# SATELLITE

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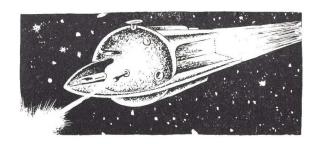
WALL OF FIRE

They were technologically advanced and had superior insight. But mankind did not grasp the intentions of the Aliens from Saturn

A Remarkable Science Fiction Novel By

Charles Eric Mains

THE TOMBLING DAY by RAY BRADBURY



#### IN STEP WITH TOMORROW

All these years science fiction writers were widely acclaimed as brilliantly imaginative entertainers—but entertainers solely. Had anyone dared to suggest that the world around us, and interplanetary space itself would have become an experimental laboratory for the immediate, realistic conquest of space and that space platforms, manned and unmanned and even space stations as elaborate in construction as a Frank Paul illustration were just around the corner, he would, unquestionably, have been laughed out of court.

A trip to the moon? Theoretically possible, yes, but far, far in the future. And now we are assured by rocket experts with their feet firmly planted on the ground installations of ballistic missile sites that a trip to the moon is not only possible in an immediately realizable experimental sense, but will in all probability take place within the next five or ten years.

All this, of course, has greatly increased the stature of science fiction writers in general. Being human, they take pride in the fact and they have every right to feel proud. But entertainers they have been, and always will be. Entertainers primarily, because there is no field of human endeavor where imaginative fulfillment can be achieved on a higher level. And we think you'll agree that this issue's complete novel—wall of fire by *Charles Eric Maine*—is an entertainment treat of the first magnitude.

LEO MARGULIES, Publisher



#### A COMPLETE NOVEL

#### THE WALL OF FIRE

#### by CHARLES ERIC MAINE

"Come in your millions from Earth and everywhere in the universe," the welcoming voice said. But a good will invitation may lead to truly terrifying complications.

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#### ALIEN SCIENCE AT THE CROSSROADS IN

# WALL

It was a Good Will Festival in a golden age of science. But mankind's uneasy, hard-won peace was endangered. . . by the strangest of far-voyaging, accidentally invited guests.

#### by CHARLES ERIC MAINE

FOR SOME TIME the small gyrojet plane had been losing altitude and descending towards the drifting cloudbanks that screened from view the large, Florida coast island of Palm Key. Here and there the tips of the island's aerial installations projected through the sluggish mist like stalagmites on the floor of an enormous roofless cave. The pilot observed them briefly, checking his position against the computed course of the radar servomechanisms.

Presently the cloud streamers began to close in, making the afternoon sunshine flicker and fade on the sleek silver fuselage with its eagle insignia and Army Air Force registration number. In the small passenger cabin the strip lights came on automatically. The three passengers leaned in unison towards their respective windows, looking out and down into the featureless white vapor and soon the massed masonry of high buildings began to mater-

#### AN ASTOUNDING NOVEL OF THE FUTURE

# OF FIRE



ialize, grey and shadowy through the haze.

The man on the right of the cabin was rotund and heavy, wrapped parcel-like in a belted brown tweed suit. His head, bald as a grapefruit, glistened with a fine dew of perspiration. His eyes, dark and brooding, restlessly sought the first elusive glimpse of the tall glittering towers of the Festival site. He was Senator Drazin and, as usual, he was distinctly agitated about something.

The man on his left—tall, athletically built-wore an olivedrab uniform bearing the insignia of a full colonel. His hair was streaked with grey, and his eyes were narrowed in concentration. His face was deeply tanned, the skin slightly roughened, as is from long exposure to wind and strong sunlight. He had left his office at Military Intelligence. Washington, D. C., to enplane for the Florida Keys on a priority mission. His name was Colonel Kyle, and he was a battle-scarred war veteran.

The third passenger sat cool and relaxed with his fingers interlaced behind his neck. He wore a snap-brim hat, and loose informal clothes that matched the smoky color of his unsmiling eyes. He was of taut build with smooth lean features, and his dark hair, beneath the hat, tended to hang limply over one eye. At Wash-

ington Headquarters he was known as Dex, but his full name was Jon Carey Dexter, and he was one of the best security men in the United States Defense Department.

The plane began to bank gently into a descending curve. Above the continuous thunder of the jets came an excited exclamation from the Senator who had seen something that appeared to greatly interest him.

"There it is," he cried. "Over there!"

The three men looked curiously out upon a miniature metropolis of futuristic architecture, arising from the level immensity of a large coral island. The place had an unreal crystalline appearance, like a fragment of a Dali, and it seemed to spread in cubes and turrets and spires over a good part of the island, with color springing from every surface and outline as if viewed through a prism. A tremendous translucent arch zoomed into focus, surmounted by gigantic letters in neon tubing, not yet illuminated, that spelled out the words Welcome to the Festival of Earth, and underneath, the same message in the international Earth language: Bonveno al Festo del Mondo.

Then they were flying diametrically across the site itself, covering an area of more than four square miles. Here was a flag, and there another, undulating idly over building constructions as yet scarcely finished, each the contribution of one of the many hundreds of nations that were participating in this tremendous spectacle of civilization and scientific progress at the turn of the millennium.

The Senator's eyes glistened with proprietory pride. Here was the spirit of the newly-born twenty-first century, crystallized in a form of architecture which embodied the history and culmination of one thousand years of human achievement. Here, on American soil, the world would soon see the various cultures of Earth. Electronics, nucleonics, ballistics, ultrasonics, psychomatics, astronautics, and all the *ics* of a vigorous technological era. Science triumphant!

Scaffoldings stood erect like gaunt surrealistic skeletons, hurrying to meet the deadline. The Festival was scheduled to open in exactly thirty days but here and there construction was lagging.

The American sector flashed swiftly by, leaving a blurred impression of towering transparent buildings casting a long pale shadow across a vast amphitheatre, which, though still under excavation, was assuming the familiar crater pattern of a rocket-launching site. Then came the British sector and the multi-fluorescent dome of the Hall of Science of New Russia. Other sectors flick-

ered past in bewildering rainbow succession.

"I don't see the Stadium," the Senator exclaimed impatiently. "A bird's eye view would have been most informative."

"The pilot has his orders," Kyle said quietly.

The gyrojet reached its drop point above a rectangular asphalt landing ground.

IN HIS PRIVATE office on the twentieth floor of the Festival Control Headquarters, Edward G. Wayne awaited the three men. He sat quietly at his massive glass and plastic desk. Several electrically installed instruments were located at one corner of it. He wore rimless concave glasses that made his eyes appear small and remote. His clothes were supple and expensive. One entire wall was a window overlooking the wide futuristic expanse of the site. In the opposite wall was a door of polarized glass, opaque from the outside but transparent from within. Neat gold lettering on the door announced: Director of Technical Services.

Apart from the roof of the building, immediately above, Wayne's office was the highest point in the site. His staff worked below him, in the laboratories and workshops, and beneath him also were the offices and conference rooms for the organizing committees, as well as the telephone

switchboards, automatic teletype exchanges, emergency generating plant, radio and television transmitting equipment which, in the weeks ahead, would feed Festival pictures and sound to external networks throughout the world. It all comprised, in short, the electronic heart of a complex internal video system providing facilities for monitoring all sectors of the site by means of observation screens posted throughout the building.

The building was as yet mainly unoccupied, and engineers were still installing equipment and pulling multiple cables through conduit tubing. But Wayne's office, the co-ordinating nerve center of the establishment, was completed, with telephones, video screens, intercom and other apparatus.

After a few minutes the three visitors entered. Senator Drazin came first, plunging through the door like an irresistible force in search of an immovable object. He shouted, "I don't like it, E. G.!"

Wayne was accustomed to the Senator's melodramatic outbursts. "Did you see them?" he asked quietly. "They're in the Stadium."

Drazin glowered. "We bypassed it. Didn't see a thing."

Wayne came slowly around the desk. "I'll show you on the video," he said, "but first . . ." He turned to the others who were standing a little to the rear, partly eclipsed by the Senator's bulk, and held out his hand. "I'm Wayne," he

said. Technical Director. You're Colonel Kyle, I take it?"

"Yes," replied Kyle affably. "And this is Jon Dexter of the Defense Department."

"Hello, Wayne," said Dexter.

"I think we ought to get down to business without delay," Kyle said. "Washington seems to think this matter is urgent."

Wayne said, "Sit down and I'll bring you up-to-date."

He pressed a switch on the desk, and immediately a rectangular panel slid aside in the wall opposite, exposing a large blank video screen. The three visitors sat down on austere steel-tube chairs and concentrated on the screen. In a moment the familiar outlines of the Festival buildings were visible, against the bright Floridean sky.

Another switch clicked, and the scene changed to a long shot of a vast oval sports stadium with a green turfed arena edged by fifty-thousand seats stacked vertically in tiers. Wayne made an unseen adjustment, and the picture zoomed into close-up, then appeared to pass through the outer walls of the arena, dissolving into a foreground view of the level area of turf.

Lying alone at the northern edge of the arena was a single silver disc. That was all. A number of small indistinct creatures, human in shape, could be seen moving on the ground. The disc appeared to be oval and oblate, rather like a chromium-plated doughnut with a narrow flange around its circumference. It might have been twenty feet in diameter, but it was difficult to judge.

Senator Drazin puffed out his cheeks in disgust. "Well," he exclaimed. "Is that what all the fuss is about? To call in Washington! Not to mention the Army and a Defense Department security agent."

"All right," said Wayne. "Take a good look at that silver disc, gentlemen. You are looking at the first alien spaceship to land on Earth."

"If you ask me," snapped Drazin, "it's probably some cheap publicity stunt to boost the Festival!"

"Why not let Wayne do the talking, Senator?" said Dexter wearily.

"Okay, okay. I'm only making suggestions!"

Wayne eyed him keenly. "Talking about cheap publicity stunts, yours weren't so hot, Senator."

Drazin flushed angrily. "Just what do you mean by that?"

"Fourteen days ago you made a speech on the World Rainbow Network publicizing the Festival and broadcasting an open invitation to all nations to come to the Florida Keys for the big show. Right?"

"What's that got to do with that thing out there in the Stadium?" "I'll show you." Wayne crossed to his desk and pressed a switch on the intercom panel. "Clayton, put through section six of the Drazin Festival Speech recording, will you please?"

"Okay, chief," came a voice through the small loudspeaker grille.

Drazin stirred and crossed his legs uneasily, but his expression was still aggressive. Presently he recognized his own voice fading up over the intercom. ". . . level of enlightenment that no other civilization has ever achieved. America invites the whole world to come and witness this great human triumph. There have been World Fairs before, but never a project so ambitious. The Festival of Earth will be a fitting tribute to the dawn of a new millenium, when, having mastered the power of the electron and the titanic force of the atomic nucleus, mankind can look forward with confidence to a bright, peaceful future in the coming age of science."

The Senator shifted his feet uncomfortably at the sound of his own eloquent phrases. At the time of the broadcast they had been inspiring, but here, in the atmosphere of Wayne's office, with a small group of critical and possibly unsympathetic listeners, they failed to soar. He tensed the muscles of his jaw.

The recording continued: "On behalf of the organizing authority

of the Festival of Earth, I welcome you all. Come in your millions, all of you, from Earth and every inhabited planet in the solar system. If there be living creatures anywhere else in the universe of stars—well, let them come too—if they can! I invite the Universe to come and witness the triumph of mankind!"

Wayne snapped a switch. "Repeat the last five seconds," he said.

The recorded voice of Senator Drazin snapped backwards in time. ". . . in this universe of ours—well, let them come too—if they can! I invite the Universe to come and witness the triumph of mankind!"

"Thanks," said Wayne, switching off the intercom. He turned to Drazin, eyeing him impersonally, as if his concave glasses were a binocular microscope. "Well—they came!" he said.

Drazin squirmed a little. He hated innuendo. "What do you mean?"

Wayne pointed to the video screen. "You invited the Universe. So the first contingent arrived this morning."

"It was a figure of speech," said Drazin irritably. "You don't imagine I was seriously inviting aliens?"

"That speech went out on all wavebands in the communications spectrum—and some of the transmissions went out into space. Sen-

ator, your invitation has been accepted."

Colonel Kyle and Dexter had remained silent throughout this exchange, their eyes fixed on Drazin's mobile and expressive features.

"Look, Wayne," said Dexter. "How do you know all this?"

"I'm going to show you our strange visitors in close-up," Wayne said quite simply in reply.

The picture then showed three of the creatures walking together and carrying between them a long metallic object. The humanoids from the silver disc were clearly etched in every detail.

They might have been triplets—identical triplets—with bulging bodies and pink flabby faces and gleaming bald heads, wearing grey clothes of conservative cut. They looked undeniably human, but there was one inexplicable factor . . . and every man in the room was aware of it except Drazin himself.

Kyle and Dexter were openly incredulous. Drazin was frowning, vaguely aware that something about those figures was incongruous.

"Well," asked Wayne.

Kyle said, "I don't believe it."

Dexter stroked his chin reflectively. "Personally I'd say it was impossible. What's the gimmick, Wayne?"

To Drazin's surprise Colonel Kyle laughed, and then it came

to Drazin in a frigid incredible wave of feeling that swept vertically through his body to oscillate frantically in his brain. He had seen himself on the screen—himself three times over. Each of the alien visitors was a perfect replica of himself. Drazin in duplicate—no, in triplicate.

At that very moment two more of the aliens passed across the screen. Wide-eyed Drazin perceived the same fantastic physical characteristics—the rotund bulging bodies, the pouchy faces, the smooth hairless heads.

Drazin in quadruplicate. In quintuplicate. Senator Drazin—President of the Festival Committee, well-known figure in politics and government affairs—turned out like a machine part from an assembly line.

Kyle said, "According to my staff chief at Washington there was a hint of military aggression. Are you telling me that these comic characters are the enemy?"

"Better not underestimate the Dupes," said Wayne.

"Dupes?" echoed Kyle.

"The workmen call them Dupes. It's short for duplicates."

"Suppose we start at the beginning," Kyle suggested.

Wayne explained that at exactly 7.44 a.m. that morning nightshift workers preparing to leave the site had heard a strange whining sound like faraway dynamos. It grew more insistent. Soon a dark shape descended, solidifying into a well-defined disc. As it came lower they observed that the thing was somewhat oval with flattened domes above and below. A narrow flange around the circumference glowed a pallid blue, and appeared to be spinning.

Then, a few seconds later, the whine, which had now reached a paralyzing intensity, ceased abruptly. The thing from the sky had evidently touched down.

One of the men telephoned Wayne at 7.51 from the Control Headquarters building. He made straight for the arena, and found a considerable crowd standing in compact groups about four or five yards from the main entrance to the Stadium. He recognized Robert Clayton, his deputy, who was intensely excited and saying something about an invisible barrier.

Wayne learned that two technicians had got themselves severely burnt and were in sick bay, and that the scientific officer was making radiation tests. Rather be-wildered and vaguely irritated he strode towards the Stadium with Clayton.

One of the working men had just flung a sizeable stone at the main entrance to the building. The stone left the man's hand, a dark blur, and exploded into white incandescence about three yards away, as if it had been a fused hand-grenade. There was no shrapnel and no blast, only a

searing flash of incredible brilliance, and finally, when the transient eye-glare had faded, a faintly luminous vapor.

Wayne stopped dead, and Clayton came alongside. "That's what I've been trying to tell you, chief. That wall goes right around the Stadium and nothing can get through it without being completely burned up. It's an invisible wall. Look hard, you can see a faint twinkling."

Wayne moved forward cautiously until Clayton caught his arm. "That's enough, chief. Can you see anything?"

"No," said Wayne. Then, a moment later, "Yes, I think I can. Just there, against the dark background. Millions of tiny points of light!"

"They must be specks of dust. They get white hot and burn out in a second, but they give you the shape of the wall."

Wayne looked all round, and then up. The almost indiscernible glitter of the burning dust particles receded in what appeared to be a vast glistening bubble enveloping the Stadium in a gossamer hemisphere of heat. He stepped back a pace and the bubble faded from view. But the wall was still there, menacing, impersonal, invisible . . .

Clayton said, "The crew looked like ordinary human beings—well, not exactly ordinary. I only saw them over the video in the control

room and the picture wasn't particularly good. But I had a curious impression that they all looked like someone we both know. You can see in the control room for yourself."

Wayne, understanding nothing and feeling more bewildered than ever, followed him obediently.

#### II

restless. "So you came back to the H.Q. building," he said, "and you saw these creatures—these Drazins. What then?"

Wayne said, "At first I thought it was something the Senator had dreamed up for publicity purposes."

"I can assure you, E.G.," Drazin said, "we don't think in terms of stunts."

"Well," Wayne said, "my first reaction was to telephone the Senator to find out if he knew anything about it." Wayne went on to explain that he was on the point of lifting the phone when an unexpected movement on the video screen had caught his eye. Glancing quickly at the external stadium view, he had seen two of the Dupes emerging from the main gate carrying a metal box.

Clayton had been quicker. Although he could not have realized what the box contained, he sensed that something important was about to take place—in the open,

and in full view of the audience outside the barrier. He had hustled Wayne down the elevator and into his car at prodigious speed, and they had screeched to a halt on the fringe of the clustered spectators not more than ninety seconds later.

The two Dupes were close to the fire-wall-perhaps three or four yards away-and the box was lying on the ground. At this range there was something a little glossy and varnished about the Dupes; their similarity to the Senator was a doll-like resemblance that carried no real conviction. Wayne felt unaccountably that somewhere deep inside the pink tubby exterior of the strange visitors was something alien and inconceivable. They were of human shape, but—and this was question that was building up enormously in his mind-were they human origin or intent?

The box, so far as Wayne could see, was metallic and rounded with a number of projections on the top. One of the Dupes stooped down and moved his fingers in a manipulatory gesture. Then unexpectedly, a voice boomed from beyond the barrier—a human voice speaking in the international Earth-language.

A curious voice it was, of no fixed pitch or tone uttering disjointed phrases and sentences that seemed to have been compiled from syllables cut from recordings of terrestrial speakers, as one might build up sentences by cutting words from a newspaper and pasting them in sequence. A synthetic composite voice without character or personality reciting a formula. The colorless voice of a semantic integrating machine.

The voice said, "Greetings, people of Earth. We who have come far through space thank you for your friendly invitation to visit your planet and present ourselves at your Festival. Although our humble devices are but a dim light before the blinding glory of terrestrial science, we too have techniques and machines to demonstrate."

The voice ceased for a few seconds, during which Wayne and Clayton eyed each other questioningly. Then it went on: "It will unfortunately be necessary for us to occupy a certain amount of your territory in order to set up our apparatus, and it is most important that we should not be disturbed. We have therefore set up an invisible fire-wall which is completely impassable. Please do not attempt to break through this barrier. It cannot be done and you will be harmed."

Another pause, and then, "We shall communicate again soon." The voice ceased, and the Dupes lifted the box and carried it away.

Drazin remarked scathingly, "They have made no hostile move, E. G. We should have waited a

bit. After all I am Chairman of the Festival Committee. You should have consulted me before reporting the matter to Washington. It would be so easy for Washington to jump to the wrong conclusion. They would have known all about it through official channels soon enough."

"Let me explain, Senator. I did not contact Washington at that point because there was, as you say, nothing sinister in the arrival of these creatures from out of space."

"You two can argue it later if you wish," Kyle said. "An event so momentous should have been reported to the government immediately. But now that it has I am only interested in the military and civil aspects."

"That goes for me too," said Dexter.

"Well, we returned to Headquarters Building and watched the Stadium on video. Later, we saw two Dupes bringing the semantic machine out again. We hurried over to the barrier just in time to catch the message. It said, 'We who have come far through space humbly request that you, the triumphant inhabitants of Earth, withdraw yourselves from a circular zone of a quarter-mile radius surrounding this point by not later than three hours after sun-zenith. At that time the fire-wall will be extended to encompass this area. Humans who are trapped within

the wall will not be able to escape."

Wayne hesitated. "That was all. The Dupes went back into the Stadium and I came back to the office. It seemed to me that this second announcement of the Dupes was a distinct threat. An almost warlike threat. They had expressed their intention of occupying by force an area of the Festival site, and, incidentally, American soil."

"True," said Kyle.

"So I sent a priority telegram to Washington and phoned the Senator. It's now"—Wayne glanced at his wrist-watch—"just a quarter to three."

Kyle referred to a pocket chronometer of military design. "We have fourteen minutes to the deadline," he agreed.

"Well then . . ."

"Have you taken any action?" asked Kyle.

Wayne nodded. "I have already ordered complete evacuation of the area surrounding the Stadium for a depth of one quarter-mile—pending any decision you make, of course. I couldn't afford to take chances with the safety of my staff or contracted employees."

"Good!" Kyle said.

"There's one other thing. During the morning I asked the site scientific officer to make certain tests on the force-barrier—the

fire-wall as they call it. Would you like to hear the results?"

"Will there be time?" asked Kyle.

"I think so." Wayne returned to the desk and thumbed a switch on the intercom. "Hello, Clayton. Have Dr. Farrow come to my office, please."

"Okay, E.G.," said Clayton's voice, and the line went dead.

Silence descended. Drazin was obviously flexing his mind to take a determined line on the situation. Kyle, watching him, was vaguely contemptuous. For him there was no such thing as a complex situation. Dexter was still leaning back in his chair, vaguely skeptical, unsmiling. He was factgathering. Facts were his stock-intrade. When he had collected enough of them he could begin to build theories.

Thirty seconds later the door opened and a trim white-coated young woman entered the room. She smiled at the four men, and instantly the tense frosty atmosphere thawed, and Dexter's laconic expression evaporated.

Dexter stood very still, noticing with interest the slim ankles and nyloned legs, the graceful curve of the hipline beneath the tightly belted overall, the flawless complexion—a little pale, with dark sensitive eyes a little tired—the cool black hair, cut short and glistening with highlights. His mind, filtering the impressions of

his eyes, concluded precise intuition that here was a rare combination of femininity, intelligence, and charm. He was aware of magic in the air.

The Senator looked at the young woman's face. Then his eyes gave her an "I'm-the-Chairman - why - haven't - we - met - before?" glance.

Kyle, on the other hand, regarded the girl frigidly from under slightly raised eyebrows; he obviously didn't approve of women holding responsible posts in the world of science and engineering.

The girl said, "Good afternoon, gentlemen. You sent for me, E.G.?" Her voice was cool and clear like a mountain stream.

"Yes," said Wayne, standing up. "Meet Senator Drazin, Colonel Kyle, and Jon Dexter of the Defense Department. They've flown here from Washington on top priority." Then he turned to the three men. "Gentlemen, this is our Scientific Officer, Dr. Lynn Farrow."

The girl surveyed them lightly with a swift butterfly touch of her brown eyes. Her eyes rested perhaps a little longer on Dexter, as though for an instant she had made psychic contact, but her expression remained polite and distant. She said, "I suppose you want me to talk about the force barrier around the Stadium?"

Wayne nodded.

"I discovered with the aid of

electronic test equipment that there's nothing mysterious about the wall itself. It consists of a narrow zone of high-intensity radio-frequency energy of extremely short wavelength—certainly less than one centimetre, and probably approaching infra-red. I was unable to make an exact frequency measurement."

"Why," asked Kyle.

"Because, frankly, we haven't suitable test equipment."

"Why not?"

