end of that time you have not persuaded the Columbia people to come to terms, that prism opens, and the seeds will start growth. I believe you know what will happen. Monroe will be strangled, crushed to death in the coils. If you attempt to bomb the lava cavern, the prism will be robbed of support and will fall like a stone. And if you try to enter the prism up there you'll get an unlooked-for surprise. There's a charge of 60,000 volts in the steel exterior walls. Three hours, Thorpe. You'd better work fast."

The voice ceased as abruptly as it had come, and Thorpe slumped slowly back in his chair. Every angle of rescue seemed closed against him. Hunter, in his insane drive for power, had allowed not the slightest loophole. In three hours the prism would open, spill forth its seeds and . . . the rest was not pleasant to think about.

Should he go back and plead with the Columbia officials to submit to Hunter's demands? Up to the present time, he knew, they had steadfastly refused to even consider them. And even if they did agree to abandon the most important air routes in favor of Red Star, an inconceivable capitulation, could Hunter be relied upon to keep his promise and release Monroe? Thorpe clenched his fists. Probably not. Wade Hunter was a man beyond reason now; he was acting on his own, going

ahead blindly, ruthlessly, without thought of the future.

Lips tight, Thorpe checked the Silver Star's downward speed, switched on the searchlight and peered out the observation port. Yes, there it was, scarcely three hundred feet below them—a huge prism suspended motionless in the onyx sky, steel walls gleaming weirdly under the beam of powerful light.

For a long time, Thorpe stared at it, examined its smooth, blue-grey sides. His eyes were dark with despair, and a drop of perspiration was oozing out on his fore-head. God, if there were only some way! If only the prism wasn't electrically charged, he could move the Silver Star alongside and . . .

His teeth clicked together with savage determination as a half-formed plan flashed across his brain. He thought a moment, clenched and unclenched his fists, then whirled upon Alice.

"Listen," he told her, "I want you to take the controls, turn the ship about, and head directly for that prism. When we're about fifty feet off, turn again as if to pass it on a parallel plane. Cut your speed to five points above zero. Is that clear?"

There was a frown of puzzlement in her face as she nodded assent. But she made no attempt to ask questions.

CHAPTER VI

Star turned her prow and dropped slowly toward the distant prism. In the stern cabin, Thorpe's eyes were pressed to the glass of the observation port, following the glare of the searchlight as it focused itself with a circle of effulgence on the floating object there in the sky. His right hand was gripped tightly around a bar handle extending from the plane's wall—the projector-anchor release.

Presently the cutter was directly abreast

of the prism, and with a little start Thorpe saw what he was looking for—a small prominence on the flanking steel side and an oblong-shaped series of lines, marking a carefully sealed door.

The Columbia pilot quickly sighted the direction-control and yanked back the release. Somewhere below in the Silver Star's holds a motor whirred, and a ratchet groaned as if in pain. A panel tripped open in the outer hull, and a resilient rubberized bar, three inches in diameter, shot across space like a bullet, connecting the cutter with the side wall of the prism. It struck with its magnetic grip-end a few inches to the side of the sealed door, clung there rigidly while the Silver Star trembled violently and stopped with a sudden shock as the anchor-motor checked out the play.

Thorpe was working fast now. From a rack along the side wall he took down a crystal altitude helmet, and from the emergency tool kit under the floor he drew forth an oxyo-electrolic torch and battery case. He flung the case over his shoulders, buckled the straps across his chest and moved toward the hermetically-sealed entrance chamber.

"Wings, what are you going to do?" The cutter's forward motors stopped; Alice had left the control-room and hurried back to the stern cabin. Her mouth was quivering, her face white.

Thorpe tried to make his reply bantering. "Mosey over to that prism, cut a hole through the side and let my boss out. I'll be all right, honey."

The girl grew paler as she flashed a glance through the stern port. "But you'll be electrocuted. There's 60,000 volts running through that thing. And even if you don't come into contact with the walls, that anchor bar is as smooth as a flagpole. Wings, isn't there some other way . . .?"

He patted her gently on the cheek, smiled and slid the crystal helmet over his head. A moment later, hands encased in rubber gloves, the torch gripped firmly under his arm, he was in the entrancechamber, fumbling with the outer door release.

He stepped out slowly, closed the door behind him and swung lithely across the wing to the point where the anchor bar protruded from the cutter's hull. There he poised a moment, lowered himself, let go, and crouched to a sitting position.

It was not pleasant—thousands of feet above the surface of the earth, a three-inch bar between him and eternity, and his body already freezing cold from the sub-zero temperature. The darkness pressed close about him; piercing it the white beam of the searchlight at his side gleamed like some miniature sun.

NCH by inch he began to slide his way along the smooth rubber pole; inch by inch he crawled outward, testing each grip of his hands before he permitted his body to be moved. A strong desire to look beneath him hammered at his brain. He fought it off, riveting his eyes on the glinting prism ahead. Once the rubber gloves lost their hold, and he was forced to throw his weight quickly to the side. He stopped a moment then, gasping for breath. heart thumping wildly.

Hours seemed to have passed before he reached a point where if he extended his hands he could touch the prism's wall. But he made no attempt to go nearer. Sixty thousand volts, he told himself grimly, was a lot of electricity, and its effect when grounded on a human body was quite thorough.

The electrolic torch came into play now, ignited by Thorpe's fast numbing fingers. Deftly, he adjusted its arc to full strength, took care to see that he gripped only the insulated handle, and began to move it slowly up and down along the sealed edges of the door. Winking like a windblown gas jet, the blue arc ate through the tough steel like soft cheese. But powerful as it was, to Thorpe, it seemed to cut

with maddening slowness. The cold about him was eating into his vitals now; the air in his altitude helmet choked him with its smell of chemicals.

At length the last remaining shred of steel was cut, and the door panel fell outward, revealing a yawning opening. Thorpe reached upward, ripped off his crystal helmet and flung into space as a familiar figure appeared in the glare of the cutter's searchlight.

"Monroe!" he cried hoarsely. "Don't touch the outer wall. It's charged. Charged, do you understand! Wrap a coat around your nose and mouth and jump for the anchor bar. Hurry, man!"

Protection to the lungs against the frigid cold was essential. Already Thorpe could feel the biting air pass like a sharp knife down his windpipe. He slipped his own jacket off and bound it tightly about his face. Then he watched and prayed while Monroe braced himself and leaped agilely out of the prism onto the slender bar.

The man was no featherweight. The bar groaned and trembled under the additional strain, and Monroe swayed like a tottering vase as he fought to regain his balance.

Back they crawled, a few feet apart, over miles of space, it seemed, toward the cutter. Ahead, peering out of the port with anxious eyes, Alice watched their every movement. The Silver Star's cabin was ablaze with lights now; the ship hung there before them like a harbor of welcome.

Even days afterward the memory of that perilous crossing existed in Thorpe's brain as only a vague dream. Some way, hands and feet numb with cold, the two men worked their way to the more solid security of the cutter's left wing. And a moment later they stood in the glowing warmth of the plane's stern cabin, exultant with success.

Thorpe moved quickly toward the side

passageway. "Let's get going before anything more happens," he said. "There's no telling what other tricks Hunter may have up his sleeve. I . . . "

He broke off as a violent shock struck the Silver Star, heeling her over on her beam ends. Thorpe was catapulted heavily into the plane's side wall. He scrambled to his feet in an instant and rushed to the stern port.

For a moment the Columbia pilot stared, puzzled. Out there the rocking searchlight played on empty space, space mottled by only a few slowly descending black coils and cables. The prism had disappeared!

"The coronium seeds," he said slowly. "By opening the prism's side we let in the necessary natural air. That air differed from that which kept you from suffocating in composition and chemical content, and the seeds immediately started growth. The internal combustion became terrific in a few minutes. Those growing metallic vines destroyed the prism's apparatus and burst through the top wall."

"But the prism itself," broke in Alice. "What happened to it?"

Without machined "Fell, I suppose. support it dropped like a meteor. It . . . Good Lord!" Thorpe stiffened. "Hunter's lava cavern is directly below . . .!" He spun on his heel and ran down the connecting passageway toward the control cabin.

THE Silver Star raced earthward like a wheeling albatross. At a thousand feet, Thorpe released five carbonic roto-flares, and the ground below was instantly transformed into a glowing illuminated stage.

But it was a grim sight they looked down upon. Near the edge of the lava bed where the entrance of the machine cavern had been, was only a blackened, rock-sprayed ruin. From its disgorged interior flames were beginning to shoot upward, and over all, slowly hiding it from sight was a thick pillar of rising smoke.