Lynn sighed. "We didn't anticipate interplanetary invasion, Colonel. There's no reason why we should have centrimetric or millimetric measuring instruments on hand."

Kyle grunted. He wasn't happy among abstract technicalities.

Lynn continued, "The principle involved in the force wall is similar to that employed in modern radio ovens and industrial furnaces. The powerful alternative radio field induces eddy currents into any object that intersects it. The energy involved is of a very high order. Any solid material penetrating the barrier is instantly raised to a temperature of about ten thousand degrees Centigrade."

Wayne interposed, spreading his hands in mute appeal, "The wall is quite impregnable. Even asbestos clothing would be uscless."

Dexter's face had not moved

from its intent mould. The technical words and phrases emanating from a girl who, in his opinion, could well qualify for the title of Miss America fascinated him. A clever girl, too. But in spite of the cautionary evidence of his eyes and ears he was only conscious of her dominating femininity, and he liked the feeling.

She said, "The wall is strictly confined like an invisible bubble surrounding the Stadium. It is probably being radiated from some kind of high-power transmitter in the ship."

"The ship?" echoed Kyle.

"The space ship. The silver disc. By means of a technique known to us, but not widely used for any specific purpose, the radiating waves are made to interfere with each other in phase so that the actual radiation zone takes the form of a narrow shell. roughly hemispherical in shape, centered on the arena. You see. the spot-power dissipation at the transmitter must be of the order of ten million watts—a fantastic quantity by terrestrial standards. It must mean the aliens are deriving their energy for the barrier from atomic sources."

Kyle's expression became overcast and ominous like a February morning. "Are you actually implying that this barrier is in effect an atomic weapon?"

"Not exactly. Its function

would appear to be mainly defensive."

"But you mentioned atomics."

"Yes. I made sensitive Geiger-Muller tests and located a well-defined source of intense beta radiation within the Stadium—conclusive proof they are indeed using nuclear fission. Their equipment must be extremely compact and advanced and efficient—probably far superior to ours."

"The hell you say!" said Kyle with feeling.

"What do you suppose is their motive?" Dexter asked.

She regarded him from beyond her own invisible barrier of emotional poise. "It's not my job to guess at motives. But it rather looks as though we may be in for trouble."

Kyle loomed forward like a one-man pincer movement. "You mean—invasion of the Earth?"

"I'm not sure whether they are hostile or not. But it's obviously wiser to anticipate the worst."

"I agree," said Wayne. "I've been studying the video screen most of the day and I have not counted more than eight of these Dupes. But how can eight aliens in human form—with all due respects to the Senator—hope to invade a planet as technologically advanced as Earth?"

"Reinforcements may arrive," Lynn suggested. "They've been erecting some kind of apparatus behind the ship for the past few hours. You can't see it from this angle. It may be significant."

Drazin coughed. It was a formal throat-clearing preliminary cough of the kind which the initiated would realize meant the Senator had finally crystallized his attitude. "Just a moment. You are all assuming quite glibly that these Dupes are our enemies. I firmly think they've come on a friendly mission. They only want to take part in our Festival."

"That's just it, Senator," Dexter said, "your invitation was an ideal opportunity for them to land on Earth without arousing serious suspicion or hostility for several hours. They need time to get their equipment functioning, so they pretend to be erecting some kind of exhibit for the Festival."

"That must be it!" said Kyle. "Pretence and subterfuge."

"A foundationless assumption!" said Drazin. "We have no real reason to suppose they have anything but good intentions!"

Wayne sighed and glanced at his wrist-watch. "We shall soon know," he said. "It is now two fifty-eight. In two minutes the force barrier is due to shift. I have already plotted its new circumference on a map of the site, and it intersects several buildings visible from this window."

He ushered them over to the transparent wall through which the colorful mosaic of the Festival site could be seen. Wayne pointed. "There's the Swedish Gymnasium, and next to it the Tibetan Tower of Wisdom. Over to the right you can just see the long studio of Television Avenue. The perimeter of the extended forcewall will intersect all three. We should be seeing fireworks very soon."

"What do you mean—fire-works?" said the Senator.

"The buildings will ignite and burst into flames. The barrier will raise them to incandescent heat."

His face was grim.

"And if nothing happens?"

Wayne shrugged his shoulders. "It would strongly suggest that the whole thing is a bluff."

Wayne glanced at his watch again. He waited until the rotating second-hand reached zero minus ten, and then quietly started to count off the remaining seconds. His watch was a fraction slow, for at exactly zero minus three it happened.

The landscape exploded into a crackling glare. A moment later, after the first preliminary flash, the observers saw that the three buildings Wayne had pointed out were engulfed in an angry wall of intense flame. Combustion was instantaneous and complete. Black coiling smoke writhed upwards in sinister serpentine motion, diffusing into the dark grey of the low-lying cloud. The crackling continued. Presently the Sta-

dium, still quiet and deserted, became lost in the haze.

The four men and the girl stood watching for a full minute without speaking. Then Colonel Kyle said, "That convinces me. We've got a war on our hands—an interplanetary war at that!"

"Rubbish! I don't believe it," said the Senator.

Kyle went on briskly without pause, "I'm returning to Washington immediately to report to my Chiefs of Staff, but I'll be back in about six hours. Meanwhile each of you must act decisively. You, Wayne, carry on as usual. Fire precautions, site administration, all vital measures. Keep an eye on the Dupes over the video. Dexter—I'd like you to enlist the aid of the Festival guards to evacuate an area of five miles radius around the Stadium. Set up a strict security guard. Only workers actually employed here will be permitted to enter or leave the restricted zone. No reporters or cameramen, understand?"

Kyle turned his bleak gaze to Drazin. "You had better remain here to act as liaison between Wayne and Washington and the Press. Once the news leaks out this telephone is going to ring incessantly. Remember—caution and accuracy. We don't want any fancy phrases."

Before Drazin could protest Kyle was addressing the girl. "Dr. Farrow, I don't think I need give you any instructions. The more you find out about the scientific techniques of the aliens, the better for us all."

"I'll do my best, Colonel," she said.

Four minutes later he took off for Washington in the gyrojet.

#### III

COLONEL KYLE'S departure was the signal for a general exodus. Wayne waited until the gyrojet was airborne, and, with a murmured explanation, left to supervise the firefighting. Dexter studied the video screen for an instant. Then he switched off the business-like part of his mind, and asked, "Where does a guy eat here?"

"The canteen is on the fifth floor," Lynn said. "But right now it's closed."

"So a guy doesn't eat?"

"Not until four. There's only a skeleton staff on duty."

"Okay," said Dexter. "I'll be back. See you at four." His tone of voice implied that it was a date, but the girl made no response.

Not long after the Defense Department man left the telephone started ringing insistently. Drazin said, "It's started."

Lynn moved towards the door. "If you'll excuse me, Senator . . ."

The senator quickly found himself caught up in a desperate sense of urgency. The press, radio, television, news agencies, photo agencies, scientists, freelance journalists, newsreel companies, and a member of the British Interplanetary Society on vacation in Florida—all asking the same questions in the same disbelieving tone of voice.

He wondered how the world would react when the Press and the T.V. networks began spread the news around. True, interplanetary travel was not a new idea. The Russians had lead the way with successful satellites back in 1957 and the United States had quickly caught up and surpassed them. Rockets had already been launched into space, and two were known to have landed on the unexplored surface of the moon. There had been only instrument-carrying, radiocontrolled projectiles, however, for man was still earthbound.

Suddenly the frail bearded figure of Dr. Ebenezer Jollie of the International Anthropological Society popped unexpectedly into Drazin's mind. If there was one man in the world capable of helping him it was Jollie who had made brilliant analyses of tribal and racial customs. It seemed to Drazin that the first step should be to try to understand the aliens' pattern of behavior. Surely, he told himself, understanding the aliens was more important than making war on them. The ques-

tion was—how to get hold of Dr. Jollie?

He lifted the receiver, and said, "Get me the Institution of Natural Science in New York City." As an afterthought he added, "Please."

A female voice announced that Dr. Jollie was not expected back for a month at least. She put the Senator through to the Principal of the Institution. Drazin outlined the situation. He would arrange with the police for the Doctor to be flown to the Festival site as soon as he was located. It might take a day or two, for Jollie was out in the wilds, accompanied by two junior assistants.

The Senator slammed the phone down and glared in frustration at the silver discs on the video screen . . .

AT FOUR O'CLOCK Dexter stood just inside the door of the Administration canteen, scanning the room for a glimpse of Lynn's white coat and black hair. She was now wearing a green dress and was talking to a young man at the other side of a table near the door.

Dexter hesitated for a moment, then decided to make it a trio. Lynn's companion, he noted, was not as young as he had imagined at first glance. He had the thick, unruly, straw-colored hair of a college athlete and the clear blue eyes of a child, with a humorous

mouth set in friendly lines. He was probably thirty-five. From the way he was looking at the girl Dexter sensed a kind of invisible liaison between them.

He said, "Mind if I join you?"

Lynn looked him over without warmth—rather speculatively, he thought. The green dress was cut low, and her arms were smooth and slender and pale. Her face, no longer intelligent and aloof, held a provocative haunting quality.

"Not at all," she said. "Jon Dexter of the Defense Department, and this is Bob—I mean Robert Clayton; E.G.'s deputy."

The name did not click into place at first. Perhaps it was the warm familiarity of the way she said "Bob" that distracted his mind.

"Glad to know you," said Clayton cordially, extending his hand.

Dexter recalled hearing his voice on the intercom in Wayne's office. He reciprocated, feeling suddenly aged at the contact of the other's uncalloused skin against his own leathery palm. A waitress hovered near. Casually Dexter ordered, then met the girl's solemn brown eyes.

"Any developments?" she asked.

Dexter took his eyes from her and stifled the intoxicating sense of enchantment that was threatening to take possession of his faculties. "The blockade is on," he said. "Nobody can leave or enter without a permit. They are still putting up equipment in the arena."

"Any signs of hostile weapons?" Clayton asked.

"I wouldn't know. Kyle would say yes. Drazin would deny it."

The waitress soon arrived, and Dexter concentrated on eating for a few moments. The girl was saying to Clayton, "I haven't got the right kind of test equipment for measuring radio-frequency energy in the three hundred thousand megacycle spectrum. But I feel reasonably certain they use some form of communication between Earth and their home planet."

Clayton nodded, but Dexter remained silent.

"I made some tests on the barrier this afternoon," the girl went on. "Although I got nothing new on the force-wall itself, I did manage to pick up some modulated signals—way up near the infrared part of the spectrum."

"You mean," Dexter suggested, "that the Dupes are in contact with base, and may be calling for reinforcements." He smiled faintly. "Like a vacation postcard—only it's no vacation."

Clayton sighed and stood up. He regarded the girl sorrowfully. "The poor Senator must be starving." Then, lowering his voice, he added, "See you later, honey." To Dexter he said cheerfully: "Enjoyed meeting you."

As soon as he was gone the

girl turned back to Dexter with a hint of mischief in her eyes. She said, "Bob Clayton and I are old friends."

Dexter pulled the coffee towards him. "How old?"

"Three years. We worked in electronic robot servo-mechanisms for stratofliers."

"That doesn't mean a thing to me," Dexter said. "How did an attractive girl like you get into this electronics business?"

"We're an electronic family. My father is on the board of U.S. Telesonics, and my brother's an engineer in Federal Electronics."

Dexter finished his coffee and thoughtfully replaced the cup in the saucer.

"I was brought up in an atmosphere of prototypes, circuit diagrams, and higher mathematics," Lynn went on. "Dull isn't it? If you're interested," she added, "I can fix you up with a mailorder tuition course."

"I like my tuition at close range," Dexter said.

"How close?" Her voice was bantering.

"It all depends on the teacher."

Lynn regarded him with mock severity. "Jon Dexter, I have a feeling you're trying to flirt with me in a very subtle way."

"The moment I saw you my heart took a beating." Dexter grinned. "When you put away your electronic toys at night, what do you do, Lynn?"

"I go to shows, read books, watch T.V. Surprise you?"

"No. I'm likely to be around here for a few days, maybe more. How would you like it if I—"

Her voice became vaguely impersonal. "I'm already going steady." "Clayton?"

She nodded—a brief inclination of the head—and the warmth of his blood seemed to drop. He knew the feeling well enough, the unwelcome chill damping his more impetuous impulses. But he welcomed his reactions to this woman with an intensity of feeling that he had not experienced for many years. He realized it acutely, well aware of the unsettling affect it would have on him now.

"Tell me about Clayton. What sort of a guy is he?"

She leaned forward, warm and friendly again. "A pretty ordinary guy. That's why I like him. Now, Jon—what sort of a guy are you?"

He shrugged his shoulders noncommittally. "Not particularly pretty, and even more ordinary than Clayton. Does that improve my chances?"

"How did you get into the Defense Department?"

"Before the last World War, I was a struggling young lawyer in New Jersey. When the war started I had a lucky break and got a commission in Military Intelligence. Towards the end of the war I was presented with a nice little

staff job at Counter Espionage—Room Three Hundred B at Washington. From there its a natural step to the Defense Department's Special Security Branch."

"You're a checker-upper for the Big Brass, is that it?" she asked quietly. The echo of secret amusement and the imp of mischief dancing behind her half-closed eyes irritated him. He had a distinct impression that she was laughing at him. He stood up quickly and leaned over the table, taking her face firmly between his hands. Then, before she had time to register astonishment or protest, he pressed his lips firmly against hers and kissed her with a resentful determination that surprised him more than it surprised her.

AT 7:57 P.M. that evening E.G. Wayne received a signal from Air Traffic Control, Washington, announcing that Colonel Kyle would arrive at the Festival landing ground at 8:11.

By ten minutes past eight they were all seated in the office: Wayne, Dexter, Drazin, and Dr. Farrow, who was once more wearing her white overall and looked decidedly professional. Wayne was preoccupied with documents spread out on his desk. Dexter and Lynn were, for the moment, emotionally separated bv memory of the incident in the canteen, and Drazin, odd man out,

was nobody's friend, for his pacifist views conflicted with the firm convictions of almost everyone.

Kyle entered the room and began speaking at once. "I've had a long talk with the Deputy Chief of Military Intelligence," he said. "Also, an emergency meeting of the Internal Defense Committee was held. After that, a conference of the Chiefs of Staff. That's a lot of talking in three short hours—but the net result is action. Strong decisive action."

The colonel paused an instant, then went on. "The arrangements we have made are most satisfactory. It was appreciated that the hostile attitude of the aliens has not been sufficiently pronounced to justify immediate military action. That means, in brief, that no decisive action will be taken—unless there are any further acts of hostility.

"But we'll be prepared," he added significantly. "During the night units of the twenty-fourth Armoured Division will be ferried over from the mainland and move into fields adjoining the site. Their weapons will include the new seventy-five millimeter armour-piercnuclear rocket shell—and that's an item to be reckoned with. In addition, a squadron of Black Mambas—the latest thing in jet fighter-bombers-is being flown to Ponce de Leon Field, thirty miles north of here. Plus a special task force of seasoned airborne troops. This maneuver is known at Washington as 'Operation Barrier!' "

"And you are in command, Colonel?" Dexter asked.

"I'm in command," Colonel Kyle said. "For the moment we shall retain the organization as it stands. Wayne will continue to supervise local administration and assume responsibility for defense services on the site—fire fighting, communications, and so on. Dexter will act in liaison with the Festival guards and supervise security measures in the restricted zone. And Senator Drazin. Chairman of the Festival Committee, had better continue to answer incoming telephone calls and release whatever news can be released. Finally, I have requisitioned hotel accommodation on the island for two hundred of us. as we must necessarily remain within easy reach of the site. Cars will be provided, of course. I'd like you to fix that for us, E.G."

"Sure, Colonel," said Wayne.

"A skeleton staff must remain here every night. I shall stay tonight, and I want one of you to stay with me."

"I'll stay," Wayne said.

"Good. Tomorrow we shall attempt to communicate with the aliens in order to reach some sort of solution to this deadlock."

"Why not tonight—now in fact?" Drazin asked.

Kyle extinguished his cigarette

with an experienced flick of his thumb and forefinger. "Because," he said, "we can't strike tonight."

"I don't think it will work not an ultimatum," said the Senator.

Kyle smiled grimly. "We received an ultimatum to evacuate a large area of the site by three o'clock today, or else! They carried out their threats to the very second. Tomorrow we'll give the orders."

"What kind of orders?" asked Dexter.

"Complete removal of the force-wall and the admission of a selected body of terrestrial delegates into the Stadium."

Lynn said, "Supposing they ignore the ultimatum?"

"Then Operation Barrier will really begin in a big way."

"If you mean that you will try to break through the barrier, it won't work, Colonel. That barrier is *really* impenetrable."

"We'll see about that," the Colonel said grimly.

"I think it ought to be considered as a problem in electronics rather than as a fortification," Dr. Farrow persisted.

Silence followed. Kyle walked across to the video screen and peered inquisitively at its multi-hued surface. Nothing had changed. The metallic disc still stood poised like a silver doughnut on the fresh green of the arena, motionless and glittering, with a quiet suggestion

of sinister omnipotence. The Drazin-creatures moved here and there with calm unhurried motion.

Wayne said, "Senator Drazin has been glued to the telephone. Calls are coming in at the rate of one a minute. Clayton's taking them at the moment to give us a little peace and quiet. The question is: how much of this can we release?"

"Everything except the military angle," Kyle said.

Kyle scanned his audience in a businesslike manner. "I've said all I want to say," he announced. "So if any of you have something to report—"

Lynn Farrow's voice came quietly from the rear. "I've made some progress, Colonel. I think I can tell you a little more about the Dupes and where they came from."

"Fine," said Kyle, beaming.

She crossed to the desk and opened a cardboard folder, producing a number of large photographs and several transparencies resembling X-ray plates. The pictures, she explained, were long-range telephoto shots of individual Dupes taken from a vantage point high above the Stadium before the fire-wall had been extended. Here, for instance, was a close-up of an eye taken in shadow, and here a similar close-up of an eye taken during a brief moment of sunlight.

But, curiously enough in both

cases the size of the pupils was identical. They were clearly discernible and measurable, and the logical inference was that the Dupes' eyes did not function in the same way as human eyes.

"Why not?" asked Kyle.

"Because," the girl explained, "the pupil aperture of the human eye varies according to the amount of ambient light. The brighter the light, the smaller the pupil. This self-regulating action is an automatic reflex. But there is no such reflex acting in the alien eyes. This hints at the possibility that they are not real eyes at all." Lynn picked up another picture. "This one," she said, "is a close-up of an alien wrist."

She invited them to compare it with the Senator's wrist. Drazin made no protest, but simply held out his bared right arm. The difference was immediately visible. The wrist in the photograph was so smooth that it reflected the light in tiny whorls and patterns like the gloss-painted surface of a doll.

Lynn said, "Their skin shows no pore structure and no wrinkles."

She then explained some X-ray plates. A special camera and longrange linear accelerator had been used to provide a sufficiently powerful beam of X-radiation. They were, in effect, telephoto X-rays. The two plates were of different Dupes, but they both exhibited

identical features. Lynn held the plates up against the window so that all could see the shadow pattern of the aliens. There wasn't much to see—a meaningless mosaic of shapes contained within the humanoid outline of the body structure. Central, roughly in the region of the abdomen, was a dense opaque oval.

Lynn said, "These two pictures are identical except in one respect—the shape and size of this black oval in the middle. The remaining body structure matches exactly, and it isn't even remotely human. There is no skeleton, and no organs of the kind we would expect. Instead there is all that detail of light and shade which when magnified resolves into geometrical shapes."

Lynn replaced the transparencies in the folder and turned to face her audience. "There's one more thing," she said. "I was able to make rough checks on the direction of the radio signals. It's a fairly narrow beam, and quite powerful, and although it is pointing more or less vertically upwards it is also sweeping slowly across the sky. The rate of movement is about fifteen degrees in an hour, the same rate as the rotation of the Earth."

Ignoring their startlement she added tersely, "Those are the facts, gentlemen. Now I will outline my interpretation. It was fairly obvious that the rotation

of the radio beam was designed to counteract the rotation of the earth. In other words, the beam was aimed at one definite fixed point in space. So I checked with the observatories at Mount Wilson and Mount Palomar. The bearing of the beam was pinpointed quite accurately on one particular planet."

"Which one?" breathed Kyle. "Saturn."

"You mean—the Dupes come from Saturn?"

"We can't be absolutely certain, but they are communicating with Saturn. Now here is the problem: Saturn is a large planet of immense gravitation with a poisonous atmosphere consisting mainly of ammonia and methane. It is a planet of extreme cold. Scientists do not believe that such a world could sustain life of any kind—certainly not human life."

Kyle shook his head. "You just admitted the Dupes came from there."

"So they did. My point is that any life form of Saturnian origin must of necessity be very different from terrestrial life forms. A typical Saturnian must be adjusted to tremendous gravitational stress, inconceivably high atmospheric pressure, extremes of cold, and, of course, must breathe ammonia and methane, if he breathes at all. He couldn't possibly resemble a human being in any way."

"I still don't get it," Kyle confessed.

Lynn smiled absently. "They are humanoid in shape. But we have just seen that that is impossible. Therefore, the Dupes are not Saturnian life forms in themselves."

"Then what are they," said Kyle gruffly.

"Robots."

"The hell you say!" cried the Colonel with feeling.

"But not robots in the full sense of the word." Lynn picked up one of the transparencies and held it up against the window. "They are some eighty percent robot," she explained. "All this granular structure comprises mechanical and electronic parts and circuits. Their bodies are flexible metallic envelopes containing a mass of complex control gear."

She pointed to the black oval mass in the center of the shadow-graph. "But this section is not robot. In all the X-ray plates this is the only part of each alien which differs."

"What is that black thing, then?" asked Kyle.

"That," said Lynn, "is the real Saturnian."

There was chill silence for a few seconds. Then Kyle came over to the desk and inspected the X-ray plate at close-range. He said, "But so oval—and shapeless!"

Lynn explained. "The real Sa-

turnian is inside that oval shape. My guess is that it's a pressurized case, probably radiation proof, forming a sealed compartment in which its occupant can survive under conditions of temperature, pressure and atmosphere approximating to those of Saturn. A kind of refrigerated control room."

"How big are these Saturnians?" Kyle asked.

"We don't know," said Lynn, replacing the transparency in the folder. "The oval compartment is opaque to X-rays. It probably has thick walls. At a rough guess I should say the Saturnians might be about six inches tall."

Kyle's lips tightened. "Little men six inches tall trying to push us around!"

Lynn said, "Don't under-rate them because of their size, Colonel. Little men are often the most aggressive. And anyway, they're not men at all, so you haven't got any standard to judge them by."

She moved back to her seat with an air of finality and found herself close to Senator Drazin whose bewilderment and confusion seemed to have increased now that the secret of the Dupes had been revealed. "Dr. Farrow," he whispered urgently, "if all that you say is true, then why are these robot things made to look like me?"

"It is obviously a subterfuge," said Lynn. "They realized that

they stood a better chance of avoiding suspicion if they looked like human beings. They had to have some kind of robot machine as a vehicle for their pressurized compartments, so they designed them in human form."

"But why *me?*" pleaded the Senator.

"Because you were the man who broadcast that universal invitation. They probably accepted you as the spokesman of world peace, and you seemed to be the best possible sheep's clothing to put their Saturnian wolves in."

"But how did they know what I looked like?"

"They have probably been keeping Earth under close observation for a long time," she said. "There have always been reports of flying saucers as far back as anyone can remember. Or again, they might have picked up television broadcasts of you, Senator. The resemblance is only superficial—the sort of thing one could build up from photographs."

Ten minutes later, after a confusion of excited comment and discussions, Colonel Kyle said, "We are greatly indebted to Dr. Farrow for her brilliant deduction work, but it doesn't alter the basic situation. We still issue anultimatum tomorrow, backed up by force of arms. If there are no further points . . ."

Drazin said, a little anxiously, "There is one very important

thing, Colonel Kyle. The question of whether the opening date of the Festival will have to be postponed."

"Everything will depend on what happens tomorrow," Kyle said.

The Senator rose with ominous silence. He looked around the room first, noting the faint hostility, then said, "As this is presumably a conference and we all hold responsible official posts, perhaps I may be permitted to say a few words?" The quiet inflexion of his voice was like the oppressive calm preceding a tornado. Dexter and Lynn exchanged brief premonitory glances.

Presently, without great enthusiasm, Kyle said, "Okay, Senator. Let's have it, but keep it brief. It's been a long day."

"Thank you, Colonel," murmured Drazin with astringent irony. "As Chairman of the Festival Committee I should like to remind you that the Festival is an international enterprise in which delegates from a great many countries have an equal say here. It is not a wholly American enterprise and it is not for an American alone to decide whether or not there will be a Festival.

"Even if the aliens—the Saturnians—are in fact engaged in aggressive reconnaissance of this planet—and that I dispute most emphatically—it is still not a matter for the United States alone.

The security of the entire planet would be involved." Here Drazin raised his voice rhetorically.

"By what authority do you undertake to defend the whole world from interplanetary invasion? After all, what do we know of these visitors, beyond the fact that they are a highly scientific race? We could learn much from them, and perhaps they could learn from us. We should ask them to admit one or two suitably qualified persons into the Stadium. Even if they refused to admit such a specialist he should nevertheless be brought here. From his analysis we could then determine with a reasonable degree of assurance whether they are in fact hostile."

He paused, then went forcefully, "American prestige is at stake. The Government should not have entrusted this to a military man. Take every possible step to find a peaceful solution before committing an act that may bring thousands of Saturnian spaceships to this planet. Call in somebody like Dr. Ebenezer Jollie of the International Anthropological Society and let him look the Saturnians over first. He may be the one factor that can help solve this deadlock. Unless something of the sort is done the President should summon his cabinet and place the matter before Congress."

When Drazin had finished

speaking he sat down heavily and looked slowly around from one face to another, and what he saw pleased him.

The frozen interval was suddenly thawed by the arrival of coffee, quietly ordered by Wayne earlier. It was wheeled in on a glass and chrome trolley by a waitress. After she had dispensed refreshment and had departed Kyle said, "I've got to hand it to you, Senator. You sure can talk. I can see how you got so far as you have in public affairs and why vou're on a half-dozen or more committees."

Kyle sipped his coffee as he considered his next point.

"Be reasonable, Colonel . . ." Drazin insisted.

Kyle stared at him narrowly. "All right, Senator. I'll overlook your not too subtle insults. Get hold of this man Jollie. We shall then announce over loudspeakers that we wish to send a deputation into the Stadium. There'll be Jollie, myself, and the Scientific Officer, Dr. Farrow. If they won't cooperate then I'll invite Jollie to give his expert opinion and immediately thereafter I'll take whatever action I think fit. Now, about this Dr. Jollie. . . . Can you contact him?"

Drazin took a deep breath and said, "I've already done so. He's on his way here already, as far as I know."

Kyle stiffened, and a change

came over his features. He fixed upon the Senator a look of stern disapproval. "Very smart, Senator. Quite a frame-up."

Drazin protested. "I simply

anticipated your own decision."

Kyle was only slightly mollified. He said coldly, "In the future remember I'm in command. I like to know what's going on."

A few routine matters remained for disposal, and then the party dispersed, except for Colonel Kyle and Wayne who were staying overnight at the site. Dexter and Drazin accepted Lynn Farrow's offer of a lift to one of the island's luxury hotels in her car.

Drazin had struck a hard blow for a peaceful solution, and his ego was expanding radiantly, illuminating his embittered soul.

#### IV

IT WAS TWILIGHT as they left the site, the cool frowning twilight of mid-autumn. A fresh breeze curled through the avenues between the Festival buildings, blowing in nervous gusts, as though the atmosphere itself were evacuating the place where alien creatures from an unimaginable corner of space had established their sinister fortress.

The roads were silent and deserted, and the buildings, triumphal and colorful by day, now took on a gaunt misshapen aspect as advancing night drained the color and detail from them.

They passed close to the black burnt-out shells of the buildings marking the perimeter of the force wall, and in the gloom Dexter thought he could perceive the faintly luminous shell behind which the Saturnians lurked, sealed in their pressure chambers built into mocking images of Senator Drazin. The Senator himself, sitting quietly in the rear seat, must have experienced the same feeling.

Soon they left the buildings behind and came to the main highway that led to the residential section of the island. Lynn said "I'm certainly glad to see the last of that until tomorrow."

"Yes," Dexter agreed. Glancing sideways at her and seeing her in profile with her hair blown awry by the breeze through the open window he was conscious of a warm intoxicating feeling that urged him to move closer to her, to touch her, perhaps. But he resisted the desire.

"Flesh and blood I could stand, but robots, no," she added.

"If you dig deep enough you'll find flesh and blood," said Dexter.

"I know. Refrigerated under pressure and probably suspended in methane and ammonia. It's not the kind of flesh and blood I go for."

Dexter grinned at the advanc-

ing road. "What kind do you go for, Lynn?"

"Jon," she said, not unpleasantly, "you've got a one-track mind."

"I didn't have until I met you."
A subdued cough from the direction of the rear seat reminded Dexter he had a room adjoining the Senator's at the Granada Hotel.

"Better be careful what you say," Lynn said quietly. "He's had enough shocks for one day."

Dexter looked back and saw

Dexter looked back and saw that Drazin was asleep. He said, "Candidly, so far as I'm concerned he can take a running jump at the fire-wall. By the way, where's Bob Clayton tonight?"

jump at the fire-wall. By the way, where's Bob Clayton tonight?"

"Still working, I guess. Normally we drive back together, in separate cars. He drives in front and sets the pace. Then we separate at Palm Key Boulevard after stopping at a drug store for a coke."

"How about us stopping at one of these pleasant small cafes for a highball and *not* separating?" Dexter suggested.

She shook her head. "No use, Jon. I'm a one-man girl. But why are you so insistent on dating me?"

Dexter replied softly, "It happened when I first saw you walk into Wayne's office. I knew then . . . well, I just knew. Believe me, Lynn, you're the girl I've been looking for all my life."

"Mnn, that was smooth," she said softly. "Well rehearsed, I should say. But in the future you must take care not to fall for scientific officers, female variety. They're too rational. They don't let their hearts rule their brains."

"Straight down here for a few miles" she observed, later, "and that's Buenna Drive, where we go our separate ways."

"No highball?" asked Dexter.

"No highball. But I'll tell you what I'll do, Jon. If you're still around when the Festival opens—if it opens—I'll show you round. Just you and me."

Finally they were pulling up outside the Granada Hotel. Dexter, sighing faintly in reluctant recognition of defeat, opened the door and stepped out on to the sidewalk. He lingered a moment and said, "Well, goodnight Lynn."

She regarded him with her familiar enigmatic raised-eyebrow expression, but her gaze was friendly. "Goodnight, Jon," she said.

"There's always tomorrow."

"And there's always Bob Clayton," she said, but she spoke the words without emphasis.

She switched on the ignition and pressed the starter. The engine purred smoothly, awaiting the stimulating touch of the accelerator. The Senator awoke and was heaving his globular form through the door.

The girl waved her hand and

the car moved gently away into the traffic stream.

Dexter said wearily, "What you need, Senator, is a good stiff ration of Scotch. Your nerves are shot to pieces."

BY NOON THE following day the situation had materially changed. A fully-equipped unit of mobile task troops moved in overnight, setting up a tented camp in a field to the north of the Festival site. Shortly before dawn a convoy of massive armoured tanks trundled noisily into the scene, followed by armoured cars pulling field guns and large rocket mortars. Guard check-points blocked all roads leading to the restricted section, so that the surrounding palm-dotted area was lifeless. There was an atmosphere of mounting tension and restiveness that gave rise to short tempers.

At breakfast in the hotel Dexter and Drazin saw a telefilm accompanied by a reasonably accurate commentary of the Saturnian ships. The Colonel had evidently made a statement to the Press, and this was confirmed by a perusal of the newspapers.

The Miami Sun, for example, carried black headlines: FRIEND OR FOE? Underneath, in large italics running the full width of the page: SATURNIAN EXPEDITION TO EARTH—CHALLENGE TO MANKIND. In spite of the alarmist implication of the heading, the

actual report was quite innocuous.

The final paragraph stated: "During the day attempts will be made to communicate with the aliens and to secure the removal of the fire wall. As a security measure a zone five miles in depth has been sealed off. Developments of world-wide importance are expected within the next few hours, but the majority of the scientists consulted are confident that the aliens do not present any great threat."

Nowhere was there any mention of the influx of troops and arms that had been ferried from the Florida mainland and were now in the restricted area. The more responsible papers emphasized the peaceful aspect of the momentous event.

News agencies all over the world demanded information and photographs, but the communiques from New York, Chicago and other large American cities were relatively uninformative because of a secret Government directive and, apart from the aerial pictures of the silver disc, photographs were simply not available.

One unexpected result was an enormous increase in Festival response. Millions of people who would have been content to watch the celebrations on their video screens decided to go to Florida in person. The ether was alive with multichannel radio applica-

tions for advance bookings from every corner of the civilized world.

At half-past-eight a hired car arrived at the entrance to the Granada, and a few minutes later Dexter had signed a type-written authorization and had taken possession of it for the duration of his duty at the site. This had been organized by Wayne. Dexter drove the Senator back to the site at high speed.

Beyond the guard barrier, approaching the site, they passed the tented camp that had sprung up in the space of a few hours. Dexter noted the tanks and field guns with a smile of satisfaction. The Senator scowled disapprovingly. By the time they drew up at the Headquarters building Dexter was seriously wondering whether he would ever leave it alive.

Colonel Kyle and Wayne were both in the office as they entered. Lynn was there too, looking clean and fresh, like an April morning. She and Wayne were in a huddle with two other men, engineers from the installation crew. They were studying a large scale wiring plan on the desk.

Dexter said, "What gives?"

The Colonel greeted him cheerily. "Nothing fresh to report, except that I've now got an army and an air force to back me up in the event of an overt act on the part of the aliens. The enemy has not moved. Wayne thinks he

can alter the video system to show us what's going on behind the spheres."

The morning passed without incident. Work on the video net progressed smoothly and efficiently, but took many hours to complete.

The Colonel took Dexter over to the Army camp, and introduced him to the Commanding Officer of the 24th Armoured Division Detachment, a Captain Doakes, who displayed as many medal ribbons on his tunic as did the Colonel. He was a tall angular man of mournful appearance, and had a drooping moustache. In spite of his vaguely unmilitary appearance, Kyle explained that had Captain Doakes been awarded the Congressional Medal of Honor for outstanding courage in action. Dexter liked him on sight.

Doakes said, "A handful of Dupes won't stop the twentyfourth Armoured, Colonel. We'll soften them up with the new seventy-five millimetre armourpiercing rocket shells. Then we'll walk in and take over."

"That'll be fine when the time comes, Doakes, but politics are tied up in this situation," Kyle said. "I've been instructed to wait until a further hostile act develops. If the fire-wall is not removed, we break through."

They walked around the encampment, inspecting the lines and the equipment. The unit was compact and efficient, and looking over the guns and mortars Dexter had little doubt about the devastation they could cause. But the force barrier was a different proposition and he was curious to know just what effect terrestrial arms and ammunition would have on it

They returned to the site, and the Headquarters building a little after eleven o'clock, Doakes accompanying them to learn something of the layout of the Festival buildings and the organization of the various services and communications. Wayne and Lynn Farrow were in the office, and the Senator was attached to the telephone, looking dispirited and weary.

Wayne waited the signal from his engineers to indicate that the reorientation of the video field of view had been completed. This was, in fact, accomplished ten minutes later: the monitor screen now glowed suddenly with a confusion of unsynchronized colors. He made certain adjustments and the picture snapped abruptly into stark focus. The silver disc still sat quietly against the background of the arena, but now a large metallic structure was visible in front of the Saturnian ship. The new angle of vision brought it into sharp perspective.

The structure appeared to be made of the same metal as the disc, but was trapezoid in shape like an overgrown bathing hut that had been pushed out of vertical by an unexpected gale. It looked curiously oblique and unreal. On the tiny roof were mounted a number of small parabolic devices that reflected the sun's rays in iridescent splashes of light. From an oval aperture at the base of the trapezoid Dupes emerged at regular intervals in precisely timed procession.

Lynn Farrow was distantly interested in the small paraboloid objects atop of the oblique building. At present they were blurred and indistinct because of the reflected sun glare, so that she found it impossible to make measurements. But presently an obscuring cloud darkened the scene and brought them into flatlyetched detail. They appeared to be metallic reflectors, rather like car headlamps, but a little larger. She laid a transparent rule on the video screen and scaled them off. then referred to a pocket computor, watched in a vaguely blasé manner by Wayne.

"Well?" asked Wayne when she had finished the computation.

Lynn regarded the screen speculatively. "Those things are ultrahigh-frequency paraboloid antennas, and they account for the signals I picked up yesterday. That structure must be their transmitting and receiving station. I wish we could intercept their mes-

sages. We might learn something." She added as an afterthought, "But we'd have to learn Saturnian first!"

She was just about to turn away from the screen when something clicked faintly in her mind. There was something different about the arena scene-something that had changed since yesterday. But for a moment she was unable to pin-point the unusual factor. It had nothing directly to do with the radio antennas on which her attention had been concentrated, but was connected with the Dupes themselves, with their coming and going. At that moment realization exploded in her mind, a chill star-shell flooding her brain. The thing was so obvious now. Dupes kept emerging regularly from the slanting doorway of the trapezoid structure, one after the other, almost second. But none went in.

Apart from the oblique radio station at present in close-up view, the rest of the arena was off-screen.

"Let's have the general view of the arena, E. G.," she requested.

Wayne operated a switch, and the scene changed to the familiar green oval with the silver disc. The return of the wide-angle view confirmed her fears. The arena was filled with Saturnians.

Even so, Wayne was not aware of anything unusual, his eyes being drawn irresistibly to the elliptical shape of the Saturnian ship. It was in striving to see the trapezoid hut, now out of sight behind the disc, that his curious gaze followed a Dupe to the edge of the arena. And in that moment he saw them.

He took a pace towards the screen, his small eyes popping, and said incongruously, "My God, look at those Dupes!"

Senator Drazin, behind a paneled screen which served to keep him undistracted during his telephone sessions, caught the surprised inflexion. Momentarily free from answering calls, he poked his head around the side of the screen rather like a tortoise emerging from its shell, and said, "What Dupes?"

Getting no reply, and observing that Wayne and the girl were intensely studying the monitor screen, he could restrain his curiosity no longer, but went over to join them. One glance told him the situation: it was as though his subconcious mind had already tipped him off. This latest development was going to take a lot of explaining away on pacifist grounds.

Lynn said, "This alters the situation, E. G. Yesterday we had only a few aliens to handle. Now there are hundreds, and more arriving all the time. In a few hours there will be thousands of them in the Stadium. Equipment too, possibly weapons."

"No wonder they expanded the fire-wall," said Wayne tensely. "They needed more room. This is serious."

"But where are they coming from?" asked Drazin in bewilderment.

By way of reply Wayne returned to the desk and switched in the new-angle zoom circuit. The trapezoid building leaped into magnified detail, and the Dupes were still emerging. They were all identical, like varnished animated shop-window dummies of the Senator.

"Could it be—Are they being manufactured by that machine?" asked Drazin, losing something of his professional coherency.

"No," said Lynn. "I think they are coming from Saturn direct."

Drazin clutched his chin. "How?" he demanded.

"My guess is they are coming over a radio beam," Lynn said smoothly. "It's the only possible explanation, Senator. We know that building is a radio station of some kind, and Dupes keep coming out of it. Radio transmission of solid matter is the only theory that fits the facts."

"I've never heard of such a thing."

"Nor me," the girl agreed. "Outside of fantasy, that is. Teletransition is one of those things that are technically conceivable, but impossible in practice, on Earth at least. The Saturnians

may have discovered a technique of breaking down matter into its basic energy and transmitting it through space in that form for reassembly at its destination."

The urgent ring of the telephone recalled the Senator to his duties, leaving Lynn free to explain to Wayne without interruption. She said, "Judging by the number of paraboloid antennae on top of that trapezoid machine, I would say the whole thing is simply a super-sensitive radio receiver picking up microwave signals beamed from Saturn. It could be that the Saturnians are being converted into an energy-waveform by some kind of three-dimensional scanning, as in video, and this waveform is used to modulate the radio beam."

"Sounds very logical," Wayne grunted.

"It means that hostile reinforcements are being conveyed from Saturn to Earth at the speed of light. They're being reintegrated at this end at about three-thousand an hour, and we can't do a thing to stop them. Unless we do something and do it quickly there may be more than a hundred thousand aliens inside the barrier by this time tomorrow. We've got to act fast, E. G.!"

Drazin returned. "I can't agree at all, Dr. Farrow," he said. "How can we assume they are hostile when we have no evidence of their real intentions? Wait until Dr. Jollie arrives. He'll tell us what to do."

"Kyle will tell us what to do," Wayne said.

Lynn said calmly, "I don't think Dr. Jollie will arrive in time, and even if he did, he would probably be the first to agree that Saturnian reinforcements can mean only one thing."

"But Kyle agreed . . ."

Wayne trod heavily towards the door, his face sallow with the portent of impending doom. "I'm going to find Colonel Kyle and Captain Doakes. This is the time for action, not argument." He left noisily.

Lynn said, quickly, "E. G.'s right, Senator. Come over to our side. We could fight this together."

"ALL THIS TALK of teletransition is way above my head," said Colonel Kyle some time later. The five men—including Captain Doakes and Dr. Farrow—were grouped around Wayne's desk. Wayne had carefully outlined the situation as it was now interpreted and Lynn had explained the technical problems involved. But Kyle, who was essentially a practical fighting man, thought that the technical angle had been overstressed.

"As I see it," Colonel Kyle stated flatly, "we are dealing with a resourceful antagonist equipped with new kinds of weapons. The initial Saturnian landing party is



being rapidly reinforced. By radio transmission, you say, but the method is unimportant. I have only to pick up that phone, and I can have a squadron of Black Mamba jets dropping bombs on the Stadium within a few minutes. Alternatively, Captain Doakes can open up a barrage that will be all hell let loose . . . I can't afford to wait for Dr. Jollie, Senator."

He paused, then resumed, "I'm thinking of the terrible consequences of inaction. But I'll make a concession to you, Senator.

Before I launch a full scale attack, I'll keep to my original plan, and issue an ultimatum. This is how it will be done. You, Dexter, will requisition a police car fitted with loudspeakers and take it as close to the barrier as you can. You will then broadcast an ultimatum to the Saturnians, using the International Earth language, which they seem to understand.

"Repeat the message several times, so that they can get their language machine to work on it. Tell them that if the force wall is not removed by three o'clock—

three hours after sun zenith—and free entry of United States officials to the Stadium permitted, the units of the Army and Air Force will attack in force."

"Okay," said Dexter.

"And then what?" asked Wayne.

"If the ultimatum is ignored or rejected, I shall have the Stadium bombed from the air to soften up resistance, followed by an armoured attack on the ground. We shall use high-velocity rocket shells. The Stadium and all its contents will be wiped off the map."

"It won't work," said Lynn calmly, her soft voice contrasting with the sharp vehement timbre of the Colonel's precise sentences. He looked straight at her, almost through her, raising one eyebrow inquiringly.

"You've overlooked the barrier," she added.

"The barrier won't stop shells and bombs," Kyle stated dogmatically.

"The new seventy-five millimeter armour-piercing rocket shell will blast its way through thirtysix inches of laminated plate steel," said Captain Doakes.

"The shells won't get through it. They'll heat up instantly the moment they intersect the barrier, and they'll explode. The same applies to bombs. Nothing can penetrate the wall."

"I don't believe it," said Kyle.

"I've great faith in high-velocity steel. If it fails, then I'll let you take over. How's that?"

The girl flushed slightly. There was no mistaking the sarcastic bite in Kyle's voice. Dexter caught her eye and winked solemnly, but she looked away quickly, as though the Defense Department man's levity were every bit as unwelcome as the Colonel's harsh irony.

There important came an throat-clearing cough from Senator Drazin. "I need hardly repeat," he said sternly, "that I am still forced to disagree with the Colonel. They haven't committed a definite act of aggression. True, they have a fire-wall, and have damaged a number of Festival buildings, but after all they are alien creatures with an alien mentality, and maybe they feel justified in erecting some sort of defensive barrier. I believe the fire-wall is not a threat, but a warning."

"Drazin," Kyle answered sharply, "I'm not interested in your theories and suppositions. They won't defend us. What about you, Dexter, do you support my plan of action?"

Dexter nodded slowly.

"And you Wayne—how do you feel?"

"I'm with you, Colonel."

"And you, Dr. Farrow?"

The girl hesitated for a moment as though her conscience were not

easy. "I'm not sure," she murmured doubtfully. "I feel that maybe the Senator has got something, but at the same time I don't think we ought to sit back and do nothing. We ought to take action, but I believe it will have to be action based on science. Believe me, Colonel, shells and bombs will be useless!"

"Are you with me or against me?" Kyle insisted.

"If you put it that way, I guess I'm with you."

"Good. And you, Captain?"

"I can't wait to get started," smiled Doakes with aggressive emphasis.

Kyle breathed a satisfied sigh. "You're outnumbered, Senator. We do things my way from now on, and I don't want any further pacifist yap-doodle. Dexter, the first move is yours. Start as soon as you like."

"Suits me," said Dexter. He moved leisurely towards the door.

#### V

ROBERT CLAYTON and Dr. Farrow had finished lunch and were idling over coffee. "Look, honey," Clayton said, "this thing is developing into something serious. Tanks and troops are moving in, and the Colonel has roped in a couple of squadrons of Black Mambas. I don't think you ought to stay."

"But I want to stay," she an-

swered firmly. "There's work to do."

"Wait a minute, honey. I'm going to suggest to Kyle that if there's any kind of combat where your life may be endangered, then you should be sent back to the mainland."

"You mind your own business," Lynn said bluntly. "If you say a word to Kyle then you and I are through!"

Clayton stared at her blankly, poised for an instant in a reactionless mental vacuum. "Look, honey," he said hesitantly. "What—what exactly did you mean when you said we're through?"

"That's not what I said," Lynn explained carefully. "I said that if you spoke to Kyle as you suggested, then you and I are through."

He pondered this soberly for a moment. "As easy as that?"