For a long time Thorpe looked in silence. Then, heavily, he passed his arm around Alice and pulled her into the seat beside

"That's all, I guess," he said quietly "Let's head for home."

DARWIN, AUSTRALIA, May 23—(MP)—by 111 ternational radiopress—The Piccard IV, newest and most powerful super stratoliner of the Columbia Stratolines, landed here at the Royal Drome at 10 clock this morning on perfect schedule, completing its maiden voyage from San Francisco without mishap. Captain Thomas (Wings) Thorpe in charge, once liner pilot. with his wife, the former Alice Bradley, acting radio operator, were driven immediately upon arrival to the club chambers of the Australian Stratonautical Society where a celebration in their honor was to be held.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIR-CULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of Science Fiction, published bi-monthly at Holyoke, Mass. for October 1st, 1939.

Of Science Fiction, published bi-monthly at Holyoke, Mass. for October 1st, 1829.

State of New York is 18 Before me, a Notary Public, in and for the State and county aforesaid, personally appeared Abner J. Sundell, who, having been duly sworn according to law, deposes and says that he is the business manager of the Science Fiction and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 8, 1933, embodied in section 537. Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Blue Ribbon Magazines, Inc., 60 Hudson St., N. Y., N. Y., Editor Cliff Campbell, 60 Hudson St., N. Y., N. Y., Editor Cliff Campbell, 60 Hudson St., N. Y., N. Y. St. Cambell, 60 Hudson St., N. Y., N. Y. St. Cambell, 60 Hudson St., N. Y., N. Y. St. Cambell, 60 Hudson St., N. Y., N. Y. St. Cambell, 60 Hudson St., N. Y., N. Y. St. Cambell, 60 Hudson St., N. Y., N. Y. St. and 18 stated and also immediately therunder the names and addresses of stockholders owning or holding one percent or more of tota amount of stock. If not owned by a corporation, the names and addresses of the Individual owners must be given.)

Blue Ribbon Magazines, Inc., 60 Hudson St., N. Y., N. Y.
Lillian Silberkielt, 60 Hudson St., N. Y., N. Y.
3. That the known bondholders, mortagees, and other security holders owning or holding I per cent or more of total amount of bonds, mortagees, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear muon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the salo two puratraphs contain statements embracing affaint's full knowledge and bellef as to the circumstances and conditions under which stockholders and security holders who do not sphest upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication soil or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above is—. (This information is reduired from daily publications only.)

8. ABNER J. SUNDELL

8. Swent to and subscribed before me this 50th day of September, 1839

8. Maurice Coyne (My commission expires March 30, 140)

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ARE YOU A FAN?

F YOU belong to a science-fiction club, issue or work on a science-fiction fan publication, or come in contact with science-fiction notables, why not write us about it? Readers of THE FANTASY FAN are anxiously awaiting to know what you are doing to spread the gospel of science-fiction! Share your experiences in the fan field with advocates all over the world! This department is open to all fan, author, and publishing material, so don't hesitate to make free use of it!

This month, we present a special fanpublication edition of THE FANTASY FAN. The next issue will feature fan articles.

JACK DARROW

ANY years ago, a young fellow in Chicago by the name of Clifford Kornoelje became interested in science-fiction. Adopting the name of Jack Darrow, he soon became famous throughout the science-fiction world as one of the most active fans of all time. He has done much to spread science-fiction, through personal contact, organization, and correspondence. Ever on the alert, Jack won a valuable prize in our recent essay contest. So, to Jack Darrow (Clifford Kornoelje) of Chicago, a top-flight fan of the First Order, we respectfully dedicate this number of SCIENCE FICTION.

THE FAN MAGS

HE following list of fan magazines are those operated by young science-fiction enthusiasts for the purpose of familiarizing the readers of fantasy with the people behind the scenes—authors, editors, club members. Informal, breezy, newsy, these sheets are worth the perusal of everyone interested in our branch of literature. These publications are mimeographed, except when otherwise stated.

AD ASTRA, 3156 Cambridge Ave., Chicago, Ill. Bi-monthly, 10c. Editor: Mark Reinsberg. November, 1939: 25 pages. full page Krupa drawing, excellent arrangement of articles on all phases of science-fiction.

FAN-FACTS, Comanche, Okla. Bimonthly, 5c. Editor: Daniel McPhail. May-June, 1939: 14 small pages. Biographies of famous fantassers.

FANFARE, 125 W. Sixth St., South Boston, Mass., 10c. Editor: Francis Paro. December, 1939: 18 pages, illustrated stories and articles—comic cartoons.

FANTASEER, 18 Maryland Ave., Hempstead, N. Y. Monthly, 5c. Editor: William H. Groveman. Twelve hectographed pages of miscellaneous fan material--colored cover.

FANTASCIENCE DIGEST, 333 E. Belgrade St., Philadelphia, Penna. Bi-monthly, 15c. Editor: Robert A. Madle. July-Aug-Sept., 1939: 30 neat pages of choice material—fiction, articles, departments. hu-

mor, poetry. None better.

FANTASY NEWS, 137-07 32nd Ave., Flushing, N. Y. Weekly, 3 for 10c. Editor: James V. Taurasi. Four to six pages. Science-fiction's only weekly news sheet—what the magazines, editors, authors and fans are doing. An essential to all who want to keep up to date.

FUTURIA FANTASIA, 3054½ W. 12th St., Los Angeles, Calif. Quarterly. 10c. Editor: Ray Douglas Bradbury. Fall, 1939: 20 well-mimeod sheets of sophisticated fan features—frank, unusual, humorous—superb art work (including cover) by Hans Bok.

GOLDEN ATOM, 48 Lewis St., Rochester, N. Y. Monthly, 10c. Editor: Larry B. Farsaci. November, 1939: 16 pages of good miscellany.

HORIZONS, 303 Bryan Pl., Hagerstown. Md. Quarterly, 2 for 25c. Editor: Harry Warner. October, 1939. 12 hectographed pages—entire contents one amateur story.

LE ZOMBIE, Box 260, Bloomington, Ill. Bi-weekly, 3 for 10c. Editor: Bob Tucker. Science-fiction's humorous newsand-views sheet. A favorite with the fans.

M. S. A. BULLETIN, 55 Middle St., Skowhegan, Me. Monthly, 5c. Editor: James Avery. Eight pages of science-fiction articles and news of the Maine Scientifiction Association.

MIKROS, 1903 W. 84th Pl., Los Angeles, Calif. Quarterly, 5c. Editors: Russell J. Hodgkins and T. Bruce Yerke. September, 1939: 10 pages—articles about the interrelation of Technocracy and science-fiction. Intelligent, controversial material.

NEW FANDOM, 603 S. 11th St., Newark, N. J. Bi-monthly, distributed to members of New Fandom only—dues \$1.00 per year. Editor: Sam Moskowitz. 30 pages of high-grade items by science-fiction's leaders. New Fandom sponsored the 1939 World Convention.

NEW WORLDS, 17 Burwash Rd., Plumstead, London S. E. 18, England.

Monthly, 10c. Editor: Ted Carnell. 14 pages of good articles and news for British consumption.

POLARIS, 404 S. Lake Ave., Pasadena. Calif. 10c, 3 for 25c. Editor: Paul Freehafer. December, 1939: 16 pages—mostly fantasy stories by amateur writers.

THE SATELLITE, 57 Beauclair Dr., Liverpool 15, England. Monthly, 10c. Editor: John F. Burke. Good assortment of articles by Americans and Britishers—14 pages.

SCIENCE-FANTASY REVIEW, 14
Henley Ave., Litherland, Liverpool 21, England. Bi-monthly, 3c, 9 for 25c. Editor:
L. V. Heald. Eight pages of good material—one of the best bargains in the fan field.

SCIENTI-SNAPS, 2709 E. 2nd St., Dayton, Ohio. Bi-monthly, 10c. Editor: Walter E. Marconette. October, 1939: 16 neat pages—excellent selection of material—features an article on the life of A. Merritt.

SPACEWAYS, 303 Bryan Pl., Hagerstown, Md. 10c. Editor: Harry Warner. November, 1939: 26 well-edited pages of choice bits—very popular publication.

STUNNING SCIENTIFAN, 1836 39th Ave., Oakland, Calif. Quarterly, 15c. Editor: J. J. Fortier. Fall, 1939: 42 pages. mostly amateur fiction—also good articles.