"What do you mean, Bob?" she asked.

"You could break off—just like that?"

Lynn stretched her hand across the table and gently touched his fingers. "I'm an independent character, Bob. I like to plan my own life."

"Sure, Lynn. But haven't I the right to have some say. I thought we..." He broke off, confused.

"Thought what?"

"Well, honey, I always took it for granted that we'd . . ." The words would not come, and he released her hand, but she did not withdraw it.

"You took it for granted we'd get married sooner or later," she said, finishing the unspoken thought for him. "That's a lot to take for granted, Bob, especially as you haven't even asked me yet!"

"I'm asking you now, Lynn. Will you marry me?"

She did not reply immediately, but studied his face. Presently, she said, "Tell you what, Bob. Ask me again when this business of the Saturnians is over. I need time to think. I guess I'm all mixed up, just as you are."

"Maybe there's someone else," Clayton suggested. "For instance, I don't like Dexter's attitude. He's a fresh guy."

She looked at him steadily, for a moment. "I think you're being very childish. Let's go. Don't mention his name to me again," she added quietly. "He doesn't mean a thing."

MEANWHILE DEXTER was sitting beside a uniformed Festival guard in a sleek black patrol-car, fingering the press-to-talk switch of the hand microphone.

The car was facing the direction of the Stadium, blocking the road at an angle. Twin loud speakers on the roof hummed faintly as power surged through the amplifier. Dexter had already checked the exact position of the

barrier by flinging small stones in its direction. The point where they dissolved in a sparkling puff of vapor was the line of demarcation, and about a hundred yards on either side the charred remains of Festival buildings formed shapeless black masses.

Dexter pressed the switch, thoughtfully framing the sentences of the ultimatum in his mind. "Men of Saturn," he began. His voice boomed metallically from the twin speakers above his head, echoing hollowly from the walls of surrounding buildings.

"Men of Saturn," he repeated. "We have a message for you." He hesitated, pondering the correct translation of what he was about to say into Earth-language, conscious of the fact that the artificial syllables of this international auxiliary tongue were tantalizingly clusive and difficult to define with accuracy.

"Believing you to be friendly visitors of good will," he continued, translating slowly and with considerable effort, "we ask you, in a spirit of mutual trust and cooperation, to remove the fire-wall at once so that we may welcome you to our planet, and offer you the hand of comradeship."

He paused, dreading the possible effect of his next words. "If the fire-wall is not removed by fifteen hundred hours exactly—that is, at three hours after sun zenith—we shall be obliged to re-

gard it as a hostile gesture, and interpret your occupation of American territory as an act of aggression."

He repeated the message twice, then sat quietly in the car awaiting some sort of reply.

It came, after what seemed an interminable interval of silence. in the toncless electronic voice of the semantic integrator, amplified so much that it seemed to reverberate from the sky itself. The voice said, "We of Saturn are proud to be the recipients of your message, but in all humility, and in the spirit of profound apology, we are compelled to reject your generous offer. Most humbly we beg to inform you that at three hours after sun zenith the firewall will be extended to enclose an area of radius one mile from the Stadium. This is regrettable, but necessary. Therefore we politely request that all terrestrials be withdrawn from this zone since any individuals trapped within the wall will not escape."

And that was all.

"So now we know!" said Dexter to the driver. "It looks as though we shall be at war, if the Colonel has his way, with Saturn by three o'clock."

Colonel Kyle had already heard the Saturnian reply, for the thunderous voice of the semantic integrator had penetrated to all corners of the Festival site. By the time Dexter arrived back at the office the plan of campaign had been drastically altered. Wayne had produced a large-scale map of the site on which he had drawn a circle depicting the new circumference of the force wall as it would be at three o'clock. It enclosed the greater part of the site, including the airstrip and the Headquarters building itself.

Kyle's counter-move was to organize an immediate air offensive without waiting for the ultimatum to expire. "If we don't attack here and now," he explained slowly, "then we shall have to evacuate the whole site, and in particular this H.Q., before three o'clock. Once again the Saturnians will have gained an advantage over us by seizing the initiative. Well, I'm not going to let it happen that way. I can have a squadron of jets dropping bombs on the Stadium inside ten minutes."

Senator Drazin shook his head doubtfully but his voice lacked conviction. "I'm not sure that it's a good policy, Colonel. We ought to adhere rigidly to the terms of the ultimatum. Three o'clock was the deadline."

"Well it's not now!" Kyle picked up the phone, while the others watched in brooding silence. "Hello, operator. Get me Ponce de Leon Field," he demanded frostily.

He replaced the receiver, and glanced at his watch. It was already a quarter after one.

Lynn Farrow said, "I hope the planes won't fly below fifteen hundred feet. They'll run into the barrier if they do."

The Colonel regarded her dubiously. "I had thought of that point," he observed. "Assuming, of course, that the wall extends upwards by the same distance."

"Which it must do," she pointed out, "as it is being radiated from a central source. It is a sphere of a quarter-mile radius, and that's about thirteen hundred feet. I think fifteen hundred would be a safe altitude for the jets."

"And when they increase the radius to one mile?"

"Obviously, the ceiling will go up to more than five thousand feet, and it certainly would not be safe for any plane to fly below six thousand."

The phone bell rang imperatively. Kyle picked up the receiver and said, "Hello. . . . Extension forty-four. . . . Is that Squadron Headquarters? I want to speak to Major Passmore. This is Colonel Kyle of Military Intelligence. Ah, hello Major. This is Colonel Kyle. Go ahead with Operation Barrier —low altitude precision bombing. Yes, you can load up to forty tons of incendiary and anti-personnel H.E's. And be sure to brief aircrews to fly at one thousand five hundred feet or over to avoid the force barrier. What's that? Yes, I said the force barrier. You know the target area. See that you obliterate it. Good. I'll be watching."

Kyle replaced the phone briskly, then looked steadily at the others. "There's only one way to win a war, and that's to go in and fight," he said, with smug satisfaction.

"I'd better have the site evacuated," Wayne said, "just in case of accidents. An announcement on the P.A. should do the trick. All the crews have transport."

"Okay," said the Colonel.

"And I," said Lynn, "am going down to the lab to pack the equipment and instruments. I'll need to have everything ready for the retreat."

"What retreat?" demanded Kyle.

"Wait and see, Colonel!" she replied. Then she was gone.

Twenty minutes later the jets appeared from the northern sky, flying swiftly in purposeful arrowhead formation. They whined ominously above at about five thousand feet, curving around to circle the site, then merging into a single line. Back again. lower this time, tearing through the air with fierce restless energy, their line of flight accurately bisecting the oval of the distant Stadium.

On and on to the north, then round again for the last time—one by one—at more widely-spaced intervals. This was the bombing run: the first jet shrieked in at a little over fifteen

hundred feet. It was still approaching the target when the bombs, four of them, peeled away from under the fuselage, arcing forwards and downwards like tiny black elfin darts towards the open arena.

They did not reach the target. In fact, they did not travel more than a fraction of the distance to the ground. High in the sky over the Stadium came a tremendous quadruple flash. Four billowing spheres of smoke burst and uncoiled. Then came a deepthroated multiple explosion and a shuddering concussion that shattered hundreds of windows on the island in a wide area.

Shrapnel from the exploding bombs tore through the structure of the receding plane. The wings tilted momentarily as though going into a turn, then the jet sideslipped and simultaneously one of the port engines burst into flame. Seconds later the first of the Black Mamba fighter-bombers crashed helplessly into the side of the tall crystalline Chinese pagoda in the Oriental Sector, and the building subsided into a fragmentated mountain of shimmering rubble.

The second plane was already on top of the target, and the relays in the bomb-bay flicked over to liberate a twin shower of small incendiary bombs. One and a half seconds elapsed, and then the watchers on the ground and in the Control headquarters were treated to an incredible display of pyrotechnics as the fire bombs were ignited and fused into a luminous vapor by the force wall. The plane escaped without damage, leaving behind a sky angry and aflame with searing incandescent cloud that gradually dispersed in the breeze, spreading a drifting veil of acrid white smoke around the Stadium and beyond.

The third plane did not release its bomb load, but turned off sharply to avoid the burning cloud. And then the raid was over. The remaining aircraft, witnessing the fate of the first plane and sensing the futility of the assault, broke away from the bombing run and, picking up formation again, flew away towards the north and base.

Kyle and his colleagues had a grandstand view of the raid from the window of the office. Not a word was spoken as the tragedy unfolded; only when the first of the jets crashed in flames was the silence broken by Wayne as he grabbed the telephone and called out every available fire tender. With glazed and desolate eyes Kyle witnessed the inglorious retreat of Earth's first striking force after its preliminary and unsuccessful skirmish with the enemy.

His face as grim as death, Kyle picked up the phone, and in a few seconds was connected to the

C.O.'s tent in the nearby fields. His instructions to Captain Doakes were curt but precise. No time was to be wasted in reconnoitering or experimenting. One field gun was to be taken close to the barrier and seventy-five millimeter high-velocity shells were to be fired through it. If they penetrated then the whole of the artillery unit would be used to reduce the Stadium to smouldering ashes.

No one spoke in the fateful grief interval which followed. Wayne experimented with the video equipment in an attempt to secure a picture of the artillery attack, but was unsuccessful. Before he had time to readjust the screen to depict the familiar view of the arena now swarming with Dupes, a brilliant flash glowed starkly through the window, followed by a tremendous staccato explosion. Black and white smoke writhed violently beyond the Australasian buildings.

Ten minutes later Captain Doakes crashed into the office, his face bloody and smoke-tarnished, his hair awry. "We measured the distance from the muzzle of the gun to the edge of the barrier," he said, his voice almost breaking with the intensity of his emotion. "It was one yard—perhaps a little less. We didn't dare take it any closer, you understand. The men loaded her up with a seventy-five millimeter. I was a

little distance away in the staff car. Then they fired."

He paused for breath and despairingly rubbed the back of his hand across his forehead. "You never saw such carnage. The shell went off right in front of the muzzle, as soon as it hit the barrier. It was the ultimate hell!"

"Anybody hurt?" asked Kyle.

"Anybody hurt! Three of the men are unrecognizable. The gun—well, it might be useful for scrap iron."

"How many dead altogether?" "Ten, so far."

Kyle paced heavily up and down, striking his fist repeatedly into his palm, his lips drawn into a grim, bitter line. Finally he said in a voice choked with emotion, "Dr. Farrow was right. That wall is impenetrable. We've obviously got to withdraw, whether we like it or not, and think up a new method of attack." Then abruptly, as an afterthought, "You'd better get over to sick bay yourself, Doakes. You're out on your feet."

The Captain dismissed the suggestion with a stubborn wave of his hand. "I'm okay, Colonel. Just a scratch. But I could do with a bath."

He smiled weakly and left them.

"And now," Kyle said with greater composure, "Wayne, I want you to organize the immediate evacuation of the site. All constructional work will be sus-

pended. Workmen and engineers will be sent home until recalled to duty, which may not be for some days—possibly weeks."

"What can I do?" asked Dexter.
"I want you to contact Federal
Air Control and have the Festival
airstrip declared unserviceable for
traffic. Ask them to arrange a
diversion around the zone for all
aircraft because of the height of
the barrier. Then I suggest you
wade in and supervise the packing of as much equipment as possible. We'll move our H.Q. to the
army camp outside the site."

The telephone on the desk rang, and Kyle pounced on it impatiently. "Who?" he snapped, in response to the metallic voice in earpiece. "Pan-American the News Agency, eh? Yes, I've got a new release for you. You want to know what the Black Mambas were doing, and what the explosions indicated? Just this-we are at war with Saturn! Yes, I said war! An ultimatum delivered to the Saturnians in the Stadium was rejected nearly an hour ago. Since then air and land attacks have been carried out.

"What's that?... Of course they were successful. But these Dupes are tough birds. Now listen. This phone will be disconnected in a few minutes, and there will be no further communiques from this Headquarters... No, it's not a retreat. It's a planned withdrawal to prepared positions!

Don't contact us—we'll contact you!" He slammed the receiver down.

Kyle glanced at his watch. "We've got about three quarters of an hour. I'll have to go to Washington again. I don't want to relinquish command, but I'll probably be ordered to serve under a five-star General. The entire High Command may be flown here. I'm putting you in command during my absence, E. G. You haven't very long, and there's a lot to do. Keep an eye on the clock. And have the external phone circuit disconnected as soon as Dexter has finished with Federal Air Control. See you later."

And with that the Colonel was gone from the room in a roaring hurry.

Wayne had already left to supervise the arrangements for evacuation. Everything through the window seemed incredibly quiet and peaceful. The fundamental pattern had not changed: the silver disc still glittered dully against the grey and green background but now there were innumerable Dupes swarming in grotesque concourse around the ship and spreading out across the arena, perhaps five and six thousand—there was no way of counting.

"Dreadful thing," the Senator said. "Sheer mismanagement on Kyle's part. The girl predicted it, but he wouldn't . . ."

"Look, Senator," Dexter interrupted, "let's not hold an autopsy here and now, There's no time."

The intercom buzzer sounded. Clayton's voice said, "Hello. Dexter. Are you still there?"

The Defense Department Security Agent surveyed the line of scarlet-tipped switches on the intercom unit, wondering vaguely which one to push down. The winking glow from a tiny green pilot light provided a clear indication, so he pressed and answered the call.

Clayton said, "I've had instructions from E. G. to close down the switchboard. All external circuits are disconnected, with the exception of one line from the Twenty-fourth Armoured Division H.Q., which is through to you—in case Captain Doakes is wanted urgently."

"Okay," said Dexter, and raised the switch.

There was no point in just waiting around, doing nothing. Everybody seemed to be in on the evacuation, and the only problem to be decided from Dexter's angle was one of selection, namely, who to assist. In the space of a few seconds he was in the elevator, descending to the seventh floor and the Technical Services Laboratory.

Meanwhile, Colonel Kyle was making preparations for his second trip to Washington. He had gathered up every document he considered important, every report, every eye-witness account of the military operations he had not been able to view in their entirety. He had dictated his own command participation report in two brief pages and tossed it into his briefcase along with the other data.

Now he was ready to board the plane and the plane was being moved onto the runway.

He was trying to conceal his impatience when an incredible thing happened. A fiery wall descended on both sides of the runway and began to widen. It swept back and became a circle of fire and the circle spread slowly outward until it passed beyond the edge of the field and then out beyond the surrounding trees. But not a man on the field was harmed by it.

In some respects it was not like the other wall that had left such havoc in its wake. It seemed more attenuated, less fiery, and it swirled the men on the field about without injuring them.

Further and further the new wall spread and in the control tower on the field a wild signaling began—a buzz of frantic communication from every part of the island.

In less than ten minutes the wall enveloped the entire ten mile island, sealing it off hermatically from all outside communication. And when Colonel Kyle's

plane rose into the air and tried to wing its way through the barrier all of the instruments went dead and the motors ceased to roar. The plane had to descend in a slow, motorless glide to avoid instant destruction.

No sooner had it landed than a toneless, electronic voice spoke from a semantic integrator. "We have been forced to erect another barrier. It is different from the first and would not have served our purpose in establishing a secure zone for our necessary establishments. Our establishments would have shaken and shattered it. It is most unfortunate that such should be the case . . . the new wall will cause no loss of human life and that we desire above all else. It will cause no loss of life unless you try to penetrate it."

# VI

THE LABORATORY was a large vault of a room illuminated gauntly by concealed shadowless strip lighting.

Lynn Farrow, slim and darkly attractive in her white overall, was packing selected items of apparatus into small crates and containers. She looked up quizzically as Dexter pushed the door open.

"Can I help?" he asked.

"No thanks," she said, lowering her eyes quickly and continuing with her task. "I can manage."

"But time is getting short,"

Dexter said, looking around the room, "and now that we've another wall surrounding the whole island, our danger here on the Festival site increases steadily."

She turned away from him and picked up a portable field-strength meter, lowering it gently into its box. "In that case, all right, help me pack. There's more than enough to do."

Dexter took her hands swiftly and pulled her towards him. She colored angrily, twisting and turning to wrench herself free. But he was quicker and stronger, and in a moment she found herself caught up in his muscular arms, painfully conscious of the strength and hardness of his body. She relaxed suddenly, turning her head sharply away from his descending lips. "Let me go!" she cried. "You've no right—"

"I'll let you go soon enough, Lynn," he replied. "I meant what I said in the car last night. Don't think I didn't."

She said, "I don't care . . ." And that was as far as she got, for Dexter was kissing her with demanded response. She struggled against it for a moment, then submitted helplessly, offering no further opposition. When she opened her eyes again she found that he was looking at her from a range of not more than six inches, and his keen blue-grey eyes held a subdued glint of triumphant satisfaction. She held him at arms

length. Her face was flushed and confused, her hair disheveled.

"You think only of yourself," she said with feeling, "and I hate you."

Dexter said, "A positive hatred is better than nothing at all."

Her eyes flashed angrily. "I thought you came here to help me pack. You're wasting your time, Jon. You don't mean a thing to me, and you never will. Why don't you get that in your thick skull, and think about it. I'm not for you."

"I wouldn't bank on that," Dexter said.

She turned her back on him and retired to the bench where she continued packing equipment. For a while Dexter watched her, but the frank admiration of his steady gaze was modified by an unwelcome mood of self-criticism. Maybe he had over-reached himself. She was no ordinary girl and this was no ordinary flirtation. She was completely remote from his own duty-bound, immediately realistic way of life. How could he have fallen in love with a woman scientist?

"What's the time?" she asked him presently. Her voice was as impersonal as an electrocardiograph reading.

He referred to his watch. "Nearly twenty to three."

"Then don't you think we ought to . . ."

"Sure. Let me show you how."

He walked forward and joined her at the bench. "We'll get this lot packed and I'll take it down to ground level in the elevator."

At exactly five minutes to three there were four trucks waiting at the main entrance. Drazin had already left in a car, and Wayne was preparing to leave with the first truck. Dexter, carrying a heavy wooden crate, dumped it thankfully on the ground beside a massive steel filing cabinet, and shouted, "I'll come on the last truck, E. G."

"You're cutting it fine, Dexter," Wayne said anxiously. "Better leave the rest of the stuff and pull out."

"As soon as Lynn's ready," Dexter called back.

Wayne's reply was lost as the first truck revved up and pulled quickly away, but his receding face was a study in worried curiosity. A moment later Lynn emerged, and Dexter helped her load the final items on their own vehicle. Meanwhile the other two trucks moved off.

Finally they were ready. Lynn climbed into the cab alongside the driver. Dexter, at the rear of the truck, pulled himself over the tailboard with swift agility. Time was running out—just three-and-a-half minutes to go—but there was still a comfortable margin to get beyond the mile radius.

Standing inside the truck and looking out at the deserted road-

way Dexter felt desolate and vaguely resentful. It seemed far more like a headlong retreat than a planned withdrawal to beyond the barrier to carry on the struggle against the Saturnian semi-robots.

At the back of his mind an idea had been evolving and maturing for several hours—ever since the moment of the ultimatum. Now it began to take positive shape.

The force wall was impenetrable—nobody doubted that any longer. Bombs and high-velocity shells had failed to pierce it, and had only resulted in disaster. The thought hammered through his brain with ever increasing insistence: You can't fight from the outside—only from the inside. Only from the inside. . . . the inside . . . the

The others had gone—Drazin, Wayne, Clayton, Kyle—everybody. Only Lynn and himself were left and the driver of the truck. He knew now exactly what he had to do. Decision came instinctively, as it usually does to forceful men with a basic drive toward immediate purposeful action. It was simply an abstract recognition of the inevitable.

Through the small rear-window he could see Lynn's face looking back at him. He waved to her reassuringly and shouted, "Okay, driver—take it away!"

Immediately the engine roared into life, and the vehicle lurched forward. Dexter waited about

three seconds. Then he tensed his muscles, and vaulted over the tailboard into the road. For a fractional moment of instability he struggled to retain his balance, and failed. He felled heavily, rolling over on to his back. When he sat up the truck was already the size of a toy, disappearing down the road at a crazy speed. He looked at his watch and saw that time was running out. He had three minutes at most.

"Well, Lynn was safely out of the danger zone, he told himself, feeling that it was something to be pleased about. In a few minutes she would be on the other side of an invisible and impassable wall, and no longer in immediate danger. Maybe he had signed his own death warrant but he did not regret his decision.

Slowly and with a certain lethargy of spirit he made his way back to the Control headquarters, and went up to the top floor in the elevator. From the large window of Wayne's office he surveyed the familiar panorama spread out beneath him. The site was now utterly deserted.

He turned to the video screen but Wayne had evidently switched it off before he left. Seconds to go—and then, with appalling suddenness, a line of distant buildings flared into sinister orange brilliance. He heard the familiar crackling sound, and almost instantly the inferno soared to fiery heights, marking in raging flame and billowing smoke the great circle of the new force-barrier.

Shaken, sick at heart, Dexter turned from the window and sat down on a corner of Wayne's desk. So the Dupes had kept their word!

The area of their conquest had widened and he was alone in a vast invisible bubble with the unfathomable enemy, alone with robot-encased denizens of a bizarre alien world. What did the Dupes think of it all—if they ever paused to think about human affairs in the sealed pressurized cabins of their automation vehicles? How could a creature lying suspended in compressed methane and ammonia have any linkwhether mental, spiritual or physical-with the human race? And conversely, how could a mere human hope to understand the motives and mentality of creatures that he could not even see?

Still badly shaken, and trembling a little, he swung himself off the desk and crossed to the video screen. Its blank white surface was uncommunicative. Video wasn't his line of business, but he remembered that Wayne had manipulated switches on the desk. And then he caught sight of the telephone . . .

He seized it almost hungrily, remembering that it was connected by direct line to the Army camp, to Captain Doakes' tent, in fact. Persistently he flicked the cradle up and down, but the line was dead, and presently he replaced the receiver. Obviously the barrier had clipped the phone wires.

He wondered idly whether the Saturnians knew that he was inside the barrier—whether they had a video system of their own enabling them to keep watch on all that took place in the environment of the Stadium. He decided it would be better to wait until nightfall before venturing out, provided they didn't find him first.

And then what? His goal was clearly the arena, and all that it contained. He had to get in there, in spite of the multitude of aliens, and wreck the machinery. Even if he couldn't wipe out the entire Saturnian force, he could at least make certain that no further reinforcements would arrive, and perhaps, with a bit of luck, destroy the fire wall-provided he could locate the particular piece of apparatus responsible for its existence. That was where a little technical knowledge would have been useful.

There were two things that had to be done, and he had to do them: destroy the apparatus that was bringing in reinforcements by —what was the word?—teletransition, and remove the barrier. Once that was accomplished the situation could be resolved with

Saturnians and terrestrials on equal footing.

Dexter was suddenly conscious of a subdued humming sound that set the air trembling and his heart to pounding. A prickling sensation tingled like iced water over his scalp and down his spine as he tried to identify the noise. The humming grew fainter, stopped. Abruptly he realized that it was the elevator and that it had gone down. Quickly he crossed to the window and glanced out but there was nothing to be seen. Elevators didn't move of their own volition-someone or something had pressed the button on the ground floor, and that meant that someone or something was going to come up. But how far? To which floor?