SWEETNESS AND LIGHT, 1903 W. 84th Pl., Los Angeles, Calif. Quarterly, 10c. Editors: Russ Hodgkins, Fred Shroyer. Hank Kuttner, Jim Mooney, Art Barnes—all top-notch fans and authors. Fall, 1939: 13 pages of super-sophistication. The panmag of science-fiction, taking everyone down a peg. Amusing, interesting, satisfying.

VOICE OF THE IMAGI-NATION, Box 6475 Metro. Station, Los Angeles, Calif. 10c. Editors: Forrest J. Ackerman, Morojo. September, 1939: 16 pages of interesting fan letters with comments in "Ackermanese" by California's leaders.

YEARBOOK OF 1938, Box 260, Bloomington, Ill. Annual, 15c. Editor: Bob Tucker. Handy alphabetical catalog of all science-fiction published during 1938.

THE ILLINI FANTASY FICTIONEERS

BY ERLE KORSHAK

OST of you science-fiction fans know that the next World Science Fiction Convention will be held in Chicago. Many of you, however, do not know that, for the purpose of sponsoring the convention, an organization called the Illini Fantasy Fictioneers has been formed.

The organization has been started by Illinois' leading fans—plans and ideas are being investigated—things that will make the convention a bigger success. Now we are calling for members. Everyone can join. Everyone can help, no matter where you live, anywhere in the world—whether you plan to attend the convention or not. Join now!

Already such fans as Forrest J. Ackerman, Morojo, and Ray Bradbury of California, Doc Lowndes of Connecticut, and dozens more the country over have rushed in their membership fees—so don't delay! Write to the secretary, Richard I. Meyer, 3156 Cambridge Ave., Chicago, Ill., for full details. The membership fee is very low, and, as a member, you receive the club magazine, which alone is worth the cost of joining. And, remember, your membership means a bigger and better World Science Fiction Convention 1940 in Chicago!

CONVENTION ACCOUNT

BY FORREST J ACKERMAN

HAD ten terrific days in New York City, at the time of the World Science Fiction Convention 1939. As I look through my autograph book, again and again are brought back to me the priceless experiences of that cross-country trip: such as, meeting Hugo Gernsback, "Father of Scientification"; the dinner in honor of Frank R. Paul, science-fiction's most famous artist; talking with A. Merritt, Edmond Hamilton. Ray Cummings, Willey Ley,

Jack Williamson, Harl Vincent—literally scores of celebrities and fan-friends! Say. it was swell seeing Julie Schwartz, Connie Ruppert, Jack Darrow, Dale Hart, the "Philly Fellows," et al for the first time—and Charlie Hornig for the fourth! For the sixth time I saw the super-scientifilm, "Metropolis." I was very fortunate indeed to obtain the original Paul for "Jewels from the Moon" from the August SCIENCE FICTION, a "jewel" of an illustration well worth "mooning" over! I now live in anticipation of a repetition of all this sort of thing at the next convention—Chicago 1940!

REPORT ON THE CONVENTION

BY RAY DOUGLAS BRADBURY

ORE than 200 fans from all over the country converged on New York on July 2nd, 3rd and 4th, like cannibals after a missionary potluck, and I am proud to say I was right in there mobbing Manhattan with the rest of the scientifictionists. I arrived from Los Angeles five days previous to the meeting and found Charlie Hornig, editor of SCIENCE FICTION, at my beck and call. Then followed a rapid fire "glimpsing" of all New York has to hold-towering buildings, rumbling subways, clattering elevateds, the spectrum-rampant coloring of the Fair, and finally Sunday when Park Avenue witnessed clusters of queer people rushing down the street to a certain Caravan Hall. Man who attracted most attention, and had policemen leering, was Forrest J Ackerman, fellow member-friend of mine from Los Angeles. He and Myrtle Douglas (Morojo) stepped out of the film "Things to Come" dressed in Paul pants (bloomers to you), boots, and long colorful capes, not to forget bulging shoulders (a la Atlas). Traffic was tied up in Times Square for practically no time at all.

The Convention convened. Artist Paul, beloved illustrator of hundreds of issues of magazines, and the science-fiction editors, gave speeches. When Julius Schwartz got up, everyone remarked how wonderfully he resembled Groucho Marx. Bradbury walked in with a bundle of hamburgers under his arm and started bidding. He thought Schwartz was up for sale. The science-fiction auction came later. Eando Binder, Ray Cummings, Harl Vincent, Manly Wade Wellman, Leo Margulies, Mort Weisinger, and John W. Campbell, Jr., were just a few of the celebrities there.

The auction got under way. Drawings by Wesso, Paul, Binder and Schneeman were offered for sale. A baseball game was played between two factions—the score: seven sprained ankles to thirteen dislocated sacroiliacs.

THE PHILADELPHIA SCIENCE FICTION SOCIETY

BY ROBERT A. MADLE

ARLY in 1935 Milton A. Rothman formed the Philadelphia Science Fiction League, which, in 1936, became known as the Philadelphia Science Fiction Society and prospered under this title. Among the members are such names as Alexander M. Phillips, popular science-fiction author, John V. Baltadonis, Oswald Train, Jack Agnew, Helen Cloukey, and myself. We meet every other week, usually on Saturday nights or Sunday afternoons. and we publish an organ, the PSFS News. All near-by fans are invited to get in touch with me at 333 E. Belgrade St., Philadelphia, Pa. Join the PSFS!

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PSYCHOLOGY... AND THE FUTURE

Editorial by CHARLES D. HORNIG

tistic, and we know others whom we do not consider to be of that nature, yet all of us are inclined to rate the race of man as something more than animal—there are beasts and there are men.

It would be better if we could look at it in a more logical manner—that man is just the highest development of animal life, but nevertheless, an animal. Of course, this is speaking of his physical life here on Earth, and does not include his soul or spark of the Eternal that is somewhere in his being.

We know that our physical structure does not differ very much from that of other vertebrates, that we must get our energy by masticating things that grow, and that we must reproduce by a purely animal act—just like our brothers who are lower in the scale of evolution.

We speak of brotherly love, and yet we proudly boast "the survival of the fittest." We struggle for supremacy in business, in society, in politics—with the same set of emotions that dogs use to possess food, to lure a mate, to become leader of a pack. We fly off the handle and punch each other about, to settle some matter that has nothing to do with physical superiority—like animals flying at each other's throats. We boast of our breeding that makes us so much better than all other breeds—we let this pride drag us into war, so that we can destroy the other breeds of men who are so unworthy to exist.

And yet we say that Man and Animal are two entirely different creations.

BUT we like to believe that Man is just a little less of the Animal with each passing century. He is a little more patient with his competitor, a little more considerate of his inferior, a little less anxious to lead his brothers into bloody battle—than he was a hundred years ago. And I think we owe a lot of this to a better appreciation of psychology—the science that teaches us why people do the things they do—and knowing the reasons for human action, we can better understand our fellow man.

To understand is to appreciate—and we cannot hate anyone whose actions are clear and well-founded in logic, which is any one of us that is sane. By understanding the strengths and weaknesses of others, on the other side of the fence, we come to love them—because we come to realize that they are much like ourselves. Their emotions, their desires, their motives are the same as ours. Beyond that national border the inhabitants are also people. They desire the same peace and freedom that we do. And when they get into a war, they don't really enjoy chopping off the hands of babies, any more than we do.

God blessed the *homo sapien* with an intelligence superior to all other animals. Let this intelligence guide us to a better understanding of others—this is the true road to brotherly love. And we have no desire to suppress or destroy those we love.



Where Editor and Readers Exchange Thoughts

SCIENCE FICTION invites you to write letters to this department, giving your views and criticisms. Address your letters to EDITOR, SCIENCE FICTION, 60 Hudson St., New York City. Write us today!

Dear Reader:

Pardon me if I seem a bit "rambunctious" today, but I'm in a celebrating mood! It's a birthday, you know—and you can celebrate with me, for the magazine you now hold in your hand begins the second year of SCIENCE FICTION! Yep, just one year ago this issue, the newsstands saw their first copy of a struggling new babe in the fantasy pulp field—an infant that has grown amazingly during its first year—grown in circulation and (I hope you believe it) quality.

Though there were only five numbers during the initial twelvemonth, I think that there has been much improvement—at least, I've tried to give you the authors, the types of stories, the kind of illustrating, and the departments you asked for. But I want the second year to be bigger yet, so keep writing me about your desires and suggestions—criticisms too. After all, I can't meet you all personally and get your ideas on how to run a science-fiction magazine, I have to depend on your letters. May I count on you to help me edit SCIENCE FICTION to your satisfaction?