He walked softly through the ante-room and into the corridor. The humming had recommenced, and the vertical panel of indicator lights winked one after the other as the elevator bore its unknown occupant higher and higher. When it reached the fifteenth floor Dexter took out his pistol and moved silently back into the shadowed recess of the office doorway.

And then the most incredibly fantastic thing in the world happened. Lynn Farrow stepped out of the elevator. She was flushed and breathless and wearing a grey coat that hung loosely over her green dress and she was the most

wonderful sight Dexter could ever have hoped to see at that time or at any time.

She turned towards the office, took two steps, then saw Dexter. She said, "Hello, tough guy. Put that toy away before it goes off."

He slipped the gun in its holster. A million bewildered thoughts tumbled in his brain, but all he could say was, "What are you doing here?"

She came close to him, looking at him with a warmth she had never displayed before. "I couldn't let you run out on me like that," she said, simply. "I saw you lying in the road soon after we took off. You made no effort to shout to the driver," she said, "and I realized immediately what you were going to do."

She had taken off her coat and her figure was a slim curved contour that seemed to embody the sum total of feminine charm since the dawn of time. I tried to get the driver to stop, but he wouldn't—not until we were outside the danger zone."

Dexter's mind, listened impersonally to her narrative. In spite of his leaping heart and spinning emotions he had to recognize that here and now Lynn Farrow was the most unwelcome sight in the world. She was a handicap to his one-man assault on the Saturnian citadel. And yet, paradoxically enough, he was happy because she had returned.

"I came back," she said. "I must have been about ten to fifteen yards across the new perimeter when the fireworks started. After that—well, it wouldn't have been any use changing my mind. I knew where I'd find you, and here we are."

She came close to him and put her hands on his shoulders. "The Saturnians are primarily scientists and you need someone with scientistic training to guide you," she said. "But if you want the full truth, I came back because I had to. I didn't care for us to be on opposite sides of an invisible barrier. That's why I came back," she whispered. Her voice was the only voice he had ever known.

"What about Clayton?" he asked. She stood for a moment pensively studying the control switches. He drew close to her and touched her arms.

"I'm sorry, Lynn. I shouldn't have said that."

"It was a perfectly legitimate question," she said without looking up. "The truth is, Jon, I'm all mixed up. Not so long ago I thought I was in love with Bob, but . . ."

"Maybe it will help for now if we just say you came back to help me fight the Dupes," Dexter said. "Just remember, though. I love you, my darling."

She looked at him hard and long. "All right, Jon. Let's fight

them. What do you intend to do?"

He found it difficult to make an immediate reply to a question put so bluntly. "I thought about waiting until nightfall," he said doubtfully, "then trying to sneak into the Stadium unseen, perhaps with the aid of this." He drew the pistol from its holster and spun it round his index finger. "Then maybe I could find a way to wreck that radiotransport gadget so that no more reinforcements could arrive. But now you're here—well, candidly, I don't know what to do."

"Naive," she murmured. "Like trapping elephants with a peashooter. Let's go into Wayne's office."

They were soon back in the familiar reassuring environment of Wayne's office, and it was almost as though the three o'clock evacuation had never taken place, as though the door would open at any moment and Wayne or Kyle or Drazin walk in.

"Let's take a look-see," she said, crossing to the screen.

She flicked a number of colored switches on the desk, impatiently coaxing a kaleidoscope of flashing colors on to the video screen where presently they untangled themselves into the all-too-familiar view of the Stadium.

There was a sizeable army of Saturnians in occupation of the arena now, but the reinforcements had stopped coming in. Instead small groups of aliens were entering the oblique door of the radio station and emerging again with heavy objects of divergent shapes which resembled the component parts of some unguessable machine.

"Freight," said Lynn shortly.

"Maybe weapons," Dexter suggested. "I tried the video earlier but couldn't get it to work. I thought maybe it had gone the same way as the telephone."

She regarded him with sudden interest. "The phone's dead, of course."

Dexter nodded.

"That's because the phone wires are above ground—at least, they are at the new perimeter, where the local network joins the main trunk lines from the mainland. And I'm almost certain the new wall has cut us off from the outside."

"Sure—I'd already figured that out," Dexter said, wondering why she had bothered to state the obvious.

"But the video system is working," she pointed out.

"Why not? It's mainly internal, and I guess most of the cables must be *inside* the cut-off zone."

"But don't you see, Jon? The electricity supply on which the video, lighting, and other services depend, comes from outside the site, from the high-voltage grid three miles away."

"Sure I see," said Dexter

blankly. He could see but he couldn't understand what she was driving at.

"We still have power—but the phone is dead," she said patiently. "The power cables are underground and the phone wires are above ground." Lynn smiled tolerantly, as one might smile at the groping effort of a small child to comprehend a new abstract word. "Well, figure it out, Jon. We know that everything intersected by the barrier disintegrated in flames. But the ground itself at the perimeter of the force-wall was not even scorched. It leads to only one possible conclusion. The barrier must terminate at ground level."

"Of course," said Dexter slowly and without conviction.

Lynn snapped her fingers in irritated frustration. "What a fool I was! I should have realized it from the first. The barrier is only a specialized form of radio transmission, and the ground is always neutral to transmitted energy. Don't you see the significance of it, Jon?"

"I think I do," he said. "It means that we won't lose our electricity supply, water supply, and all the other things that come under the ground."

"Yes, of course. It means all of that. But it also means that we can escape whenever we wish."

Dexter slipped his arms round her slender waist and studied her excited face with sober concentration. "Escape?" he queried.

"Yes, under the ground. Through a tunnel. All we have to do is burrow under the wall like rabbits."

"Lynn," he said, thunderstruck, "you've got something there."

"And it means that troops and supplies can enter the site in the same way."

"You're dead right."

He kissed her lightly and she responded with a warmth that left him a little stunned. With an effort he disciplined his thoughts.

"You're a genius, Lynn. I'd have never figured all that out in a thousand years. But it doesn't really alter my plans. I've still got to go into the Stadium."

"But you don't have to now, Jon. We can get out of the zone and have the Army do the job properly."

Dexter shook his head slowly. "It's not so easy. While we're digging our way out the Dupes might get us. In any case, supposing the barrier doesn't cross open ground. How are we going to dig our way through concrete and steel mesh? Or supposing we find open ground. How long do you suppose it would take us to dig a tunnel without adequate tools? One day, two? Meanwhile the Dupes might extend the barrier to five miles, or they may decide to break out altogether and launch a general attack. They've not been importing men and machines for the fun of it."

Lynn sat down in Wayne's chair and ran her fingers over the blotter with an impatient circular motion. She spoke without looking up. "This isn't the time for heroics, Jon. I feel certain the barrier must cross open ground somewhere, and we could dig a tunnel in soft earth in a few hours. Our chance of getting out of here alive with valuable information is much greater than any chance we might have of destroying the Saturnian equipment."

Dexter stood behind her, resting his hands lightly on her shoulders. "Sure, honey, we'll dig our way out—after I've been in the Stadium."

She turned to look up at him. "You're a stubborn character, Jon."

"Anyway," said Dexter, taking one of her hands gently, "the same idea might occur to Kyle, or Wayne, or even the Senator. They might dig their way in to us. Perhaps we can even get a message through to them."

"How? The phone's dead."

"I was thinking of the radio transmitters."

"They're not even installed yet. Maybe I could have built a small transmitter for Morse signals in the laboratory, but the place was stripped. Remember?"

"So we've no means of communication." Dexter glanced at his watch. "We've got about four hours before it gets really dark, so if we've got to kill time—well, let's do it with a cup of coffee. I suggest we explore the cafeteria."

"And then what?"

Dexter eyed her with speculative interest. "And then we'll wait for nightfall, together."

Lynn's eyes held a phantom glint of a smile. She said, "That might even be interesting. Let's go."

They went out into the corridor and stepped into the waiting elevator.

### VII

COLONEL KYLE abandoned all hope of escaping from the island or communicating with Washington by seven o'clock that evening. The island was a prison, sealed off, completely isolated from the outside world and he was alone in command, entirely responsible for whatever might happen.

New tents had been erected alongside Captain Doakes' head-quarters to accommodate Wayne, the Colonel, and a number of Signal Corps technicians who were attempting to restore communications on the site.

Doakes, who had by now recovered from his shock of early afternoon, was in the tempestuous grip of suppressed fury and obsessed with the urge to break down the invisible barrier once and for all. The only snag was that he didn't know how to start.

Soon after three o'clock the final truck of the evacuation fleet had pulled into the camp and the driver, worried and agitated, had described in halting phrases how he had lost both his passengers. Doakes had promptly put the man under close arrest, charging him with dereliction of duty.

Clayton was equally irritable, but his trouble was jealousy. It was becoming increasingly obvious that he had a rival, a very strong rival, whose influence over the girl had been great enough to make her want to return to the danger zone to be with him.

Both he and Doakes had tried unceasingly to contact the Control building via the phone line, without success. Finally the Captain had sent out a Signals linesman to check the circuit. Twenty minutes later the man returned to confirm that the overhead telephone line had been neatly disintegrated at the intersection of the force wall. And that was that.

They were waiting for the Colonel in the H.Q. tent—Doakes, Wayne, Clayton, and Senator Drazin. He came blustering into the confined space under the canvas like a February squall followed by Major Passmore, Commanding Officer of the Black Mamba squadron.

Kyle came straight to the point.

He flung his dispatch case on the map table and said, "Any attempt to escape from the island would result in absolute disaster for planes and men alike. I am convinced of that. We must carry on as best we can. What do you think can be done Wayne? You must have some ideas."

Wayne shrugged his shoulders noncommittally. There was a moment of uneasy silence—an unsavory moment during which each man wished that he was miles away.

"Well," Kyle went on with harsh impatience. "Let's get back to the business in hand. Before the new wall arose, during the past eight hours, monitoring stations here on the island have been carrying out a search of interplanetary space with special receiving equipment. They picked up what they call a wide-band, pulse-modulated synchronized signal on a frequency of approximately three hundred thousand megacycles. That apparently, is a lot of frequency. They took a bearing on it, and confirmed that the signal is emanating from Saturn."

"If that is so," Wayne remarked, "they are only confirming what Dr. Farrow has already told us."

"Ah, yes—Dr. Farrow," said Kyle ominously. "Dr. Farrow and Dexter. It seems to me that I am surrounded by incompetent idiots. Wayne, I thought I told you to carry out a complete evacuation of the site. Quite obviously you ignored my orders or those two would not now be inside the barrier."

"They chose to stay," Wayne said, defensively. "I had no way of knowing they would risk their lives for no sane reason."

"They should not have been allowed to stay. You were in charge and you should have made sure the site was cleared before you left yourself. You failed in your duty, E. G. Failed miserably, and criminally!"

Doakes leaned forward and said, "Dexter acted on some crazy, last-minute impulse. He jumped off the truck as it was moving. The girl made the driver stop outside the zone, and she got down and went back in to join Dexter."

"Made the driver stop?" roared Kyle. "Could any soldier of the United States Army permit a woman to endanger herself in that way? It's incredible!"

"He's already under arrest," said Doakes wearily.

"I can see," Kyle went on acidly, "that nothing is done correctly. My officers and staff behave like fools! What's the matter with everybody? Is the strain of the last few hours driving you all crazy?"

"We can't all be Colonels," Doakes remarked blandly.

Kyle stiffened. "Be careful, Captain," he warned. "You may be a good man, but I don't take that line of talk from anyone."

"Then I suggest, Colonel," said Doakes, "that you should try a little civility for a change. We are capable and responsible men, and we don't like to be snarled at."

"I speak as I feel," shouted Kyle. "And I won't tolerate insubordination."

Doakes stood up and casually smoothed down his tunic. "Then you can count me out," he said quietly, and walked past the table to the tent exit.

Kyle stared at him aghast. As he went past he gripped his arm firmly and said, "Sit down, Captain Doakes. I'm ordering you to sit down. You know the consequences if you defy me."

Contemptuously Doakes broke away from the other's restraining hand. He said, "Okay, Colonel. Maybe I'll stay. But remember what I said. We're here to iron out a very difficult situation, and there's no time for insults—not from you or anybody. None of us may live to face an unjust court martial."

When Kyle spoke again his voice was very calm and deliberate. "Perhaps it isn't all. But for the moment I'll overlook what you've just said. The position is this. The new wall only blocks terrestrial communication. We can't stop the Saturnian signal from coming in. But we can jam it locally by using waves of the same frequency. We can't communicate

with the outside world, but we can prevent them from receiving those messages."

"But three-hundred-thousand megacycles," objected Wayne. "Have we equipment that can handle it?"

"I think we have. One of America's largest electronics manufacturers has built a high-power transmitter to operate on that frequency. Fortunately they sent it on for exhibition, and the instrument is here on the island. When the transmitter starts up, there will be no further supplies or reinforcements from Saturn, I am assured by scientists that what will emerge from the teletransistor machine will be shapeless distorted matter-a mixture of Saturnian reinforcements and material jabber which will probably choke the apparatus and make it completely unusable."

"Good!" said Wayne with grim satisfaction. "That's the brightest news I have heard yet."

"We still have to break down the barrier," Doakes said.

Kyle hesitated for a moment, as if considering the best way to frame his announcement, then went on, "I want you to remember that the original force wall is impassable. We tried bombs and shells, and they failed. We lost one of our planes, lives in the process. Solid matter can't get through the barrier, but radiation

can. The barrier does not stop light, sound or heat."

His voice hardened. "Now there is one type of bomb which does not depend on fragmentation for its effect: it destroys by heat flash and radiation. And I intend to use a small atomic bomb if the situation warrants it."

Drazin looked startled. "But the range? Even Miami is within the flash radius!"

"Let me explain the details before you start heckling," Kyle said
with irritation. "First we shall
jam the transmitter signals. Then
an ultimatum will be given to the
Saturnians demanding immediate
surrender, otherwise a low-level
atomic bomb will be exploded. As
a scientific race they will know
only too well that one bomb can
destroy them. We shall not hesitate to use it if necessary, but
there are certain important factors to be considered."

"I'll say there are!" Drazin, who was still standing, was gripping the edge of the table with unsteady fingers.

Kyle hold up a silencing hand. "Let me finish, and let's be realistic. Modern low-level atomic and thermonuclear bombs have a restricted ground range of about two miles—so there's no danger to Miami or any other city on the Florida mainland. And two miles is sufficient range for our purpose."

"But the Festival site would be

wiped off the face of this planet," Drazin said in a hollow haunted voice.

"Exactly," Kyle said briskly. "Naturally we should have to evacuate an area about eight miles deep around the site until all traces of radioactive contamination had been neutralized. That also means that we, and the whole of our military detachment, and the middle-area residents of Palm Key will have to withdraw to the outskirts of the island. The bomb will, therefore, have to be remotely controlled."

"Supposing the Saturnians extend the original barrier and cut us off from the bomb and then defuse it?" Doakes asked.

"Simple, Captain. The control lines to the bomb will be wired on a break-to-make circuit. That means that the moment they are cut or broken from whatever cause, the bomb will go up. Obviously it wouldn't be advisable to have the ultimatum delivered at close quarters, like last time, so we'll use a remotely-controlled amplifier and landlines, and we shall hear the Saturnian reply in the same way."

Clayton spoke then for the first time. "You can't use the atomic bomb while Dr. Lynn Farrow is inside the barrier."

"I can and will," said Kyle unflinchingly. "This is a military operation and I refuse to assume responsibility for the stupidity of others."

A moment of shocked silence followed Kyle's outburst. Then Doakes said with no attempt to conceal his feeling of outrage. "Why not give Dexter and the girl a chance to do something useful? They may be able to strike a bargain with the Dupes. They need time. Damn you, such a proposal is inhuman, and nothing can justify it."

"They are probably both dead by now," said Kyle eyeing him coldly. "They are two in number against thousands of aliens. But if, by morning, they are still alive and free, then they too will hear the ultimatum, and they should have enough common sense to take adequate precautions."

"What precautions?" demanded Clayton.

"Against the heat flash, at any rate. They can get below ground level—in the deepest basement of one of the Festival buildings. In that way they'll escape the initial flash and radiation burst. Later when specially equipped squads go in to clear up, we'll be able to bring them out and rush them to a hospital."

"It won't do for me, Colonel," Wayne protested. "Sure, I'm all in favor of blasting those horrors off the site. But not while a man and girl are inside the barrier. Why can't you wait for a day or two until we have some definite

news from Dexter, or Dr. Farrow. Maybe they'll get out. They might even persuade the Dupes to lift the original barrier, and the new barrier as well. Give them a break. Dexter is tough, and the girl is clever. They may accomplish more than any atom bomb."

"That goes for me, too," said Clayton hollowly.

"And me," added Drazin.

"I have heard enough," said Kyle frostily holding up his hand again. "Fortunately, Doakes, I don't have to rely on you at all. A special unit of signals and communications engineers is standing by with the bomb to fix up control facilities. I shall be at the controlling end-and I'll have the support of experts. You can withdraw your men immediately. Break camp and withdraw to the island outskirts. I'm going send out an order now for a widescale withdrawal of residents to the far end of the island, but the guards will be fully capable of supervising that evacuation. Most of the larger hotels are sufficiently far away to be in no danger and the guests will be permitted to remain. Actually, only an evacuation from the restricted zone should be necessary, but I am extending the safety margin for residents.

"You, Drazin, can go whenever you wish. I'm sorry the barrier makes it impossible for me to send you from the island. I don't want to see you again within miles of the site. I'm through with you. Wayne, I'd like you to come with me. Clayton can stay right here until he's wanted. I have already set the preliminary, original barrier evacuation process in operation.

"There is one-way traffic only within a radius of eight miles from here. People will be permitted to leave, but nobody—with the sole exception of the bomb crew—will be allowed to enter the restricted zone. The ultimatum will follow automatically in about twelve hours."

"I hope," said Senator Drazin with restrained bitterness, "the world will never connect my name with this infamy. I should hate to be you, Colonel Kyle. You're going to be the most hated man in the world. I feel if I could get through to Washington I could stop you."

Kyle calmly ignored this prophecy, picking up his brief case with an air of finality. "Well, there you have it—a concrete plan of action. All the responsibility is mine now, and I intend to do my duty as I see it. First the radio jamming, then the ultimatum, and finally, if necessary—and I repeat, only if necessary—the bomb."

"One thing," Clayton said sadly. "How are you going to know whether the inner barrier has been raised or not when you'll be at the opposite end of the island. You'll want to know within a few minutes, at most."

"The Signal Corps boys will fix that. They have a method of detecting the presence of a localized radio field, and that's all the wall consists of." Kyle primly put on his gloves. "Goodnight, gentlemen."

## VIII

Dexter and Lynn Farrow. The proposed cup of coffee in the early afternoon materialized into a hastily prepared meal, admirably cooked by the girl. They ate leisurely in the silent cafeteria, conscious of the echoing emptiness of the place. Suspense was gathering in every shaded corner and beyond every peering window.

Later, around five o'clock they set out on a detailed inspection of the whole of the Headquarters building, looking for anything that might be useful in the planned invasion into Saturnian-held territory.

They worked their way steadily upwards from basement to top floor, a process that took all of two hours. Despite their undoubted great courage, fear and an ominous foreboding darkened all of their thoughts. Zero moment was approaching. It was with a distinct feeling of relief that they eventually reached the

familiar office on the twentieth floor. Here at least the bizarre atmosphere of the Festival site was at a minimum, and there were memories and associations of the past few days to help keep out the vacuum of the deserted walls.

In the silence of the deserted office Dexter pulled her gently towards him. "The most reassuring thing I know is this," he said, and kissed her.

Then, looking over the dark sheen of her hair as she relaxed in his arms, something moving across the dull luminous rectangle of the video screen drew his attention. Instantly, he became tense and distracted, staring at the screen, and Lynn, sensing the change in him, turned to look at the screen, too. They both saw it together.

Basically the scene was the same as before, with the silver disc lying inert on the arena grass; the stiff inflexible forms of the Saturnians milling busily around. But a different shape was moving towards the disc—the shape of a human being.

Dexter's heart skipped a beat.

The shape was visible for not more than three seconds as it walked leisurely across the turf and disappeared behind the alien ship, without reappearing at the other side. As far as the video definition was capable of showing, he was an aged stooped man with a bushy white beard, frail

and unsteady, walking in short shaky steps.

"Did you see that?" Dexter whispered.

"I did, yes. An old man, displaying not a trace of fear."

"What do you make of it? Who is he? Can he be one of the Saturnian party?"

"I don't know who he is or what he's doing there any more than you do. But I can guess. I may be wrong, but my guess is—Dr. Ebenezer Jollie."

"Jollie? But he wasn't even located."

"Not up to this morning. But if he was traced later in the day, and sent here in a fast jet he could have gotten here before the barrier closed down. It's the logical explanation."

Dexter considered this for a moment, still mystified. "Yes, that's possible. I gave instructions that he was to be allowed to enter the restricted zone. But how did he get in here? I just cannot figure it."

"How should I know? He probably came in before three o'clock, when everybody else was busy getting out. He may have arrived on the island hours ago. We have no way of knowing."

"But why didn't he come here to Headquarters?"

"Ask him! I guess he heard about the Dupes, and being the sort of person he is, made a beeline for the Stadium. Which means

he's been in there for more than four hours."

"Then he must be a prisoner, and probably in danger," Dexter said gravely. "That means we've got to change our plans. It's no use waiting until after dark now to rescue him."

Lynn said thoughtfully, "Supposing he's not a prisoner? He didn't act like a man under constraint. Supposing he's getting on nice and friendly with the Dupes? What do we do then?"

Dexter was impatiently emphatic in his reply. "The Dupes have tried damned hard to keep terrestrials out, so why should they be friendly to an intruder? We can't afford to take any chances, Lynn. Friendly or not, we've got to break in there and find out what's going on."

To his surprise she nodded in quick agreement. "I'm afraid you're right, Jon. The least we can do is find out what's happening, just in case. And I was so looking forward to-to being unscientific for once."

Now that the moment for action had arrived, his brain was swift and agile and ticking like a clock. He was fighting against long odds, and that was how he liked it.

"You stay here, Lynn," he said. "Keep an eye on the video. Watch how I make out. If it's okay for you to come down, I'll signal you from the Stadium."

"Think again, tough guy," she said calmly. "I'm coming with you."

Dexter shook his head. There was severity in his level gaze. "You're not, Lynn. You do as I say. This is my cue, and it's a job I can do better alone."

"Supposing you get yourself killed. What do I do then? Dig my way out alone? No thanks, Jon. I'm coming with you. I'd be scared to stay here all by myself."

Dexter decided to accept the inevitable. "Women!" he grunted.

"They're all the same. Obstinate and unreasonable!"

He took out the chloral handgun and examined it doubtfully. Sixty charges, non-lethal, against at least ten thousand aliens. Not the kind of odds he favored. But there was no alternative that he could see.

He slipped the hand-gun back into its sheath and said, "When you're ready, Lynn . . ."

"Before we go," she whispered, moving close to him.

He looked at her close up, taking in the smooth and now so familiar outline of her face, and her gentle eyes and the dark gleam of her hair in a composite visualemotional impression that made him feel hollow and empty deep down inside. She was for him, no doubt about that. She was for him, but time and space were against them.

He kissed her roughly and ea-

gerly. Then he took her arm and together they walked through the door of the office and the anteroom and into the elevator. The door rolled shut behind them. Dexter pressed the button marked 'Ground.'

The evening was cool and dispiriting, the purple sky clouding over with low-lying nimbus swollen with rain. The angular lines and curves of the Festival became a phantom silhouette, flat and cut-out against the fading sky. Dexter and Lynn moved forward silently and cautiously like insubstantial shadows, keeping close to the walls and under the overhanging branches of trees.

He was aware of something unsettled and unsure in her manner. Presently she spoke to him in a voice as quiet as the faint sighing of the wind across the contours of the site.

"It's no use going on without a plan, Jon," she was saying. "You've got to have a plan based upon knowledge of the characteristics of these creatures. There are a few facts we can work on. The barrier, for instance. It is a defensive device, not offensive."

"That's a matter of opinion."

"But it's true. The damage done to the buildings was incidental. The barrier merely isolates the Saturnians from the rest of this planet and its inhabitants. We have a bad record of warfare and racial antagonism. They are

justified in erecting a barrier to protect themselves from us."

"But we haven't threatened them."

"We had, too. More than that, we tried to bomb them."

"We gave them an ultimatum first."

"Okay, Jon, maybe we did. But an ultimatum is not a very friendly thing."

"Nobody asked them to come here. They weren't invited."

Lynn laughed shortly. "But they were. The Senator's broadcast, remember?"

"You're not seriously suggesting that they came in response to Drazin's invitation?"

"He said it. The Saturnians heard it. Supposing they had been studying the preparations for the World Festival. Supposing they came to the conclusion that mankind was really making an effort to reach lasting unity and harmony? Mightn't they be inclined to respond by co-operating and taking part in the Festival? Maybe they believe that they could make some kind of contribution to our cultural development."

"In which case, why the bar-rier?"

"All right. They come to earth, still doubtful about the sincerity of man—the half-civilized savage. They are going to put on a big show. It will need a lot of Saturnian manpower and equipment, and they want to get their

work completed without interference. So they put up an impassable force-wall. And then another when Colonel Kyle wanted to call in more arms. Doesn't that make sense?"

"It makes Drazin's kind of sense," said Dexter doubtfully. "I almost prefer the simpler view of Colonel Kyle. It makes more sense to my mind."

He stopped suddenly as they rounded the angle of a tall building and came into full view of the Stadium. The high semicircular wall towered darkly above them into the evening sky, but their eyes were drawn to the main doors, which were open, framing the brilliant illumination within.

Aliens were moving about outside the Stadium, not twenty yards from where they stood. They were coming in groups through the main doors, carrying heavy apparatus that glittered strangely in the artificial light. Some ten yards from the wall of the building a group of robot Drazins were erecting a spindly metallic structure surmounted by a rectangular box.

It had the functional aspect of a movie camera, but was more sinister and squat in appearance. All around, as far as they could see in the failing light, similar devices were in the process of construction.

"Approach them as a friend,"

whispered the girl, gripping Dexter's arm.

"Daren't risk it," he replied tensely. "I'm going to shoot my way into the arena. Let's hope they'll be too shaken to counterattack immediately. Keep close behind me, Lynn. Don't let them separate us."

Warily they moved forward into the open, taking a long curving path towards the open door. Dexter held the chloral gun firmly in his right hand, ready for instant use. But nothing happened. The Saturnians seemed to be completely unaware of their passing among them, so intensely preoccupied were they with the installation of the camera machines.

The calm did not last long. As Dexter advanced into the rectangular beam of light shining through the door, he found himself in the immediate path of four aliens carrying a long metal cylinder. They saw him at the same moment as he saw them, and they stopped dead. The cylinder clattered noisily to the ground.

Then the girl moved into the spotlight. For a few paralyzed moments they stood facing each other—the Saturnians, waxen and expressionless, like giant animated dolls, and the anxious terrestrials. Then the spell was shattered. The Dupes turned and fled in blind panic, running with short twinkling strides over the concrete surround of the Stadium.

Dexter swung round, anticipating an attack from the rear, but found to his astonishment that all the Saturnians were racing madly for cover in obvious terror. He lowered his pistol, and turned his disbelieving eyes to Lynn, who seemed vaguely amused.

"It's as I told you," she said. "They're afraid of us. We should have approached them as friends."

"Hell!" exclaimed Dexter with feeling. "But it makes our plan simple. We just walk in and wreck the machines. Easy!"

He picked up the long slender cylinder that had been jettisoned by the Saturnian party, and swung it experimentally in his hand. It was heavy but easy to handle. "This will do fine," he said cheerfully. "I'm going to modify the Saturnian apparatus by brute force."

"I'm not at all sure that you're doing the right thing," Lynn protested. "I'm beginning to revise my ideas."

But Dexter was already moving ahead.

She followed him through the open doors of the Stadium, past the row of turnstiles and empty box-offices starkly lit by the fluorescent strip lights in the ceiling, then up a flight of richly carpeted stairs to emerge finally among the tiered seats in one of the stands. The Dupes were everywhere, clambering over the seats and hustling and whirling in the arena,

scrambling and rushing towards the exits, like a football crowd after the final whistle. The air was filled with the staccato patter of running feet.

He led the way down to the balustrade surrounding the arena and swung the girl over. They approached the disc with no sign of opposition, and then abruptly they came upon the teletransitor building. The oblique trapezoid structure was exactly the same as it had appeared on the video screen, with its slanting metal walls and roof surmounted by a mass of paraboloid aerials. But something was wrong. From the large wide door at the front oozed a thick sticky mass, like lava from a volcano, writhing and contorting with a kind of elemental animation.

Protruding at intervals from its multi-hued mucous surface were recognizable fragments of Saturnians, but broken and distorted, glittering here and there with a dull metallic sheen, sometimes looking as though they had been passed through an enormous mincing machine. The stuff choked the doors, pouring sluggishly through and spreading treacle-like over the adjacent ground.

Lynn said with a grim shudder, "It rather looks as though the forces of Earth have at last managed to hit back in a most effective way."

"Meaning?"

"The transitor beam would—"
That was as far as she got. At that moment a tiny circular cavity winked open high up in the curved shell of the disc and something long and metallic and egg-shaped shot out at each end. It spun over and over as it arched towards the ground. There was a small detonation as it struck. Another shot followed immediately. An expanding overwhelming mushroom of dense green gas spread outwards and outwards.

Before they could move the vapour was around them, blotting out the sky, blotting out everything, enveloping them in a cold numbing opacity. No time to struggle or retreat, no time even to think. They crumbled to the ground, covered with a fine white frost of frozen air.

#### IX

AFTER KYLE'S conference in the Army camp was over, Senator Drazin started back to his hotel five miles from the restricted zone. Clayton himself took the wheel, leaving the Senator to subside into massive uneasy somnolence in the adjacent seat.

Clayton was a man of hasty temper coupled with inherent cheerfulness, but he could also be bitterly stubborn when the occasion demanded. The greater part of his antipathy for Dexter had evaporated. The possibility of Lynn's infidelity was now insignificant in comparison with the crisis that had arisen. Unless a miracle happened within the next four hours, it looked as though Kyle was determined to remove her, together with Dexter and the whole of the Festival site, from the face of the planet.

He shuddered, not quite able to grasp the full enormity of it.

They were halted by a police barricade at the exit to the restricted zone. A uniformed officer examined their passes by the light of a torch, then waved them on. A fraction of a second later he jumped on the running board and called them to a halt again.

"Sorry, sir," he said to Senator Drazin, "but I've just remembered something. We let a man through this afternoon. Said he had an appointment with you. No credentials, but we'd already had instructions to let him pass."

"What was his name?" asked Drazin.

"Dr. Jollie."

"Dr. Jollie!" the Senator cried in bewildered delight. "Kyle must know about this. Take her back, Clayton."

"Just a moment, sir," said the police officer. "I've had precise orders that all traffic is to be one way. You can come out of the zone, but you can't go back. I can phone for special authorization if you wish."

"It doesn't matter," said Drazin

thoughtfully. "What time did this Dr. Jollie arrive? Before the second wall enveloped the island, of course, but how long before?"

"About a quarter to three this afternoon."

"By himself?"

"Yes, he was driving a small sports car. He said he'd flown a great distance and had borrowed the car for an urgent appointment with you. He asked a deal of questions about the Saturnians. I told him as much as I'knew."

"Did you tell him where to find me?"

"Yes sir—at the Control H.Q. But he said he might take a look around the site first."

"He must have reached the site while the evacuation was in progress," Drazin mused.

"Shall I report to the Army H.Q.?" asked the police officer.

Drazin shook his head. "No. It's not necessary. I'll attend to everything." Then, turning to Clayton. "The hotel—as quick as you like."

The car slid smoothly forward into the young night, conveying a puzzled Clayton and a jubilant Drazin.

After a while Clayton said, "What's the position, Senator? Is Dr. Jollie inside the inner barrier, too?"

"Almost certainly," Drazin said.
"Not knowing the full details of what was happening, he got himself trapped within the force wall.

And I'm going to use him as a big stick to beat Kyle with! He'll find out things which will discredit Kyle forever if any of us live to reveal what has happened here to the outside world."

At that precise moment, in London and Paris and New York radio programs were interrupted for an incredible news flash . . . and that was the beginning of a night that made history. "Palm Key completely enveloped in a strange, fiery haze. Planes, flying over the island, have tried to make a landing and have been unable to locate the Festival site or penetrate the haze for more than a few miles high in the sky. At a lower altitude their motors went dead, and they were compelled to descend on neighboring keys in an emergency glide. All attempts to communicate with the island have failed."

as FAR as Robert Clayton was concerned, he was virtually out of a job. The site would no longer exist by daybreak. That was the way things appeared to him as he sat in his hotel room drinking coffee and reviewing the events of the past few hours. It was approaching midnight, and his anxiety concerning the safety of Lynn Farrow determined his actions until the small hours.

He had already made up his mind that he would undertake any risk, however great, to prevent the atomic explosion. If the bomb was actuated via control wires then it seemed fairly obvious that removal of the wires would ensure that no explosion could occur. The main obstacle to be overcome was the police security cordon blocking all roads.

He suddenly realized that it was time he got started. He dug out an old ex-army rucksack and packed it with a collection of essential items.

Fifteen minutes later he was on his way. A half hour later, on a wide island highway, a searchlight from a Festival guard's motorcycle spotlighted and half-blinded him.

"You can't go any further this way, buddy. Where are you heading for?" a commanding voice said.

"I'm trying to contact someone."

The guard said, "What's your name?"

"Clayton—Robert Clayton." It had to be the truth. One of the guards would be sure to recognize him. "I'm trying to contact Colonel Kyle."

"I thought your face was familiar, Mr. Clayton. The Colonel left some time back. You'll find him at the operational Command Station."

"Thanks," said Clayton, considerably relieved. "I couldn't get him on the phone. It's urgent."

"Okay, sir," the officer said and stepped back.

"One thing," Clayton added. "Has—it arrived yet?"

"No," said the officer.

After another half mile Clayton abandoned his car and set off on foot, taking his rucksack along. Before long he cut a diagonal path in the direction of the Festival site.

He reached the empty field, where the army camp had been, a little after five o'clock. Almost immediately the purr of an automobile engine became audible. He found adequate cover behind a cluster of wild shrubs. Two vehicles went past. Obviously Kyle's instructions had been carried out. Somewhere in the darkness ahead the atomic bomb lay quietly inactive awaiting the electronic impulse that would energize the relays. It was now or never.

Clayton quickened his steps, anxious to accomplish his mission.

In the colorless half-light he saw the bomb. It was an immense sinister object, a long glistening cylinder poised horizontally above the ground on a lattice of steel trestles. At one end of the bomb was a rectangular black offset container from which a thick cable emerged, dropping downwards among the lattice-work to a square metal cannister on the ground. Switches and meters indicated that it was a control unit of some kind, probably the line amplifier with its associated relays.

From this unit a pair of ordinary twisted field-telephone wires disappeared snake-like into the damp grass. No doubt they were connected to other apparatus some distance away, or maybe tapped into the main telephone trunk lines on the road. The arrangement was simple.

Nevertheless, as he took the wire cutters from the rucksack, a warning note sounded solemnly in his brain. He couldn't quite track down the feeling, but stood irresolute for a moment, striving to remember every detail that Kyle had released about the bomb and the plan. He couldn't think of a single reason why he should not cut the wires.

He picked up the control line and inserted it in the jaws of the wire cutters. He was aware of a curiously unreal dream-like quality.

Clayton squeezed the wirecutters. Even as he felt the sharp edges of the jaws clipping through the tough insulation of the lines the thing that had been stirring uncomfortably in his subconscious mind leaped into ghastly realization. It was a break-to-make circuit.

He jerked his hand away with startled violence, letting the cutters fall to the ground, but the damage was already done. The severed wires fell apart and from the control unit came the distinct quiet clicking of relays. He sensed a



muffled concussion within the black cannister at the end of the giant cylinder.

Inside the bomb a heavy slug of plutonium was impelled with tremendous velocity down the long narrow tube to make violent impact with its partner reaction and a titanic nuclear fission was under way.

# X

at first it was only an unreal sensation of warmth, an abstract temperature oscillating through the void, unrelated to any material thing. Then the warmth seemed to coalesce, seemed to condense into nebulae of feeling that in turn condensed into star clusters of scintillating nerves.

Lynn Farrow opened her eyes with all the slowness of eternity, seeing only hazy patterns, but conscious of soft carressing motions on the surface of her body. The patterns rotated, hardened, then precipitated. They became a flattened silver dome laced with colored wires and cables in random profusion. At the fringe of vision geometric outlines solidified and reflected the harsh light of a cold radiant pool vertically above.

Consciousness returned in a deluge. She moved her head and saw machinery and Drazin—two Drazins—and a background of metal and color. And her own body, stretched out in fantastic perspective on a mat-white surface.

The Drazins were dolls with varnished faces and immobile eyes. One of them was pouring amber fluid from an indigo container on to the rounded contour of her abdomen; the other was massaging her gently with hands swathed in dark crimson padding. Beyond them, remote and unreal, was a further Drazin, watching her with expressionless eyes. Eyes that were not eyes.

And still further into the infinite distance was a curved shining wall and a couch and on the couch was a man. And there were more of the Drazin creatures poised woodenly over him and massaging his body.

The air was heavy and exotic with clinical odors. Somewhere, dispersing gently in the atmosphere, was the faint tang of ammonia, and another smell, unidentifiable. It might have been methane.

Lynn struggled to sit up. It was a slow floating movement of her body, a movement in lethargic sub-motion, like the leisurely drifting of a cloud across an April sky. The Drazins moved back and stood in line, three indentical machines with no expression and no humanity in their humanoid forms.

She examined her captors more leisurely. Dupes was indeed an apt name.

They were identical in every respect that she could determine -identical with each other but only superficially resembling Senator Drazin. They had the same kind of uncanny but rubber-stamp similarity to the Senator as waxwork models. Their animation when they moved was a blind predetermined thing. Their mouths were forever sealed and their lips were streaks of color superimposed on a hard polished face that held no spark of life. They were not dead, for they had never been alive.

Lynn realized gradually that she was inside the doughnut-shaped ship. Looking slowly around she could now see apparatus, bank upon bank of it, like the cockpits of a hundred stratosphere airliners combined into one instrumentated whole.

In the center of the floor space was a squat cylinder some two feet in diameter, glistening in bluegrey gunmetal hue. Thick cables emerged from it like a gigantic cobweb, disappearing through cavities in the level floor. Beyond the cylinder stood one of the small semantic integrating machines, and as she watched one of the Saturnians crossed mechanically to it and operated a minute control.

Presently a metallic resonant voice spoke in the International Earth language. It was a voice without feeling or inflexion, as

though reproducing a prepared recording. Or perhaps it was receiving mental impulses in the form of Saturnian words and phrases from the operator, and translating their meanings into terrestrial syllables derived from an Earth language vocabulary prerecorded on spools.

The integrator said, "Do not move yet."

"What do you intend to do with us?" Lynn asked.

"We humbly regret that it was necessary to freeze you, but the lotion will soon restore you."

"I'd like my clothes back," she said firmly.

"They are being sterilized," the machine replied, tonelessly. "It is necessary for us to eliminate harmful terrestrial bacteria against which we may not have inherent immunity. They will be returned soon."

"The sooner the better!" She glanced anxiously at Dexter who was still inert and motionless. "Is he all right?" she asked.

"He sleeps. Why are you terrestrials so intent upon self-destruction? Why do members of your species kill themselves against our fire-wall in spite of our warnings of danger? It truly grieves us."

The question was momentarily unanswerable, so she said nothing, and the machine continued, "Why do you plan to destroy your Festival site which you have so carefully and so laboriously constructed?"

Lynn replied, puzzled, "Our actions may seem strange to you, but yours are equally strange to us. Why don't you meet us on equal terms and remove the firewall? From the moment you landed on Earth you created suspicion by your activities."

The machine persisted in its questions, ignoring her tentative cross-examination. "Why do you remain within the fire-wall and approach us with weapons? Why has your race attempted to destroy the transitor and hundreds of our colleagues by radio jamming?"

So that was it, she thought. Radio jamming—and the formless ooze creeping sluggishly through the oblique door.

"Why did your people attempt to drop explosive missiles? Why did they use powerful cannons? Why have they this night installed a fission bomb of tremendous potential just outside the inner wall?"

Lynn struggled to a sitting position, fighting a sudden nausea that made her head swim sickeningly. "Wait a minute," she protested. "I know nothing of any fission bomb. Kyle wouldn't dare . . ."

A faint sound from the curved shell of the wall attracted her attention. An oval panel swung open, revealing darkness. Something moved ponderously beyond the gap, and then a gleaming bald head moved across the darkness and a Dupe entered clumsily, one arm folded bracket-like around a grey plastic container. This he placed on the floor near to Lynn, and removed the lid.

She recognized the green of her dress, and the pastel shade of her underwear, and in a moment, defying the sickness that crouched to envelope her, Lynn swung her legs on to the floor and dressed hurriedly.

The Saturnian who had brought her clothes went out again and presently returned with a second box which he placed near Dexter's bunk. But Dexter was still unconscious and being subjected to the massage treatment.

And then, as Lynn was fastening the buckle of her dress and beginning to feel fit for any emergency, she became aware of a movement in the open doorway behind her. She turned to look, and observed a bald scalp—but not entirely bald. There was a wisp of snowy hair, and the glitter of old-fashioned metal-rimmed spectacles. An incredibly thin human figure clambered energetically through the oval opening of the door, then advanced lightly into the cabin.

The old man eyed her merrily in a whirl of private glee and chuckled, "Charming, charming. Beauty and the beast!" "You must be Dr. Jollie," said Lynn uncertainly.

He cackled, and his voice was like splintering glass. "Hey, hey—yes. Jollie by name. Jollie by nature."

"I'm Dr. Lynn Farrow, Scientific Officer to the Technical Services Staff of the Festival."

Jollie laughed his thin willowy laugh. "You didn't look all that scientific twenty minutes back." Jollie chuckled, rocking his head to and fro. Then he extended a long bony hand. Lynn took it cautiously; it was limp and spindly and she might have been shaking hands with a skeleton.

"Delighted," murmured Jollie. His eyes flicked round the room and settled on Dexter. "Who's that?"

"That's Jon Carey Dexter of the U.S. Defense Department." Lynn said.

"Hey, hey, Defense Department. Do they usually go around like that?"

"They took his clothes for sterilizing."

"I know, I know. They took mine too when I first arrived."

For a world-famous biologist, she thought, he certainly struck a new note. She asked, "When did you arrive, Dr. Jollie?"

"Hours and hours ago. Urgent call from Senator Drazin. Decided to look in here first and haven't been able to tear myself away since. Fascinating creatures—quite out of this world!"

"That's one point of view," Lynn said. "Have you discovered anything of importance?"

Jollie's eyes filled with good humor. "What do you call important? The fact that these creatures are hermaphrodite? That they have no skeletons? That they are of submarine habit? That they lay two million fertile eggs at one sitting? What do you call important?"

"Are they aggressive?" Lynn demanded. "Are they hostile to humans?"

"About as hostile as a winkle!" Jollie cackled. "And that's a good analogy. They're the winkles of Saturn. They live in seas of frozen ammonia."

"Go on," said Lynn. "What does it all add up to?"

Jollie sat down on the bunk and became abruptly sober, as if someone had suddenly disconnected his sense of humor. "These creatures are the product of an evolutionary process basically similar to that of Earth, but for the last fifty thousand years they've been adapting their environment to themselves—not vice versa. They are a weak, softbodied, defenceless species who have only been able to survive because of their sheer fecundity. On Saturn they are the favorite food of the other marine animals who are not quite so weak."

Lynn nodded. "How come

they're so darned civilized?"

"They have a highly developed racial memory. In fact, there are no true individuals. Each Saturnian is a kind of cell of the whole racial body, and the racial mind is something terrific."

"You mean—a kind of dispersed animal in which all the cells of the body are detached instead of joined together?"

Jollie wagged his head vigorously. "It's a poor analogy but it will do. They are soft globules of tissue and the whole species is one thinking entity with an ex-tremely high order of group in-telligence. But individually they are helpless and defenceless little morsels of food for their carnivore neighbors on Saturn. So naturally they have a humble defensive mentality. Defense against predators on their own planet is their guiding principle."

"So they're not hostile after all."

"How hostile can a winkle get?"

Lynn frowned in bewilderment. "But all this incredibly advanced technology of theirsspace-ships, atomic power, and radio transitor beams?"

"Big oak trees from little acorns grow," Jollie recited. "They've had fifty thousand years in which to build their sciences. First they built little machines, and then those machines built more ma-

chines to build more machines. They live in a robot world. They live like parasites among their machines. They have come a long way—but in a long time."
"But surely," said Lynn, "a

weak and defenseless species such as theirs would have developed weapons with which to protect themselves?"

"You don't understand. They have a purely defensive mentality, as I've said. They detest violence in other animals and cannot tolerate it in themselves. If they are compelled to do something that might be regarded as an intrusion upon the rights and liberties of others then they are uneasy and apologetic."

"That's true enough," Lynn thoughtfully. "They were certainly most humble when they delivered their ultimatum about the force barrier. But-why did they use a force barrier at all?"

"Why not?" Jollie cried, in a staccato guffaw of reedy merriment. He was a mixture of incompatible opposites, the strangest, most eccentric individual Lynn had ever met. But there was no denying his ability. He seemed to have mentally pinned the Saturnians to a dissecting table and opened them up with superlatively penetrating skill.

"Why not?" he repeated. "They are visiting a planet peo-pled by tough-skeletoned meat-eating giants, equipped with a fantastic variety of lethal weapons, and with at least one major bloody war per generation. They are scared to death, but they think our World Festival might signal the birth of lasting peace on Earth. Nevertheless they take precautions. They erect a force barrier instinctively—just as you blink instinctively when I make a pass at your eyes."

Here Jollie's bony fingers darted swiftly towards her eyes so that she closed them involuntarily. "See what I mean?" he asked.

"I still can't understand why they bothered to come to Earth across all those millions of miles of empty space."

"Ask him," said Jollie, pointing at the gun-metal cylinder projecting upwards from the center of the floor space. "He'll tell you."

Lynn eyed Jollie questioningly. "Him? I don't follow you."