And have you heard about SCIENCE FICTION'S twin sister? She's a lot younger, but strong and healthy. Of course, I refer to FUTURE FICTION. Her second issue is waiting for you now at your nearest newsstand, with a line-up of your favorite authors, presenting you with some real science-fiction yarns. If you like SCIENCE

FICTION, you'll go for FUTURE FICTION in a big way.

How would you like to possess, as your very own, the original oil painting by artist Paul, that adorns this number of SCIENCE FICTION? All you have to do is to write us the most interesting letter this month—about the magazine, or any phase of science-fiction. Some lucky fan is going to get this painting, and it may as well be you!

"Im going to sign off right now and give you readers a chance to speak, but first I want to check through this month's letters and see if I can decide which story was most popular in the December issue.

Well, that was quite a job—and I m afraid that I can't put any one story on top. It seems to be a toss-up between Coblentz's "Planet of the Knob-Heads" and Cumming's "The Atom Prince." Our new author, David C. Cooke, received a lot of favorable comment for his "Women's World," also. What are your favorites in this issue?

CHARLES D. HORNIG, Editor, SCIENCE FICTION, 60 Hudson Street, New York City.

SHAM FRIENDLINESS?

Dear Editor:

In the "Readers' Reactions" department of one of the few English science-fiction magazines, a reader writes the following: "In my opinion, the extremely intimate friendliness between editor and readers is the keystone which supports the magazine. If you imbue your magazine with that most typical of Americanisms, friendliness, your success is assured."

To be sure, the American editors SEEM to be very friendly and intimate with their readers and when you read their editorials or comments on readers' letters, you cannot help but be overjoyed about their sincere feelings toward the fans. Alas!—being an old hand in this game and reading sciencefiction since 1926, I was forced to recognize all this friendliness as a fake, a makeup and a powerful publicity display on the part of the gentlemen in question. They do their stage act in a very clever and convincing way. The average fan falls easily into the trap, and tickled by his personal pride of being a friend of the editor, he is apt to overlook some very forcible facts and hints that all this is only a pitiful self-deception on his part. Oh, well, I feel that such a statement calls for positive proof and that the editors frowningly and wrathfully jerk their typewriters from the drawers to crush the poor wretch under their heels, who dares to utter things so preposterous.

I shall refrain myself from calling names on the saying that names are odious and I shall modify my statement that I can only judge how American science-fiction editors behave with European fans. Perhaps with their own countrymen, they are a bit more courteous. However, here are the facts:

A science-fiction magazine had a printed questionnaire obviously for publicity purposes and they asked the readers to fill in the questions. Everybody sending in the questionnaire would get a free simple magazine of the same publisher as a reward for the pains he has taken. I was always interested in one of the companion magazines and I sent in my questionnaire duly filled in with the answers. From my long contact with science-fiction magazines, I knew that as a European reader, I had small

chances to receive my free sample and therefore I added a few short lines in which I expressed my hopes that I most sincerely hoped that the free sample issue would be forthcoming to my address. It was, of course, all in vain, because I never got the free sample.

I had a severe but just criticism against this same magazine at an earlier period, and I wrote them a letter containing a heavy brickbat. The editor agreed with me without restraint and he told me as much-in a personal letter directed by mail to my address. As a matter of fact, he confessed that he discovered the same mistake in the magazine himself, but it was too late to do anything as the issue was already out of print and he could not make any alterations. This would be all very fair—but not in a personal letter. Rather it has its place in the correspondence column, so that the other readers may make their comments upon the case. This would have pricked the editor's pride, however.

So we proceed to the next magazine. As I am living in a far away spot of the old Earth, my subscription takes some time to arrive from the U.S.A. So it came about that between the expiration of the former subscription and the renewal I missed one issue, which by the way contained the middle part of a serial novel. You know how fans are peculiar about their issues being complete and you can also imagine how I missed that middle part of the novel. I wrote to the editor; you know, I thought the editor was my friend and not the publisher with whom I never had any contact—and told him of my plight. I sent him an address strip, the full value of the mag in unused U.S.A. stamps, and also the postage, but I never heard from him. He did not even take the time to answer to the effect that he was sorry he could not get one for me. What could you expect from a friend?

And thus I come to the third case. A certain science-fiction magazine is publishing a companion science-fiction mag and I

readits advertisement. These magazines are not sold in this country anywhere, so you can only get them by subscribing. I wrote to the editor and told him that I was a subscriber to all and every science-fiction magazine sold in the world-I wanted to subscribe to this new companion and I asked for a sample issue, so that I could see if it fulfilled my taste. I assured him that there was a 95 per cent probability that I shall subscribe to it as soon as I had the occasion to read one single issue. I think by now you can guess the result, and I bow my head in shame, because I never heard from that chap a single word nor did I get the magazine.

It is about all I wanted to tell you. I could go on for awhile digging out other cases from the past, but I think that these are more interesting, because they all happened in the course of the last twelve months.

What do you think of the friendliness between readers and editors? I always had the impression that as long as the interest of the editors coincided with those of the readers, they were very friendly indeed and they stressed their friendliness to an extent that the other readers should notice it too. Whenever their interests went against those of the readers, they were polite but firm in their refusal and very often they did not budge at all, so to reserve their fullest neutrality and aloof standing. Of course, they are not giving any publicity to this attitude of theirs and so only the friendly acts reach the knowledge of the masses. This is all very well, and you never expected any friendship on the part of an editor whose paper you were reading. Never did an editor of a scientific journal or an all-around picture-magazine pretend that he was intimate with his readers and the readers did not expect as much. As for the editors of science-fiction magazines, they seem to create a special atmosphere between themselves and their readers, but this atmosphere does not hold true if you let it undergo a few

tests of friendship and finally it resolves itself into—fiction.

I do not know if you care to print this, and I do not give a hang if you don't. Perhaps it would make interesting reading for your readers, but it is up to you to decide this. The cause why I wrote you all this is the following: Never have I been disappointed in a magazine you edited and you seem to uphold the ancient tradition. I hope that your friendship with your readers is true and is all it seems to be. But to be sure, I won't give you a trial, because I want to preserve one ideal at least.

Andrew Lenard, Pozsonyi ut 7 II 1 Budapest, Hungary.

(The old-time fans will remember the interesting, long letters from our popular Hungarian fan that I used to start off the readers' departments way back in 1934 and '35, in the old Gernsback magazines. They were the most well-liked letters in the magazines. and I know that those who remember Mr. Lenard will be glad to see him back again, even with a letter such as the present one.

I'm truly sorry that you've received such an impression of the American science-fiction editors, Mr. Lenard, and I hope that you will not go on thinking that we are a bunch of fakers. You have had several unfortunate experiences that have given you the wrong idea about the fan-editor relation.

Editors, like everyone else, like to enjoy their work, and that is not possible except where the editors are on friendly terms with the people they do business with—the fans. I know most of the science-fiction editors personally, and they're a nice, democratic bunch of fellows—not in the least aloof. They often go out of the way to help a fan or author—in fact, most of them are one-time fans and authors—because they realize that each fan helps the editors by purchasing the magazines. Anyway, they naturally like each other because science-fiction makes them kindred souls.

I would like to go into this discussion more thoroughly, but I want to leave some room for other letters-but first I want to impress you with the fact that there are lots of difficulties in communicating across the ocean to Hungary, and many of your requests may have been lost or killed in red tape before they had a chance of completion. There are a thousand and one little things that can go wrong in such long-distance service—postal errors, clerical errors, losses. etc. I am sure that outside influences, beyond the power of either yourself or the American editors, have done much to make you lose faith in us. I wish you luck in your future relations, and I hope that your faith will be restored.

How about some more of your interesting scientific letters for our readers?—EDITOR.)

BOOK BY A. MERRITT

Dear Charlie:

Seeing the swell progress of your SCI-ENCE FICTION, so reminiscent of the old Wonder Stories, and noticing the old-time fans reappearing in the readers' department, reminds me that perhaps your many readers might like to take advantage of a special fantasy offer.

As you know, Charlie, I am editor of the fantasy group known as the Bizarre Series. You also know that my associate, our mutual friend, K. Russell Miller, publisher of the series, recently died. To clear up Bizarre matters for the estate, I am authorized to offer the remaining copies of our first number, A. Merritt's "Three Lines of Old French," for merely the cost of packing, handling, and mailing—one dime.

This is the same edition that sold for twenty cents, printed on Hammermill-Bond book paper, bound in heavy Hammermill Antique cover stock. It is the same A. Merritt-Frank A. Munsey Co. authorized edition. But due to the death of K. Russell Miller, I am forced to sacrifice the remainder of the stock.

RICHARD A. FRANK, 333 S. Burrowes St., State College, Pa.

(I'm sure that every fan not yet possessing a copy of "Three Lines of Old French" by A. Merritt, will want to take advantage of your offer and acquire a copy of this well-known fantasy classic.—Editor.)

REPRINTS WANTED

Dear Sir:

During the sew minutes' time my train was in Banfs, I grabbed a magazine off a newsstand to have something to read while crossing the Canadian prairies en route to Winnipeg. Due more to chance than to any intelligent or deliberate choice, I sound myself in the possession of your latest soster child, SCIENCE FICTION, the August issue, to be explicit. This was more pleasing than disappointing, for years ago I used to be an avid reader of the older magazines, and I now looked forward to renewing acquaintances with some of the old science-siction authors.

Frankly, I had on the whole an enjoyable two hours of reading. The stories were all entertaining, but I do not consider most of them on a par with many of the old stories, at least, these stories did not hold me enthralled like the older ones did. I should like to read some of the old stories again; perhaps I have become more critical and would find that the old stories were actually no more moving than the new, that I have changed rather than the stories.

I feel sure that you would experience little difficulty in securing permission to reprint some of the better of those old stories, and I am sure that many of your readers would be delighted to have you include one of these old masterpieces of scientifiction in occasional issues of your new publication. It would be interesting also to see to what extent your statement is true in which you aver that science-fiction predicts the future.

A perusal of some of the fifteen-year-old stories in Gernsback's early compilations should result in a wealth of suitable material for a monthly department in which to offer reprints of some of the old yarns.

MIKE HOLM, JR. 2058 Palace St., St. Paul, Minn.

(You are right about some of the old Gernsback stories being classics, but there are many sides to the reprint question. The greatest objection is that reprints prevent the publication of new stories that have not seen print even once. However, if we receive enough requests for reprints, we might consider issuing a special magazine containing nothing but the old classics.—Editor.)

HE KNEW ZAMENHOF

Dear Editor:

As one who has always been vitally interested in science-fiction, even to the extent of going to work in earnest on writing a scientifictionovel (Wow!), I would like to take the opportunity of complimenting you on the standard of your magazine. It is great.

Naturally, like everyone else, I have my likes and dislikes, my pet theories and occasional gripes, but then it is not written for me alone, and more people would do well to remember that.

Re Esperanto, I myself, and quite a few others, some of whom will probably write and tell you so—would like to see Esperanto in your mag. It is a fascinating study, and well worthwhile for the person who is interested in international science.

I had the pleasure, many years ago, of meeting Dr. Zamenhof personally, when still a youngster. My father knew him well and must have been one of the Doctor's early adherents. Father was all for the idea.

I fancy myself as fairly competent to speak for an International Language, as I hold a B. Philol., and have acquired seven

languages perfectly and about three additional ones in which I can "manage."

I realize that there are those who insist that English is as nearly a Universal Language as possible, but those are forgetting that racial and national boundaries and antipathies will always hinder English from becoming completely that!

> L. A. ERICHSEN, 312 E. Lanvale St., Baltimore, Md.

(I had intended to run a short course in Esperanto in SCIENCE FICTION, but I found out that the special characters c, s, h, j, and g with the super-signs, common in Esperanto, are not in our type cases and until we can do something about this, any possible course in this magazine will have to be delayed.

However, during the past few months, many dozens of fans have written to me asking for a course, and I can now refer those readers to a very excellent correspondence course in Esperanto. Those interested in learning the language should write to Esperanto-by-Mail, St. Albans, New York. The course is prepared by a very competent Esperantist. Other information about Esperanto can be secured from Joseph H. Leahy, General Secretary, Esperanto Association of North America, 1410 H Street, N. W., Washington, D. C.

I know that many Esperantists must envy you for having met Dr. Zamenhof, the creator of the language—myself included.—EDITOR.)

THE SSRCSS

Dear Mr. Hornig:

I've suffered long enough; now is the time to protest!

I stopped at my newsstand to buy a copy of SCIENCE FICTION. My eye caught a title on the cover: "The Atom Prince" and before I saw the name of the author I said to myself, "Ray Cummings, of course."

Really, how does he get away with it? The editors of science-fiction magazines are a pretty intelligent bunch, not fooled easily. Yet Ray Cummings has been swindling—well, the word is too strong—selling them the same story for more than fifteen years. He has changed names and rewritten "The Girl in the Golden Atom" (in the same rotten style, what is more) more than a hundred times—and still he gets it accepted. What's the matter with you editors? You know he's doing it; why do you keep printing the stories—story, I mean?

You put out a swell issue with good stories and interesting features and then you ruin what respect a reader can have for your magazine by publishing Cummings' old buzz.

I hate to pull the old dare-you-to-printthis gag, but I'd really like to see this letter appear in "The Telepath." It's about time Cummings was taken to task. I'm beginning to think he's the nephew of every editor of a science-fiction magazine.

A group of friends and I have formed the SSRCSS—the Society for the Suppression of Ray Cummings' Submicroscopic Stories. Want to join?

HAROLD BENTON, 26 Journal Square. Jersey City, N. J.

(I take it you don't like Ray Cummings. You ask why we editors keep using Cummings. The answer is simple enough. The readers keep asking for Cummings. I can't deny that Cummings' atom stories are all very much alike—but that might be one of the reasons so many people like his stuff—his atomic theories may be so good that they can stand repetition. Take Edgar Rice Burroughs—his plots have little variety, yet he's a great favorite.

Evidently, a little Cummings goes a long way with you. Let me know how your SSRCSS comes along. And I flatly deny that Ray Cummings is my nephew. — EDITOR.)

CALLING ALL MEMPHIS FANS!

Dear Sir:

I hardly know how to begin, I've so many things to say, but first I want to ask a question. Mr. Editor, just who are you? And by that I mean where do you hail from, how long have you been a scientifictionist, etc? You seem to be so intimate with some of the fans that it set me to wondering. Do tell me all about yourself.

I think your short comments after each letter you print sets your mag above the others. By this I mean it isn't just another pulp conveyor of fantasy literature, but is instrumental in making the reader think the magazine was printed for his enjoyment alone. Keep it up!

Sure thing about the framable covers—also the Esperanto Course.

Now comes my pet peeve: Do all sciencefictionists live in New York and California? In my year and six months as a reader of funtasy, I have not read of, heard of, or seen a science-fiction fan in this village of some two hundred and eighty thousand. Am I the only one? I will admit it would be a distinction, however. One in two hundred and eighty thousand—Bah! I've worked my head off these last eighteen months trying to get some of mv friends interested in science-fiction, and for the last eighteen months the only reward I've received is a continuance of Ha! Ha! Talk about your persecuted martyrs. Seriously, though, can't something be done about waking up these southern dumbheads? They just don't know what they are missing.

If I have aroused any of the science-fution sleepers here in Memphis, the telephone number is 2-8388. Just ask for Art.

Thanks a lot for listening this long, Mr. Editor.

ART R. SEHNERT,
791 Maury, Apt. 1,
Memphis, Tenn.

(All those questions about who I am, and such, just embarrass me no end. Art—but

my ego won't let me escape without taking advantage of your inquisitiveness, so I'll give you just a few pertinent facts about an impertinent editor.

I'm Charles D. Hornig, and I hail from Elizabeth, New Jersey - more commonly known in the big city as "Joisey." If I weren't afraid of some Elizabeth people reading this magazine, I'd admit that Elizabeth, with 120,000 inhabitants, is a suburb of New York-which makes me a commuter. In 1930 I became a science-fiction fan-and three years later went into the editorial field. It may be true that I print many letters from my friends, but the most active science-fiction fans are among my most intimate acquaintances, so I just can't get away from it. I like to make friendsparticularly science-fiction fans and authors. And during my 60,000 miles of wandering around the old U. S., I guess I've met most of the active ones.

I can vouch for the fact that there are fans who do not live either in New York or California. I'll bet there are plenty of them right in your own Memphis. Just for fun, why don't you go to your local news-distributor and find out how many science-tiction magazines are sold in Memphis? There must be hundreds of people there that read the mags every month. Then all you have to do is hang around a large newsstand until you see someone buy a copy—then he's in your power!

Anyway, I hope your letter wakes up those local fans, so that you-all can get together. But I resent you calling southerners "dumbheads." I'm from South Elizabeth.

myself.—Editor.)