"Him in the control tower," said Jollie, the restless flicker of humor appearing again in his eyes. "What did you imagine it was?"

She looked at the cylinder with renewed interest. A control tower, Jollie had said. But it looked so small. On the other hand, the Drazin robots were no criterion of size. How tiny were the real Saturnians? Were they really as small as—winkles on Earth? That was what Dr. Jollie had said.

And yet, under conditions of enormous pressure and powerful gravitation, it seemed logical enough that an alien evolution might produce diminutive animals —condensed animals none-theless complex for all their lack of physical bulk.

The robots contained small pressurized compartments to sustain their Saturnian supervisors; they were, in fact, little more than two-legged vehicles capable of performing allotted tasks. But there had to be a co-ordinating brain, a Saturnian-in-chief responsible for the actions of his workers, and he didn't need to be mobile.

As if in confirmation of her thoughts Jollie said, "The leader of the expedition is permanently installed in the cylinder. He's a fixture—until they go back. He's the brains behind the show. Ask him your questions. He'll talk your head off if you give him half a chance. And what's more, he'll show you."

"Show me what?"

"Ha!" said Jollie mysteriously. "Wait and see!"

Lynn turned to the cylinder again but she found it impossible to say anything without feeling vaguely ridiculous, so she turned to the Saturnian standing near the semantic machine.

"I should like to know . . ." she began, then hesitated.

The synthetic voice of the in-

tegrator rang tonelessly in the room. "What would you like to know?"

"What you are planning to achieve. And why is it necessary for you to occupy the whole of the site and seal it off from the rest of the world by a force barrier?"

"You ask many questions," said the integrator. "We can answer them all visually, Observe."

The operating Saturnians walked over to the wall and pressed a switch. Instantly an oval panel slid silently downwards revealing a dark grey cavity. The Saturnian returned to the center of the room.

She saw that the interior of the cavity brightened perceptibly as though filling with cold grey mist that swirled, thickened here and there, and condensed into tenuous shapes. And then the shapes were solidifying and taking color, resolving into familiar images. Lynn moved nearer. There was a perfect miniature of the Festival site south of the Stadium wall.

It was video de-luxe—three-dimensional and in color. It was more than video, for the tiny buildings were perfectly sculptured to the minutest detail, and illuminated by an even, shadowless light, even though it was ebony night outside. She could even see microscopic moving Saturnians in the foreground op-

erating the camera-like contrivances.

And then she saw the ghost buildings-saw them with an incredulous shock that momentarily disorganized the cool stable functioning of her trained scientific mind. Faint and ethereal, of fantastic and unearthly form, they encompassed and towered above the steel and concrete constructions of terrestrial imagination. They were pastel shadows from a surrealist dream mixing in iridescent mosaic with the site she knew, translucent phantoms of lines and curves and planes conforming to some alien geometry beyond human comprehension.

Lynn watched, fascinated to the point of hypnosis. "There is our contribution to your Festival," the voice was saying. "A Saturnian metropolis magnified many times, occupying the same space as your own buildings at the same time, but separated from them by one dimension of hyperspace."

"How . . .?" breathed Lynn, not understanding.

"We are using integral projectors. They are being operated by Saturnian technicians outside the Stadium wall. We are synthesizing matter by three-dimensional nuclear scanning—a simple development of the transitor apparatus."

"Not so simple," Jollie chuck-led.

"See how the work continues

steadily," the machine continued. "In spite of your attempts to interfere, fresh buildings are being spun from elemental energy as each moment passes, extending the boundary of our extra-dimensional city. We shall repair the damage to your buildings in the same way. Soon, though not so soon as it might have been, the whole area enclosed by the firewall will become a combined Earth-Saturnian Festival site."

Lynn was genuinely impressed by the concept. "I can understand now why it was so essential to prevent interference. But how will humans ever be able to enter your buildings? They are transparent and unreal."

"There will be two entrances to the Festival," the machine explained. "The terrestrial one will conduct visitors to the Earth exhibition in which Saturnian architecture will be as you see it now—a phantom city hovering on all sides. But the other entrance will operate a transfer apparatus to rotate visitors into the other dimension where Saturnopolis will be real and the Earth buildings will become ghosts. Observe."

The Saturnian moved to the wall and operated an unseen control near the oval cavity. Simultaneously Lynn experienced a transient surge of vertigo as if, for an instant, she were tottering on the edge of an enormous precipice. The room and everything

in it shimmered momentarily like a mirage about to disintegrate. She glanced quickly round, seeking something firm to hold on to, but the instant of instability had gone, and everything was as before.

Everything, that is, except the scene in the video cavity. Here a subtle change had taken place that was not immediately apparent, but looking closely she perceived that the balance between terrestrial and Saturnian buildings seemed to have shifted. The familiar structures that she knew had dissolved into spectral outlines and the fantastic pattern of Saturnopolis had crystallized into solid incredible reality. Lynn realized abruptly that a dimension had been traversed: Earth and all that it contained had become as insubstantial as a halfremembered dream.

The machine said without inflexion, "Thus the Festival of Earth will become the Festival of the Cosmos and in the exhibition buildings of Saturnopolis mankind will see the high level to which our scientific culture has attained." Then, after a pause, "And it is this, all this, which your people hope to destroy very soon with their nuclear bomb."

"Nuclear bomb?" Jollie echoed, no longer chuckling. "What do you mean?"

"During the night military engineers installed such a bomb close to the fire-wall. We anticipate a further ultimatum at dawn, followed by detonation of the bomb. It is almost dawn now . . ."

The voice ended abruptly in a loud splintering crash. And a familiar human figure leapt into appalling prominence. Dexter, quite naked and consumed with rage was wading into the Saturnians with his bare fists. One had already fallen heavily on to the semantic machine, bringing its discourse to a dead stop.

As Lynn watched another of the Saturnians intercepted Dexter's swinging arm and collapsed with a tremendous metallic concussion, its neck fracturing and gaping open.

It was the signal for a general rout. Swaying like wind-buffeted dolls of puff-ball composition the others fled from the room. Dexter stood pugnaciously over the inert Dupes, his eyes smouldering angrily.

Jollie, who, like Lynn, had been frozen beyond immediate reaction, recovered himself in a furious rush. "You fool! You might have killed them!"

"That's the general idea," said Dexter.

Lynn said quietly, "You shouldn't have done that, Jon. They're friendly creatures and they . . ."

"They gassed us, didn't they?"
Then, glancing down at himself

with a faintly startled air, "Good Lord, my clothes. Where are they?"

She pointed to the plastic container. Dexter seized it hastily and dressed in record time. Meanwhile Lynn gave him a terse outline of what had happened.

"Dr. Jollie has found out all we need to know about the Saturnians," she concluded. "They are a harmless race with a purely defensive mentality. They really did come on a peaceful mission, Jon. If you want proof take a look at the video."

For an instant Dexter peered intently into the oval video cavity. Then he turned back to Lynn. "It doesn't mean a thing. Technical trickery. Come on, we've got to get out of here." He moved over to the open doorway, then waited for them to join him.

Jollie scowled disapprovingly. "Obtuse idiot! Is he always like this?"

Dexter said impatiently, "Let's argue about it later. First we have to dig our way under the barrier!"

"There's an atomic bomb out there," Lynn warned.

He eyed her shrewdly. "All the more reason for leaving in a hurry. Anyway, I don't believe it. Kyle wouldn't be that crazy."

"If the Saturnian leader said there's a bomb then it's true," Jollie said.

"You're wasting my time. Come on, you two. We've got to get out of here and contact Kyle before the thing goes up!"

"What about these?" Lynn pointed to the three Saturnian robots lying broken and still on the floor. They might have been dead if they had ever been alive: their faces held the rigid set of rigor mortis.

Jollie shook his head, his face somber with concern. "It would be crazy to leave here. These Saturnians are technically advanced to a degree beyond human conception. If anyone can deal with an atomic bomb, they can."

"I don't trust them." Dexter turned to Lynn. "What are you waiting for?"

She regarded him solemnly. "I think Dr. Jollie's right. But I'll come with you." Then, as an afterthought, she added, "Maybe it would be a good idea to try to convince Kyle how wrong he is, if ever we get through the barrier."

Jollie said bitterly, "You're both insane. Off with you before I lose my temper."

Lynn turned to him and placed a gentle hand on his shoulder. "You mustn't feel too badly, Professor," she said. "There are many points of view, and not all of them completely wrong."

He brushed her hand away with ill-grace. "Off with you."

Dexter said, "Let him stay, Lynn. He's old enough to know what he's doing." She held out her arms helplessly, and said quietly. "We've got to stop that bomb."

She waited until Dexter had made his exit, then lowered herself through the opening. One final glance at Dr. Jollie, and then she was in Dexter's strong arms, being lowered gently to the ground.

Dawn was fading rapidly. Lynn could see Dexter's face as a grey featureless mask. They turned away from the disc and hurried towards the boundary of the arena—and at that moment Dexter experienced one of the most profound shocks of his life.

The Stadium was no longer there! It had disappeared completely—no, not quite completely, for the rows of tiered seats were still visible, like a reflection on a misted window. In their place were astonishing constructions of unearthly pattern towering angularly upwards in weird unfathomable design from a flat monochrome resilient surface. He was aware of color in fabulous profusion. It could have been a scene from a fantastic oriental fairy tale.

"What the hell?" he exclaimed, stopping short.

"I told you but you wouldn't believe me," said Lynn urgently. "This is what you saw in the video cavity. We're in another dimension. Jon, this is the Saturnian Festival site—extra-spatial but

none the less real now that we're in it. Our own world hardly exists except as a shadow. We can't escape."

"Don't you believe it," said Dexter grimly. "Come on."

He pulled her across the arena towards the Saturnian buildings, hurrying through crowds of Saturnians who dispersed in evident panic as they approached.

Presently they had left the Saturnian towers behind. When it was apparent that they were not being pursued they dropped to a walking pace. Ahead stretched a vast limitless plain of no color and indeterminate surface, but it was real and solid.

They walked on steadily, knowing that each step brought them nearer to the barrier and the world of ordinary three-dimensional sanity. The sky was blotched with dark crawling clouds. The universe seemed very bleak and unfriendly at that moment.

"Lynn . . ." Dexter whispered quietly.

And then the whole of creation burst into a blinding fury of searing white light. The air roared. They were alone in the ultimate of incandescent chaos, going on and on for an eternity as the atomic bomb exploded in a mush-rooming spiral of fire . . .

They were still alive, almost without knowing it, in a fury of

impenetrable heaving smoke and intermittent bursts of erratic scalding fire, under the malignant shadow of the enormous billowing mushroom which was climbing ponderously thousands of feet into the sky. The awareness came slowly and incredibly over a frantic eternity of terror.

The tremendous fireball, the dense crawling fingers of smoke, the gigantic smouldering crater that had once been the Festival site—all were phantoms of another dimension of space. The distant Saturnian buildings still stood erect, like a kaleidoscope pattern projected against the neutral backcloth of the forbidding sky, but obscured and screened by the transdimensional image of sweeping radioactive fog. Because of the technical genius of the Saturnians they had emerged unscathed from the furnace.

Lynn found herself gasping for breath in the pressure of Dexter's embrace, but it was a reassuring sensation. He was looking at her oddly, as though he had never seen her before, and she knew then that he had come to mean more to her than she ever dared to admit. She clung to him without speaking, and he knew what was in her mind.

And less than a quarter mile away the shattered atoms and residual nuclear energy of what had once been Robert Clayton joined the surging cloud of radioactive matter rising upwards to inflate the expanding spiral of smoke and flame in the dawn sky.

They looked at each other and said nothing. Words would have been meaningless at that moment—eclipsed and blotted out by the awful magnitude of what had taken place.

Then, thundering from the distant towers of Saturnopolis came the familiar toneless voice of the semantic integrator. "Go back to your Earth, male and female. Go back as peacemakers and tell them that we shall rebuild their Festival, which they themselves destroyed, in four days. Tell them to wait and watch, and they will see the impossible happen. The buildings of Earth will arise once more on the burning crater beneath you.

"Keep walking away from Saturnopolis—on and on. We shall extend the fire-wall beyond the zone of radioactive contamination. When you are in the safe area we shall raise the inner barrier until you pass through and return to your own dimension and your own world.

"We appoint you as delegates to convey our friendship. We humbly ask that we be left in peace until our work is complete when we shall raise the fire-wall and take our place in the great World Festival."

Slowly Dexter and Lynn walked across the level plain.

XI

THE FLASH from the atomic explosion, which occurred almost precisely at 5.27 a.m., was visible over the whole of Florida. It illuminated the night sky with angry livid flame, momentarily turning the darkness into brilliant day. Thousands of people awoke suddenly to find their bedroom walls savagely illuminated by an incredible incandescent glow from outside. Later, as dawn progressed, the pall of smoke from the giant mushroom could be seen fifty miles from the site.

Senator Drazin stirred uneasily in his hotel room as the windows rattled. He opened his eyes, and saw the glowing light patterns on the opposite wall. He became abruptly wide-eyed and alert. There were loud shouts from the wide avenue below.

The realization came to him with appalling suddenness. The atomic bomb had been detonated! The explanation was obvious: Colonel Kyle had written his name large on the scroll of human infamy. Insane with war-motivated hostility towards the Saturnians, he had gone ahead and fired the bomb.

Stubborn and cruel and cut off from ordinary humanity by his own colossal egotism, he had deliberately brought about the destruction of Dexter, Dr. Jollie, and the girl. He had to have this thing out with Kyle once and for all. It was no longer a matter of politics and strategy. It had become a bitter personal feud. The battle had to be fought out on that basis—between Kyle and himself.

Consumed with impotent fury Drazin showered and dressed, then phoned for a car to take him to the Operational Command Station.

colonel kyle was still awake at 5.27 a.m. Tired-eyed and unshaven, he sat in a white-walled room in the station, making neat concise notes relating to the Saturnian crisis to justify the resolute, self-determined course of action he intended to pursue.

The flash came first, white and intense through the window, so brilliant as to be unwatchable, gradually fading into fierce yellow and then orange. He got up in some astonishment, walked across to the window, and inspected the sky.

Then came the shock wave of the explosion, rattling the glass in the frame and sucking the air from his ears with a distinctive "woomph." In the next instant he knew that the atomic bomb had exploded.

But how—and why? That was the urgent problem. The control line to his office was not yet connected. Engineers were still working at the incoming line-termination unit near the entrance to the airfield. There was only one other possibility, and that was that the control line circuit to the bomb at the site had been broken—which meant that the Saturnians had extended the original force barrier. It was the only rational explanation. The restricted zone had been completely evacuated, and nobody in his right mind would go within miles of a primed atomic bomb.

In the space of a few minutes Kyle had the details neatly catalogued. Maybe the Saturnians had moved the barrier to gain access to the bomb with the intention of rendering it harmless. They had overlooked one simple factor-the break-to-make circuit. And now there were no Saturnians, and the site itself would be completely razed too. As for Dexter and Jollie and girl . . . It was a major tragedy. But the chances were that they had been killed by the Dupes anyway. Nobody would ever know the truth now.

It wasn't long before Major Passmore burst into his office, incongruously dressed in pyjama trousers with his olive-drab tunic flapping over his shoulders. "Did you see that flash, Colonel?" he demanded. "It couldn't have been . . ."

Kyle nodded grimly. "It was." "But . . ."

"Now listen to me, Major,"

Kyle said firmly, "this is strictly confidential. I did not explode that bomb. I had determined on other steps first. But the bomb went up just the same."

"But why?"

"Because the Saturnians decided to occupy more territory. Quite obviously they extended the radius of the barrier, so cutting the control lines to the bomb. It exploded automatically. The site and the Saturnians no longer exist."

"But what about Dexter, and the girl?"

"I'm convinced they were already dead, or at least prisoners of the Dupes. And that might even be worse than death. It was their own fault. Nobody can be held responsible."

Passmore returned in grim silence to the Officer's Mess, leaving Kyle more shaken than he would have cared to admit even to himself.

It was already daylight, and through the window of the office Kyle saw his next visitor approaching. He recognized the staff car immediately, and a glimpse of the long melancholy face with its drooping moustache merely confirmed the arrival of Captain Doakes. Kyle welcomed him cordially, but Doakes was clearly in an agitated and angry mood.

"So you did it, Colonel," he accused, "in spite of everything."
"Take it easy, Doakes," said

Kyle placatingly. "I was not responsible for the explosion."

"I know you well enough. You always get your own way. Damn you to hell—damn you—"

Kyle sighed patiently. "You don't understand, Doakes. I had nothing to do with what happened. In fact, I—"

Doakes cut him short with a mirthless laugh. "The site," he said, "is a vast crater, and it's still standing. Only it's transparent for one thing. And they're not the same buildings as before—they're new, fantastic and completely unearthly."

"Are you crazy?" Kyle demanded.

"No. I saw it myself, less than an hour ago, from an autogyro. I took some photographs. You see, the second wall has just been dissolved."

"Don't you know it's against orders to fly over the site," roared Kyle. "Let alone take photographs. Where are they?"

"I intend to turn them over to Senator Drazin," said Doakes.

The Colonel's lips went white. Without another word he turned and strode from the office.

Doakes settled himself comfortably in a chair. After a while he lit a cigarette.

Footsteps sounded in the corridor. He glanced at his watch in some surprise, for no more than sixteen minutes had elapsed since the Colonel's departure. Then

next moment the door swung open, and Dr. Lynn Farrow walked in, followed by Jim Dexter.

Doakes was momentarily petrified. He sat transfixed and wideeyed until the girl said, "What's the trouble, Captain? Seen a ghost?"

And then he sprang to his feet and advanced on them with glowing enthusiasm. "What the hell!" he exclaimed. "Lynn, as large as life! Dexter, you son of a gun! You scared the life out of us!"

"We've been slumming with the Dupes," Lynn said. She looked pale and tired, as did Dexter.

Doakes ushered them both into chairs, and hovered over them with restless curiosity. "Well," he demanded. "Come on, let's have it!"

Dexter explained briefly what had happened, then asked for Colonel Kyle.

"I have an idea he's taking a look at the site in an autogyro," said Doakes. "If I'm right he should be back in about half an hour."

Dexter said, "Okay, I'll wait for him. But there's no need for Lynn to wait too. Be a good boy, Doakes, and take her to her hotel. You've got a car? If not you'll find Clayton's outside, though I'd prefer to have it here for Kyle to see."

"Clayton's?" said Doakes, halfsensing the truth. "Yes. We found it near the military cordon. We think Clayton got himself killed by the bomb."

"How come?"

"We've a theory. But take Lynn back to her hotel. Maybe she'll tell you a few things on the way."

The girl got up wearily. "Thanks Jon," she said. Then she turned to Captain Doakes and smiled. "Ready, Captain?"

Doakes bowed slightly. He took her arm and walked over to the door. He grinned cheerfully at her, and the unaccustomed smile transformed his mournful face. "Come on, gorgeous—I'll get you there in record time."

After they had gone, Dexter stood staring out of the window, hardly thinking at all. So much had happened in the last few hours that his mind seemed to have stopped functioning. For the moment there was nothing he wanted more than a cup of hot coffee—and food. He hurried out of the room in search of breakfast.

### XII

THE OFFICE remained empty for about half-an-hour after Dexter had gone, and then Senator Drazin arrived, still boiling with indignant wrath. He paced belligerently into the center of the room and stood glaring angrily at the Colonel's document-littered desk.

Had he glanced out of the window at that instant he would have seen a small autogyro descending slowly. He picked up the phone and asked the switchboard operator where the Colonel was, but she was sorry, she didn't know. Then his eyes fell on the penciled notes on the desk. He scanned them rapidly, his lower lip curling in bitter anger.

The necessity of impressing aliens with our military strength, said the notes. Drazin treasonably wrong. Overwhelming evidence of hostility . . . And then followed a list of incidents, some highly colored.

Drazin was glad to learn in advance the arguments which the opposition would put forward. He was still perusing Kyle's notes when the Colonel himself walked in.

For a timeless interval the two men simply stood and stared at each other—Drazin baleful and angry, Kyle tired and preoccupied. Then the Senator flung the sheaf of papers on to the desk and shouted, "Murderer!"

The Colonel said patiently, "Lay off. You don't know the facts."

"The facts are," insisted Drazin his eyes aflame, "that I told you exactly what I thought of your criminal orders. In spite of that you went ahead. You deliberately murdered Jollie, Dexter and Lynn Farrow."

Kyle said in carefully controlled tones, "Better get going, Drazin, before I lose my temper." So far as the Colonel was concerned he had reached the limit of his patience.

They were still glaring at each other when Dexter returned from breakfast.

In a stunned voice, Drazin said, "Dexter! Where did you spring from? I thought you were dead."

"I'm very much alive. So is Dr. Farrow, Dr. Jollie, and the Saturnians. Only you two look more dead than alive."

The Colonel picked up a chair and sank heavily into it. Drazin followed his example.

Kyle said, "Ever since the Dupes detonated the bomb . . ."

"They didn't," said Dexter. "It was detonated by one of our party."

"Who?"

"Robert Clayton."

"I don't believe it," Drazin said. "You're trying to defend Kyle."

"Drazin, you're a crazy fool," snapped the Colonel.

"Stop it," Dexter said irritably.
"Listen to me for a change. I know the whole story. I've been inside the barrier all night and only came out at dawn. I brought Lynn with me, but Dr. Jollie remained."

He paused and glared forbiddingly at the others. "On the way back we found Clayton's car, deserted, parked off the side of the road, close to a police check point. We tried to phone him at his apartment but got no reply. It's fairly obvious he went into the restricted zone to sabotage the bomb, but detonated it instead. I made inquiries at the police check point and they confirmed that Clayton tried to get through around one a.m. I guess he must have turned back a little way, dumped the car, and cut across country."

"Fool!" snorted Kyle. "He must have known it was a break-tomake circuit—everybody knew! Why did he have to go in there and tamper with it?"

"Because," Dexter said slowly, "he was in love with Lynn Farrow, and he wasn't prepared to stand by and see her blown to atoms."

"So Clayton's dead?" said Drazin. "But you're alive . . ."

Dexter reviewed everything that had happened.

Kyle said, "Too bad there won't be any Festival!"

"But there will! You see, these little Saturnian men know more about science and electronics than we'll know in ten thousand years. They demonstrated their method of building. They don't use bricks. They use projectors! They *integrate* buildings right in front of your eyes, from dozens of camera-like gadgets. We've got a lot to learn from them."

"I looked over the site a short time ago in a gyro," Kyle said. "But those buildings are transparent images, Dexter. They're unreal."

"I was just getting to that," said Dexter. "Their intention is to build a Saturnian city on top of our own exhibition, occupying the same place at the same time."

"Impossible," Kyle snorted.

"The Saturnian city is in a different dimension. Just to prove it -while I was still unconscious in the sphere the chief Dupe transposed us all into that other dimension. Then the Saturnian city became real, and the Earth buildings became ghosts! That's how we managed to escape the atomic explosion. When the bomb went off we were still in that other dimension. Earthly objects and Earth too were mere phantoms-and you can't be killed by a ghostbomb! Lynn Farrow and I were right in the middle of the explosion, but we didn't feel a thing."

Kyle said nothing.