HE ENJOYS THEM ALL

Dear Mr. Editor:

Would you allow a member of the Science Fiction league—Number 2575—to enter your "Telepath" columns?

By all means let's have some Esperanto in science-fiction. I read Robert J. Walker's

letter in the October issue of SCIENCE FICTION and want to send in a vote to help the cause along.

I joined the Science Fiction League some time ago, but have sort of been a quiet member. But I want you to know that I enjoy reading every science-fiction magazine I get.

And no matter how good or bad the story, how well or how poorly written, I enjoy them all, because I just like to soak myself in the supernatural or in anything that at the present time seems impossible.

But in the October issue I think I like best the story "Dweller in the Darkness," which had a different ending than I had expected. Also "Flame of Life" was good.

So, in closing, let me hand it to the Editor for his fine selection of fiction for the October issue.

STANLEY STROUD, 2716 Elizabeth Ave.. Zion, Ill.

(Your letter is the aspirin of today's mail—helps to relieve the editorial headache brought on by trying to please all of the readers all of the time—which even Lincoln would admit to be an impossibility.—EDITOR.)

ESPERANTO SPREADS SCIENCE FICTION!

Kara Redaktoro Hornig:

Greetings from a new science-fiction fan' Thanks to Esperanto, you now have a new reader. I read in the "Amerika Esperantisto" that a chap named Hornig and a magazine named SCIENCE FICTION was boosting Esperanto, the widely used international language.

So I looked around for a copy of SCI-ENCE FICTION, and to my surprise, saw that it was one of these pulp magazines which I had never read. Naturally I read your magazine and was surprised at the pleasure that I derived from it. The stories are interesting and thrilling, action-packed. fantasy which is not over-emphasized, and best of all, the scientific theories are easily understood even by us laymen.

Judging from the number of letters which you have received concerning Esperanto, your readers must be interested in this international language. For their interest, I might mention here that in 1935 I began the study of Esperanto, at the time being only fifteen years of age. I studied without a teacher, yet so easy was the language that within three months I could read and write it.

I have derived many benefits from the language. I have had pen pals in twenty countries as well as friends in our own United States. If I should ever travel, I would experience no language barriers whatever. I can read newspapers and magazines from other lands. But most of all, I have come to realize that a language in universal use throughout the world will be a tremendous factor in furthering good will and understanding among the nations of the Earth. Peace can come only through understanding and Esperanto is a definite help in that direction.

To the SCIENCE FICTION readers who wish to learn Esperanto, I say don't hesitate! The address of the Esperanto Association of North America is 1410 H Street, N. W., Washington, D. C. Good books are available at exceedingly low prices. Of all the English language books for the study of Esperanto, I personally prefer the book, "Esperanto Grammar and Commentary" by George Cox.

I enjoy Esperanto mostly because of its literature. There are thousands of literary works, both original and translated, obtainable in this tongue. If for no other reason than because of its literature, it will be to your advantage to learn Esperanto, because your time will not have been wasted. Besides the national Esperanto organization, there is also the American Esperanto Institute, 1111 Brooke Rd., Rockford, Ill. This organization carries a large stock of Es-

peranto books, both instruction and literature. It also publishes a bi-monthly magazine called "Scienca Gazeto" which deals with scientific topics and is interesting reading.

I wonder if there are any linguisticallyinclined SCIENCE FICTION readers in Lima, Ohio. The 33rd annual congress of the Esperantists will take place in that city next July and it would be a pleasure to meet the science-fiction fans of that city. Look around, science-fiction readers, for Esperanto clubs in your locality. They'll be glad to help you learn Esperanto.

> WILLIAM VATHIS, 101 E. Broad St., Tamaqua, Penna.

(Welcome to the science-fiction fold, Bill Vathis! I'm glad to see that Esperanto is converting folks to science-fiction just as rapidly as the vice-versa! But, after all, science-fiction and Esperanto have so much in common—Utopian ideals for the future, a peaceful world of one brotherhood, and science that does not destroy itself by evolving new kinds of poison gas.

You, like so many Esperantists, learned the language by studying at home—and in such a short time. I became interested in the spring of 1938, in Los Angeles. Forrest J. Ackerman persuaded me to learn the tongue—and you'll find that he's the nation's number one science-fiction fan as well as a good Esperantist. I also learned Esperanto without instruction—but now I'm teaching two evening courses in the tongue—and very successful classes, too!

The reason why you see so many letters in this department in which Esperanto is mentioned is because most fans who write in say something about it, and I can't very well print a representative group of letters here without including a lot of Esperanto propaganda. The reaction has been more favorable than I ever expected.

Skribu denove! - Write again! - EDITOR.)

THINKS COBLENTZ SILLY

Dear Mr. Hornig:

Your current issue was good, except for one story, "Planet of the Knob-Heads," which I thought was the silliest science-fiction story I ever read. "The Atom Prince" ranked first with me. "Upon the Dark Moon" was second, even though it was a short-short, which, ordinarily I don't like. "Lever of Destruction" and "Women's World" nearly tied, but I cannot easily picture a world ruled by women. Otherwise, it was a fine story. "Lever of Destruction" sounded too much like a detective story, but it beat "Women's World."

"Planet of the Knob-Heads" was silly for these reasons: (1) What nation or planet could tolerate such a careless government as the one mentioned? (2) What sort of mere flesh and bone could reproduce a modern radio, or any radio, for that matter? If that were possible, how could it be crowded into so small a space? (3) Other things, such as their extremely nervous systems and their painted "knobs." The features were good, especially "Movies Via Radio." Paul's illustrations were good, especially the cover. I have one question to ask; why did you discontinue the feature explaining the cover, by Binder?

S. F. KAHN, Box 86, Friars Point, Miss.

(Answering your questions about "Planet of the Knob-Heads," in order: (1) After you study some of the governments that have existed and do exist upon this Earth, you will find that Coblentz's satirical government of the Knob-Heads is not so ridiculous, by comparison. (2) The brain interprets wave-lengths of sight and sound, so it is not fantastic to suppose that superbrains could also interpret the wave-lengths of radio. (3) The points in the story that you consider ridiculous are examples of the Coblentz satire that has made his works

famous. But if you don't like satire, I can't sell you on the story. I'm glad you liked the rest of the book, anyway.

At the time that the December SCIENCE FICTION was being prepared, Binder was out of town and we could not get in touch with him—so we left the subject of the cover to the imagination of the fans.—Editor.)

REVIEW OF FIRST YEAR

Dear Editor Hornig:

I am highly pleased with the latest December issue of SCIENCE FICTION. It was very refreshing compared to some other science-fiction magazines; I will tell you why.

First, the cover was very good. No question of the beauty of the girl in the illustration. It reminded me of the old Wonder Stories that I had thought gone forever. The reds and yellows used by Paul on the covers always please me.

"Planet of the Knob-Heads" was an ace story and by one of my favorite authors, Stanton Coblentz. I will always buy a magazine with a long story by this author. His short stories are just ordinary, as it seems that Coblentz needs time to really get going in a story.

When you have only shorter stories making up an issue, you usually have one illustration to a story. Therefore, when you have a book-length feature story, I think it would be best to have two or three illustrations for this one story. Remember, one illustration is worth several hundred words. This is only a suggestion that I think might help sell more magazines. If a person is doubtful whether to buy the magazine, why several well-done illustrations, either appealing to his love of fantasy or his sex instincts will sell him on the idea of purchasing the magazine.

The first issue of your magazine was very good. The second wasn't so hot, probably because I don't like Binder's stories. I realize that plenty of readers like Binder,

but I don't. Your third issue of SCIENCE FICTION I thought was very poor. That is, the stories were bad. "The Telepath," Editorial, and covers have been good in every issue. The fourth issue with Neil (Prof. Jameson) Jones' yarn shot SCI-ENCE FICTION'S stock up 100 per cent with me. Now the fifth issue! There are about twelve or thirteen fantastic fiction magazines on the market this month and the December SCIENCE FICTION takes a back seat to none!

I have a large collection of science-fantastic magazines and books, but I really think that the discussed issue of SCIENCE FICTION is as good as the best in the past fourteen years! Cummings' story, though not his best, is a lot better than the short interplanetary yarns he has been turning out in the past few years. I wish he could write something along the order of his "Tarrano the Conqueror" or "Wandl the Invader."

The account of the New York Science Fiction Convention made the issue particularly valuable. Also I was pleased to see that the "Telepath" had been greatly enlarged. I find it difficult to show my real enthusiasm for this issue in words, but if you succeed in turning out equally good issues in the future, why I'll subscribe, and that is more than I've ever done for any other magazine.

You ask for suggestions on how to improve the magazine. Give us Laurence Manning's "Stranger Club" stories, N. R. Jones' "Prof. Jameson" stories and anything you can get by J. W. Campbell, E. E. Smith, and all long satirical yarns by Coblentz. However, equal the December issue and I'm satisfied!

> DANIEL WADE, 5127 Farrar St.. Seattle, Wash.

(Well, I guess I overshot my mark on the December number, according to your letter. (Continued on page 100)

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M. L. SALES CO.

Room 315 160 W. Broadway Dept. 3 New York City (Continued from page 99)

I had intended to make it the best of the year—but if nothing can beat it for the past fourteen years, then I'm a little afraid—afraid that the current number might only be the best one in five years!

But seriously, I'm glad you like the magazine, and more important, that you can see it steadily improving. Whether or not it is really the best, I don't know—but I am anxious to have it get better continually. Progress, that's us!—Editor.)

LINOTYPER'S NIGHTMARE!

Dir Editr:

I wuz intrstd tu not yi atempts at simplifid spelij in yi Desembr isu uv SCIENCE FICTION. Sevrl munys ago I originatd a sistm wich sims simpl, lodzikl & esi tu rid aftr a bit uv praktis. Omitij yi old letrs Y, J, C and Z in regulr us, I uz yem wiy othr valus, as folos: Y—th; J—ng; C—au; Z—sh. Z has yi valu uv "zh" in sevrl lajwiges. Y wus yi old simbl for "th." I & C hav rbitreri valus.

Wil it is not perfekt and wud bi subdzt tu sum adizns I yink it is an impruvmnt ovr yi ½wa mezurs uv "Morojo" & ur onorabl self.

Yoiks!—and on—and up, etc.

M. Evans,
912 Rm., 1860 Broadway,
New York City.

(All I can say is—I guess I asked for it!— EDITOR.)

THE MAINE SCIENTIFICTION ASSOCIATION

Dear Charlie:

As an editor, you certainly are the most inconsistent that I know of. One month finds me reluctantly admitting that you've got a pretty good magazine there; while the next month finds me dragging you over the (Continued on page 102)

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for Men of Character

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Costly Work Formerly "Sent Out" by Business Men Now Done by Themselves at a Fraction of the Expense

This is a call for men everywhere to handle exclusive agency for one of the most unique business inventions of the day.

Forty years ago the horse and buggy business was supreme—soday almost extinct. Twenty years ago the phonograph industry ran into many millions—today practically a relic. Only a comparatively few foresighted men saw the fortunes ahead in the automobile and the radio. Yet irresistible waves of public buying swept these men to fortune, and sent the buggy and the phonograph into the discard. So are great successes made by men able to detect the shift in public favor from one industry to another.

Now enother change is taking place. As old established industry—so integral and important part of the nation's structure—in which millions of dollars change hands every year—is in thousands of cases being replaced by a truly astonishing, simple invention which does the work better—more reliably—AND AT A COST OFTEN AS LOW AS 2% OF WHAT IS ORDINARILY PAID! It has not required very long for men who have taken over the rights to this valuable invention to do a remarkable business, and show earnings which in these times are almost unbeard of for the average man.

Not a "Gadget"-Not a "Knick-Knack"-

but a valuable, proved device which has been sold successfully by busi-ness novices as well as seasoned

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

Some of the Savings You Can Show

You valk into an office and put down before your prospect a letter from a sales organization showing that they did work in their own office for \$11 which formerly could have been them over \$200. A building supply corporation paye four man \$70, whereas the bill could have been for \$1,600! An automobile dealer pays our representative \$15, whereas the best own over \$1,000. A department store has expense oil \$88.60, possible cost if door outside the business being well over \$2,000. And so on. We could door possibly list all cases here. These are just a few of the many actual cases which we place in your hands to work with. Practically every line of business and every section of the country is represented by these field reports which hammer across dazding, convincing money-awing opportunities which handly lany business man can fall to nodertrated.

EARNINGS

One man in Cali ornia earned over \$1,600 per month for three months—close to \$5,000 in 90 days' time. Another writes from Delaware—"Since I have been operating (just a little trom Delaware—Since I have been operating (just a little less than a month of actual selling) and not the full day at that, because I have been getting organized and had to spend at least half the day in the office; counting what I have sold outright and on trial, I have made just a little in excess of one thousand dollars profit for one month." A man working small city in N. Y. State made \$10,805 in 9 months. Texas man nets over \$300 in less than a week's time. Space does not permit mentioning here more than these few random cases. However, they are sufficient to indicate that the worthwhile future in this business is coupled with immediate earnings for the right kind of man. One man with us has already made over a thousand sales on which his earnings ran from \$5 to \$60 per sale and more. A great deal of this business was repeat business. Yet he had never done an thing like this before coming with us. That is the kind of opportunity this business offers. The fact that this business has attracted to it such business men as former bankers, executives of busine ses men who demand only the highest type of opportunity and income—gives a fairly good picture of the kind of business this of our is open, however, to the young man looking for the right field in which to make his start and develophis future.

Profits Typical of the Young, Growing Industry

Going inso this business is not like selling something offered in every grocery, drug or department store. For instance, when you take a \$7.50 order, \$5.8) as he your share. On \$1,500 worth of business, your share can be \$1,163.00. The very least you get as your part of every ollar's worth of business you do is 67 cents—on ten dollars' worth \$5.70, on a hundred dollars' worth \$5.70, end hundred dollars' worth \$5.70 into the words two thirds of every order you get is yours. Not only on the first order—but on repeat orders—and you have the opportunity of earning an even larger persentage.

This Business Has Nothing to Do With House to House Canvassing

House to House Canvassing

Nor do you have to know anything about high-pressure selling, "Scilling" is unnecessary in the ordinary sense of the word. Instead of hammering away at the customer and trying to "force" a sale, you make a digalifed, business-like call, leave the installation—whatever time the customer says he will accept—at our risk, let the cursomer sell himself after the device is in and working. This does away with the need for pressure on the customer—it eliminates the handleap of trying to get the money before the customer has really convinced himself 100%. You simply tell what you offer, showing proof of success in that customer's particular line of business. Then leave the invention without a dollar down. It starts working at once. In a few short days, the installation should actually produce enough cash money to yay for the deal, with profits above the investment coming in at the same time. You then call back, collect your money. Nothing is so convincing as our offer to let result speak for themselves without risk to the customer! While others fail to get even a hearing, our men are making sale running is not the hundreds. They have received the attention of the largest firms in the country, and sold to the smallest businesses by the thousands.

No Money Need Be Risked

No Money Need Be Risked

in trying this business out. You can measure the possibilities and not be out a dollar. If you are looking for a basiness that is not seen reverseded—a business that is not downgrade—a business that is not downgrade—a business that offers the buyer critisf from a burdensome, but unavoudable expense—a business that a burdensome, but unavoudable expense—a business that has a prospect practically in every offse, store, or factory into which you can set loos—gradfless of size—that is a necessity but does not have any price cutting to contend with as other necessities do—that because you control the sales in exclusive territory is your own business—that pays more on some individual tests tham many men about a sa one for the rights in yout certitory—don't delay—because the chances are that if you do wait, someone give will have written to us in the meantime—and if it turns out that you were the better man—we do both be sorry. So for convenience, use the coupn below—but send it right away—or wire if you wish. But do it now. Adaptab

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(Continued from page 100) coals in my correspondence and fan writings. But this month (December issue) has me stumped! Is it good, fair, or poor?

Regardless of my final decision, what interests me most is the cover. (No, I don't mean it that way!) But if you'll look in your old files of Wonder Stories, you'll find that Paul drew an almost identical cover for the December, 1931, issue! There's practically the same robot kidnaping practically the same girl, with but a minor variation in her human pursuers! The same yellow sky-and even the robot is shooting from nearly the same angle! One thing I would like to say, however, is the fact that Paul's women have improved immensely! The 1939 edition has an almost intelligent look on her face and actually appears healthy! The one of eight years ago looks awfully anemic and rather seasick! I wonder how many other readers caught the similarity between the two covers? Fifty?

Now for the squawk! What's wrong with Coblentz? He of the always magnificent satires fell miserably flat. Although it followed his formula for success, only at rare instances did his genius appear. It almost seemed as if he were writing "down to his audience," or at least to some predetermined policy. At any rate, "Planet of the Knob-Heads" cannot be uttered in the same breath as his beautifully-written and satirically ironic "Blue Barbarians," "Into Plutonian Depths," or "In Caverns Below." And Charlie, don't tell me that it's only a psychological thrill I got from reading those yarns years ago, because I read two of them not more than a month ago and the other only last summer! All for the first time!

"The Atom Prince" by Ray Cummings was very good and done in his traditionally descriptive style. This story should prove very unusual and interesting to new readers of science-fiction. And even to me, the theme never seems to grow old.

"Upon the Dark Moon" by Chapman (Continued on page 104)

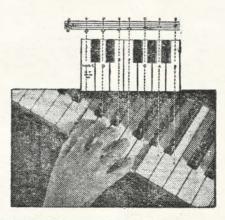


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(Continued from page 102)

(isn't he the same fellow as the semi-prominent fan by that name?) smacks strongly of O. Henry and the Wonder days. Nice little tale. Why the heck couldn't I have written it?

Of course there's no need of telling you that I'm trying like the devil to get that original Paul painting, but even at that, I want to let you know that the last two stories in the issue stank to high heaven! They are the shining example of hack stf. Form characters, stilted phrases, rehashed plots, clinch endings (in the first case at least), and all around general poor writing. But you probably realize this as well as I do.

Thanks for enlarging the "Telepath" and "The Fantasy Fan" departments. May I suggest that either Bob Tucker or Don Wollheim be next honored? Both are fellows of remarkable intelligence who have left their individual marks on the fan world, changing at times its entire course of history. Please don't be bigoted and present only your personal friends to the public. The Convention article was well-written and as unprejudiced as I've yet seen.

You seem to be genuinely sincere in acquainting casual or regular readers with the thrills and jun of the fan world, and so I'd like to say that a number of us fellows up here in the "outpost of science-fiction" have formed the Maine Scientifiction Association, of which, incidentally, I'm Executive-Secretary. We have members all over the state. Maine readers of SCIENCE FICTION interested in joining the MSA can contact me at the below address. I'll be only too pleased to send them sample copies of the club Bulletin, etc., at once.

Oh, yes! The new Quarterly! I have the highest of high hopes for it, so please don't let me down!

JIM S. AVERY, 55 Middle St., Skowhegan, Me.

(Continued on page 106)

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(Continued from page 104)

(Your letter is very high in the list of the most interesting missives of the month, so there's a chance you might get that original Paul you want so much. If not, try again!

What's a guy to do? There isn't a story in the magazine that isn't praised to the skies by some and bitterly criticized by others! Oh, well—if the magazine keeps selling, I guess the fans must like most of the stories tolerably well.

I hope this notice gets you many new members for the new Maine Scientifiction Association. Your bulletin is reviewed in "The Fantasy Fan."—EDITOR.)

UGLY RUMOR!

Cheerio!:

Please confirm or deny rumor that you refuse to give free round-trip tickets for moon-flights to any fan buying six or more copies of each issue of your magazine!

> BOB TUCKER, P. O. Box 260, Bloomington, Ill.

(I must admit that the rumor is true! Horrors!—EDITOR.)

CUMMINGS AND EDISON

Dear Mr. Hornig:

Free Paul painting! Mr. Hornig, you are to be congratulated on the best move an editor has made in a long time. You can just bet that the fans have been waiting for a chance like this and I'll bet that they won't be idle in getting their letters in. Here is my entry anyway.

Thanks for giving us the detailed account of the World Science Fiction Convention. I had read about it in "Time" and another science-fiction magazine, but SCIENCE FICTION was the first to give all the details, for which I am grateful, as I was unable to attend and I wanted to know all

(Continued on page 108)

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Mand Tinted in Natural Life Like Colors, see Extr. By's bere! The hottest, most sensational, most gripping selling idee of the age! THE PICTURE BING — the ring men and women everywhere, rich and poor, young and old want to wear and seep their whole lives long. Why? Because on this beautiful ring is permanently reproduced any photograph, snapshot or picture of some loved one. Yes — reproduced clearly and sharply and made part of the ring itself so it eas' rub off, come off or fade off. This sensati nal new idea is making an unbellevable hit. Men and women—sven those without an bour's selling superience—are taking dozens of orders a day and making dollars of profit by the handful. And now, in your terfilory, YOU can eash in big, every day, with this exciting sure-fire profit-maker and earn money so easily, it will seem more like play than work.

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Pooket Size

(Continued from page 106) about it. I am hoping to go next year.

This issue of SCIENCE FICTION is much better than the last one. From the first, your magazine has steadily improved until now it can take its place with the best of them. It is truly a great magazine.

In my opinion, the best story in this issue of SCIENCE FICTION is "Upon the Dark Moon" by John L. Chapman. Mr. Chapman should go places in science-siction. That story was one swell gem. Let's hear from him again.

Say! I heard that Ray Cummings used to be secretary to the late Thomas A. Edison. I just wondered if his part is going to be played in one of the Edison films that are going to be produced. Could you tell me?

BILLY HOMES, 1513 Dunlavy St., Houston, Texas.

(It is true that Mr. Cummings was at one time secretary to Edison. Coincidentally, my own grandfather was Edison's righthand man for eight years. Someday I've got to ask Cummings what he knows about the late Julius L. Hornig.—Editor.)

SCANTY ATTIRE

Dear Mr. Hornig:

The December issue of SCIENCE FIC-TION was pretty good as a whole. But must you have covers showing scantily attired women? Paul can do much better than that. The stories were all o.k. except for "The Atom Prince," which is just a condensed version of the "Girl in the Golden Atom." And how about enlarging "The Telepath" instead of having those small articles which fill the back of the magazine?

Ah! A science-fiction Quarterly! No advertising, smooth edges! I see that SCI-ENCE FICTION is now published regularly again. PHILIP BRONSON,

(Address Missing.)

(Concluded on page 110)

Stop your Rupture worries Younger! and look

Wouldn't it be a grand and glorious feeling to forget rupture worry completely and let peace of mind and new zest for living make you look younger? But you can't if a gouging, uncomfortable truss nags you constantly, if you never know a mo-ment's security, if you feel your rupture is growing worse all the time, with not even hope of the opening closing up. Worry, worry, worry, day after day, for all your life . . . why, it's bound to make any man or woman look old, haggard, and worn out beyond their years. Don't, don't, don't submit to this terrible, needless tragedy of dragging, ageing worry. At this very moment, as you read these words you can

decide to enter upon a glorious new life. Not by some clap-trap, senseless "magic"; but by the thoroughly effective aid of the world-famous BROOKS Patented AIR-CUSHION Rupture Support—that

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Orifice through which the pad figuratively breathes as it adjusts to conform to different body pressures,

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(Continued from page 108)

(We tried to get Paul to draw the girl on the December number wearing a fur coat the girl, that is, not Paul-because we knew the cover was to go on a winter issue. But Paul drew the cover last summer, and he refused to put anything on the girl, on the grounds that drawing coats during the summer has a tendency to over-heat the artist and can sometimes cause prostration. Paul's health comes first, you know!—EDITOR.)

AN OLD-TIMER SPEAKS!

Dear Sir:

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(A letter like this would encourage any editor. All I can say is "Thanks!"-EDITOR.)

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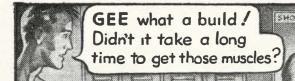
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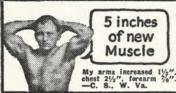
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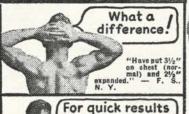




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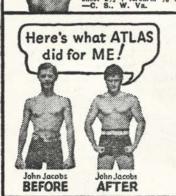
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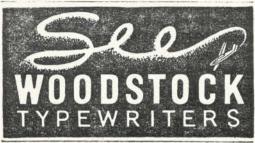
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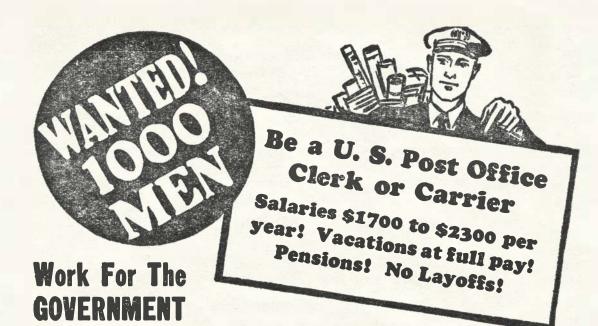
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