"Finally, they charged us with the duty of explaining the truth to those responsible for the fiasco. I sent Lynn back to her hotel—Captain Doakes took her in his car. She's dead-beat, and so am I for that matter. However, I'm going to Washington to put the true facts in front of the Chiefs of Staff."

"I see," said Kyle thoughtfully. "Well, you can. There is no ob-

stacle now. As it happens, I'm going to Washington too."

"Me too," said the Senator.
"Looks like we're all going to Washington, now that the second wall is just a nightmare memory.
And the first wall too!"

Dexter laughed suddenly to the bewilderment of the other two.

"What's so funny?" demanded Drazin in a hurt tone of voice.

"The idea of you both going to Washington. I've got a suggestion to make, and if you think it over carefully you'll do as I say."

"Go ahead," said the Colonel.

"There's no necessity for all three of us to go to Washington."

"But there is. There'll be millions of questions we'll have to answer," Kyle pointed out.

"Okay, so the United States and the United Nations will demand a full accounting. Since two humans have emerged safely from inside the barrier, the situation has taken on a new aspect that affects the entire world and Washington will have to be the first to know. Right?"

Kyle nodded.

"So, why should either you or Drazin be quizzed until the brass hats have heard my report? It will be factual, concrete, totally unbiased."

"But we can't just ignore the clamor that will arise," the Colonel argued. "The fact that you have an interesting report doesn't alter the situation. They'll de-

mand a report from me personally—and from Drazin. They'll want to hear both sides."

"Let me finish. What I suggest is this. Both of you pack a small bag each with shaving utensils, towel, toothbrush, and so on, and go through the barrier into the site for a few days."

"Are you crazy?" demanded Kyle. "What the hell for?"

"Look," said Dexter, trying to marshal his thoughts. "We know now that the Saturnians are friendly. They are going to rebuild their own buildings and ours in its entirety. Why shouldn't two responsible delegates of Earth enter the site to confer with the aliens?

"What publicity value: Colonel Kyle and Senator Drazin bearding the Saturnians in order to lay the foundations for interplanetary peace. Dr. Jollie is there, and I'm sure the three of you could cooperate well with the Saturnians. And even if you found yourselves superfluous—well, a few days in hiding would allow time for small physical inconveniences to disappear."

Dexter paused. "Meanwhile I'll tell the brass at Washington you both went into the site at the invitation of the Saturnians to negotiate peace. I'll explain that your first duty was to settle the complex situation before reporting to Washington."

"But . . ." protested Kyle. Drazin was frowning.

Dexter insisted. "Believe me, there's no alternative. You can't carry on a public feud without annoying Washington. It's undignified. But if you go into the site together, you'll be regarded as heroes. I'll see to that."

"But how can we get through the barriers?" asked Kyle.

Dexter smiled. "This is a secret just between the three of us for the moment. It terminates at ground level. You can dig your way in underneath it!"

"Do you mean that we could have dug our way in at any time?"

"That's right, Colonel! It's been a wide open door all along. Detail a group of engineers to dig a tunnel, order them to keep their mouths shut, and simply walk in, or, rather, crawl in. It's easy."

The Colonel and the Senator turned and eyed each other suspiciously. Kyle said, "I don't know that I care for Drazin's company . . ."

"That goes for me, too," snapped the Senator.

"This thing is more important than either of you. Bury the hatchet. The Saturnians say they will rebuild the site in four days by atomic projection—or something like that. Stay with them for four days, then come out and take all the credit. Jollie won't talk. He's interested in science, not politics."

"Maybe you've got something there, Dexter," Kyle conceded grudgingly. "I must confess I don't favor going to Washington like this—not for a few days at any rate. I don't know how Drazin feels."

Drazin said slowly, "I'm inclined to agree, damn it. I never thought I'd ever sink so low as to agree with Kyle."

"You and Kyle are opposites. Between you there isn't an angle of any situation that isn't adequately covered. Why don't you work together, become a potent force for good?"

Drazin agreed with sincerity. "I'm all for co-operation. Always was. But some people are so stubborn."

"Then why don't you both shake hands and forget the past?"

There was an awkward interval of strained silence. "Well..." muttered Drazin hesitantly.

The Colonel immediately became positive in his action. He stood up and held out a firm hand. "I hate doing it. Senator," he said, "but Dexter's right. People like us can't afford to quarrel. I'll bury the hatchet if you will. Here's my hand on it."

The Senator got up slowly and ponderously with an expression on his face that seemed to say "This is the end of all things." He took Kyle's hand and they shook—two embattled adversaries finally throwing in the towel.

Dexter smiled a quiet smile of triumph. He said happily, "Well, that's that. I'm going to Washington, and I'll explain why you two boys aren't coming. You'll get plenty of good publicity. Go into the site before the reporters roll up in force. Dr. Jollie will tell you everything you need to know."

"Okay, Dexter," Kyle replied. Then after an instant of selfconscious hesitation, "And thanks."

#### XIII

THE FESTIVAL of Earth was a blaze of rainbow lights and spotlit flags marking in twinkling and fluttering fluorescent outline the tall towers and domes and spires of the exhibition buildings, and over all, transparent and diaphanous, hung the auroral fantasy of pattern and hue that was Saturnopolis, forming a composite three-dimensional montage exceeding the wildest conception of any human surrealist.

The blue curving dome of the Floridean sky was speckled with overhanging gyro aircraft crammed with Press men, radio men, TV men, newsreel men—all the people whose job it was to get the news and the pictures and spread them around the wide wondering world.

Under the main entrance to the site with its giant translucent arch bearing tall welcoming signs in two languages an ornate plinth had been erected. Dignitaries and celebrities occupied the platform, a living human backdrop to the slender microphones into which important people had been having their say. Remote television cameras flung the scene into a billion home receivers through eagle-eyed telephoto lenses.

The President of the United States had already made the inaugural speech and delegates from other leading national powers had made their formal recitations as the world watched and listened through electronic eyes and ears.

In a room in the Military Intelligence building, Washington, Colonel Kyle sat watching the ceremony on a large video screen.

Two other officers were in the room with him, both absorbed in the televised scene, taking in the reedy words of Dr. Jollie who was at that moment facing the microphones.

Jollie was saying, "There has been a tendency in later generations to think that progress is only possible during the impetus of war—that the mere act of warfare acts as a stimulus to man's ingenuity. I sincerely believe that a study of Saturnian culture and characters, for these are humble and peace-loving people, will explode that fallacy and result in the abolition of war and military institutions from this planet.

"There has been much talk since the Saturnians arrived on Earth about invisible barriers. But there were, in fact, three invisible barriers between ourselves and the alien visitors. The first was the phenomena we all know about—the fire-walls. They were defensive precautionary measures whose purpose was widely misunderstood.

"The second barrier, which was also responsible for a great deal of mischief and misunderstanding, was the abstract conception of difference—the difference tween the Saturnian and ourselves. Difference may not be a tangible thing but it is very real. The utter remoteness of the mental mechanics of the Saturnians from ourselves was a great obstacle to mutual understanding, the same kind of obstacle that prevents any kind of communion between, say, a mouse and an elephant, or an eagle and a snake.

"And, perhaps arising out of that, the third barrier—that of suspicion and hatred of the unknown. That is a human characteristic, whereas the other two barriers are fundamental. Suspicion and hatred are invariably based on fear, and it was undoubtedly a subconscious fear of these bizarre strangers from out of space which resulted in the launching of the ill-fated military attack."

Jollie paused, surveying his au-

dience with keen admonishing eyes. He was no longer the frail eccentric, but had acquired a slender learned dignity. He might have been a college professor lecturing an enormous class of backward pupils.

He went on, "We have, finally, overcome these three barriers. We have found, perhaps to our surprise, that there was no hostility in the aliens, only in ourselves. As is so often the case we projected that hostility through the invisible barrier, seeing enemies where there were friends. This is the supreme lesson of Operation Barrier."

One of the officers in the room said to Kyle, "He talks for all the world like Senator Drazin—peace, peace, and three bags full!"

Kyle regarded him shrewdly. "It was something of an education for me," he said soberly. "Jollie's no fool. When I heard him backing up the Senator's arguments I began to realize that there might be something in this peace business. I began to understand Drazin better."

"Always thought you hated the guy."

Kyle shook his head. "Maybe I did at one time, but not now. We have diametrically opposite minds, Drazin and I, but that can be a good combination. Ever since we went inside the barrier together we've been firm friends."

At that moment the portly

shape of Senator. Drazin lumbered towards the microphone. There was a prolonged rustle of comment, a kind of symbolic slackening off among the audience, because Drazin's speech was the final one on the programme, and the prelude to the actual opening of the Festival.

He stood erect and spoke to the multitude with easy confidence. He said, simply and sincerely, "Our friends from Saturn, in the face of vicious and persistent hostility, did not lose that tolerance and understanding which is their strength. We sought to destroy, and they to build and rebuild. For this primary lesson in ethics we shall be ever in their debt. At this time, when mankind is united in a common demonstration of culture and goodwill, let us remember the shining example of the Saturnians. Let us resolve to outlaw suspicion, aggression and hatred, and make the newly-born era the millennium of peace and progress."

Then he turned to a varnished familiar figure seated to the rear and held out an arm in a gesture of friendship.

"I now invite a representative of our friends and benefactors to step forward, on behalf of the peoples of Saturn, to cut the golden cord and declare the Festival open."

The Drazin-like form of the Saturnian, echoing the real rotund

solidity of the Senator himself, stood up and bowed to the assembled throng. The roar of applause was deafening. Then, from a small velvet cushion brought forward by a beautiful girl in a two-piece bathing costume he took a pair of small golden scissors and descended the sloping ramp leading to the main entrance. All the members of the inaugural committee on the platform followed him.

The lens turrets of the video cameras zoomed into close-up as the scissor blades closed on the tape. And at the same moment, in the office of the Director of Technical Services on the twentieth story of the site in control headquarters, Jon Dexter, E. G. Wayne and Dr. Lynn Farrow touched glasses as they drank a toast to the success of the Festival.

Wayne said, "Well, it happened. Right on schedule, in spite of everything!"

He glanced at his watch. "I'd better get down to the higherplane entrance before the V.I.P's reach it. I have to conduct them on the initial tour of Saturnopolis."

After he had gone Dexter took Lynn's hand. "Right on schedule," he said echoing Wayne's words.

"And the rest?" she asked, moving close to him.

"That will be right on schedule, too."

She said, "Don't stay away from me for too long, darling."

Dexter smiled and took her in his arms. "You worry too much," he murmured. "I'll be back, in ten days, maybe two weeks. But I'll be back."

"Ten days is an eternity," she said.

"Then I'll be back in an eter-

nity," he answered, and kissed her. For a long trembling moment they looked at each other.

"When the Festival is over," he said, "I'll want you to come to Washington with me."

"I'd come to Saturn with you," she replied simply. "Even though I like Earth much better."

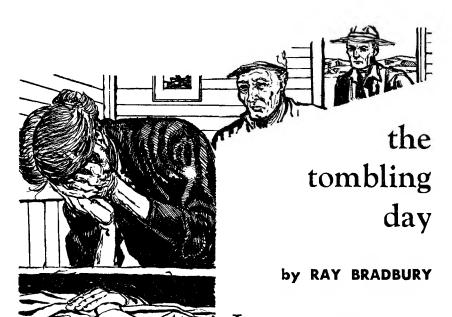
They went out into the elevator and down to the Festival of Earth.



## **NEXT ISSUE'S COMPLETE NOVEL**

# THE MILLION CITIES

One great purpose united them—to save their underground cities from a bigot's molelike mind



A dead man could not take away the life that soared giddily in Grandma Loblilly. For she was . . . eighty years young!

It was the Tombling day, and all the people had walked up the summer road, including Grandma Loblilly, and they stood now in the green day and the high sky country of Missouri, and there was a smell of the seasons changing and the grass breaking out in flowers.

"Here we are," said Grandma

In the art world when the auctioneer becomes wildly excited about Old Masters and New you'll hear one phrase repeated with every tap of the gavel: "This is a Rembrandt original" or "This is a Van Gogh original." And now . . . in the realm of science fiction and fantasy . . . one name has taken on an almost Van Goghian glow—that of Ray Bradbury. And here is a Bradbury which is brand new in all but a very carping, technical sense, for it appeared in SHENANDOAH, a quality magazine with a small circulation and in a limited two thousand sale science fiction anthology.

Loblilly, over her cane, and she gave them all a flashing look of her yellow-brown eyes and spat into the dust.

The graveyard lay on the side of a quiet hill. It was a place of sunken mounds and wooden markers; bees hummed all about in quietudes of sound and butterflies withered and blossomed on the clear blue air. The tall sunburnt men and ginghamed women stood a long silent time looking in at their deep and buried relatives.

"Well, let's get to work!" said Grandma, and she hobbled across the moist grass, sticking it rapidly, here and there, with her cane.

The others brought the spades and special crates, with daisies and lilacs tied brightly to them. The government was cutting a road through here in August and since this graveyard had gone unused in fifty years the relatives had agreed to untuck all the old bones and pat them snug somewhere else.

Grandma Lobilly got right down on her knees and trembled a spade in her hand. The others were busy at their own places.

"Grandma," said Joseph Pikes, making a big shadow on her working. "Grandma, you shouldn't be workin' on this place. This's William Simmons' grave, Grandma."

At the sound of his voice, everyone stopped working, and listened, and there was just the sound of butterflies on the cool afternoon air.

Grandma looked up at Pikes. "You think I don't know it's his place? I ain't seen William Simmons in sixty years, but I intend to visit him today."

She patted out trowel after trowel of rich soil and she grew quiet and introspective and said things to the day and those who might listen. "Sixty years ago, and him a fine man, only twenty-three. And me, I was twenty and all golden about the head and all milk in my arms and neck and persimmon in my cheeks. Sixty years and a planned marriage and then a sickness and him dying away. And me alone, and I remember how the earth-mound over him sank in the rains—"

Everybody stared at Grandma. "But still, Grandma—" said Joseph Pikes.

The grave was shallow. She soon reached the long iron box. "Gimme a hand!" she cried.

Nine men helped lift the iron box out of the earth, Grandma poking at them with her cane. "Careful!" she shouted. "Easy!" she cried. "Now." They set it on the ground. "Now," she said, "if you be so kindly, you gentlemen might fetch Mr. Simmons on up to my house for a spell."

"We're takin' him on to the new cemetery," said Joseph Pikes.

Grandma fixed him with her

needle eye. "You just trot that box right up to my house. Much obliged."

The men watched her dwindle down the road. They looked at the box, looked at each other, and then spat on their hands.

Five minutes later the men squeezed the iron coffin through the front door of Grandma's little white house and set the box down by the pot-belly stove.

She gave them a drink all around. "Now, let's lift the lid," she said. "It ain't every day you see old friends."

The men did not move.

"Well, if you won't, I will." She thrust at the lid with her cane, again and again, breaking away the earth-crust. Spiders went touching over the floor. There was a rich smell, like plowed spring earth. Now the men fingered the lid. Grandma stood back.

"Up!" she said. She gestured her cane, like an ancient goddess. And up in the air went the lid. The men set it on the floor and turned.

There was a sound like wind sighing in October, from all their mouths.

There lay William Simmons as the dust filtered bright and golden through the air. There he slept, a little smile on his lips, hands folded, all dressed up and no place in the world to go. Grandma Loblilly gave a low moaning cry. "He's all there!"

There he was, indeed. Intact as a beetle in his shell, his skin all fine and white, his lips still with color to them, his hair combed neat, his tie tied, his fingernails pared clean. All in all, he was complete as the day they shoveled the earth upon his silent case.

Grandma stood tightening her eyes, her hands up to catch the breath that moved from her mouth. She couldn't see. "Where's my specs?" she cried. People searched. "Can't you find 'em?" she shouted. She squinted at the body. "Never mind," she said, getting close. The room settled. She sighed and quavered and cooed over the open box.

"He's kept," said one of the women. "He ain't crumbled."

"Things like that," said Joseph Pikes, "don't happen."

"It happened," said the woman.
"Sixty years underground.
Stands to reason no man lasts that long."

The sunlight was late by each window, the last butterflies were settling amongst flowers to look like nothing more than other flowers.

Grandma Loblilly put out her wrinkly hand, trembling. "The earth kept him. The way the air is. That was good dry soil for keeping."

"He's young," wailed one of the women, quietly. "So young." "Yes," said Grandma Loblilly, looking at him. "Him, lying there, twenty-three years old. And me, standing here, pushing eighty!" She shut her eyes.

"Now, Grandma," Joseph Pikes touched her shoulder.

"Yes, him lyin' there, all twenty-three and fine and purty, and me—" She squeezed her eyes tight. "Me bending over him, never young agin myself, only old and spindly, never to have a chance at being young again. Oh, Lord! Death keeps people young. Look how kind death's been to him."

She ran her hands over her body and face slowly, turning to the others. "Death's nicer than life. Why didn't I die then too? Then we'd both be young now, together. Me in my box, in my white wedding gown all lace, and my eyes closed down, all shy with death. And my hands making a prayer on my bosom."

"Grandma, don't carry on."

"I got a right to carry on! Why didn't I die, too? Then, when he came back, like he came today, to see me, I wouldn't be like this?"

Her hands went wildly to feel her lined face, to twist the loose skin, to fumble the empty mouth, to yank the grey hair and look at it with appalled eyes.

"What a fine coming-back he's had!" She showed her skinny arms. "Think that a man of twenty-three years will want the likes of a seventy-nine year woman with sump-rot in her veins? I been cheated! Death kept him young forever. Look at me; did Life do so much?"

"They're compensations," said Joseph Pikes. "He ain't young, Grandma. He's long over eighty years."

"You're a fool, Joseph Pikes. He's fine as a stone, not touched by a thousand rains. And he's come back to see me and he'll be picking one of the younger girls now. What would he want with an old woman?"

"He's in no way to fetch nuthin' offa nobody," said Joseph Pikes.

Grandma pushed him back. "Get out now, all of you! Ain't your box, ain't your lid, and it ain't your almost-husband! You leave the box here, leastwise tonight, and tomorrow you dig a new burying place."

"Awright, Grandma; he was your beau. I'll come early to-morra. Don't you cry, now."

"I'll do what my eyes most need to do."

She stood stiff in the middle of the room until the last of them were out the door. After awhile she got a candle and lit it and she noticed someone standing on the hill outside. It was Joseph Pikes. He'd be there the rest of the night, she reckoned, and she did not shout for him to go away. She did not look out the window again, but she knew he was there, and so was much better rested in the following hours.

She went to the coffin and looked down at William Simmons.

She gazed fully upon him. Seeing his hands was like seeing actions. She saw how they had been with reins of a horse in them, moving up and down. She remembered how the lips of him had clucked as the carriage had glided along with an even pacing of the horse through the meadowlands, the moonlight shadows all around. She knew how it was when those hands held to you.

She touched his suit. "That's not the same suit he was buried in!" she cried suddenly. And yet she knew it was the same. Sixty years had changed not the suit but the linings of her mind.

Seized with a quick fear, she hunted a long time until she found her spectacles and put them on.

"Why, that's not William Simmons!" she shouted.

But she knew this also was untrue. It was William Simmons. "His chin didn't go back that far!" she cried softly, logically. "Or did it?" And his hair, "It was a wonderful sorrel color, I remember! This hair here's just plain brown. And his nose, I don't recall it being that tippy!"

She stood over this strange man and, gradually, as she watched, she knew that this indeed was William Simmons. She knew a thing she should have known all along: that dead people are like wax memory—you take them in your mind, you shape and squeeze them, push a bump here, stretch one out there, pull the body tall, shape and re-shape, handle, sculp and finish a manmemory until he's all out of kilter.

There was a certain sense of loss and bewilderment in her. She wished she had never opened the box. Or, leastwise, had the sense to leave her glasses off. She had not seen him clearly at first; just enough so she filled in the rough spots with her mind. Now, with her glasses on . . .

She glanced again and again at his face. It became slowly familiar. That memory of him that she had torn apart and put together for sixty years faded to be replaced by the man she had really known. And he was fine to look upon. The sense of having lost something vanished. He was the same man, no more, no less. This was always the way when you didn't see people for years and they came back to say howdy-do. For a spell you felt so very uneasy with them. But then, at last you relaxed.

"Yes, that's you," she laughed. "I see you peeking out from behind all the strangeness. I see you all glinty and sly here and there and about."

She began to cry again. If only

she could lie to herself, if only she could say, "Look at him, he don't look the same, he's not the same man I took a fetching on!" then she could feel better. But all the inside-people sitting around in her head would rock back in their tiny rockers and cackle and say, "You ain't foolin' us none, Grandma."

Yes, how easy to deny it was him. And feel better. But she didn't deny it. She felt the great depressing sadness because here he was, young as creek water, and here she was old as the sea.

"William Simmons!" she cried. "Don't look at me! I know you still love me, so I'll primp my-self up!"

She stirred the stove-fire, quickly put irons on to heat, used irons on her hair till it was all grey curls. Baking powder whitened her cheeks! She bit a cherry to color her lips, pinched her cheeks to bring a flush. From a trunk she yanked old materials until she found a faded blue velvet dress which she put on.

She stared wildly in the mirror at herself.

"No, no." She groaned and shut her eyes. "There's nothing I can do to make me younger'n you, William Simmons! Even if I died now it wouldn't cure me of this old thing come on me, this disease of age!"

She had a violent wish to run forever in the woods, fall in a

leaf-pile and moulder down into smoking ruin with them. She ran across the room, intending never to come back. But as she yanked the door wide a cold wind exploded over her from outside and she heard a sound that made her hesitate.

The wind rushed about the room, yanked at the coffin and pushed inside it.

William Simmons seemed to stir in his box.

Grandma slammed the door.

She moved slowly back to squint at him.

He was ten years older.

There were wrinkles and lines on his hands and face.

"William Simmons!"

During the next hour, William Simmons' face tolled away the years. His cheeks went in on themselves, like clenching a fist, like withering an apple in a bin. His flesh was made of carved pure white snow, and the cabin heat melted it. It got a charred look. The air made the eyes and mouth pucker. Then, as if struck a hammer-blow, the face shattered into a million wrinkles.

The body squirmed in an agony of time. It was forty, then fifty, then sixty years old! It was seventy, eighty, one hundred years! Burning, burning away! There were small whispers and leaf-crackles from its face and its age-burning hands, one hundred

ten, one hundred twenty years, lined upon etched, greaved, line!

Grandma Loblilly stood there all the cold night, aching her birdbones, watching, cold, over the changing man. She was a witness to all improbabilities. She felt something finally let loose of her heart. She did not feel sad any more. The weight lifted away from her.

She went peacefully to sleep, standing against a chair.

Sunlight came yellow through the woodland. Birds and ants and creek waters were moving, each as quiet as the other, going somewhere.

It was morning.

Grandma woke and looked down upon William Simmons.

"Ah," said Grandma, looking and seeing.

Her very breath stirred and stirred his bones until they flaked, like a chrysalis, like a kind of candy all whittling away, burning with an invisible fire. The bones flaked and flew, light as pieces of dust on the sunlight. Each time she shouted the bones split asunder, there was a dry flaking rustle from the box.

If there was a wind and she opened the door, he'd be blown away on it like so many crackly leaves!

She bent for a long time, look-

ing at the box. Then she gave a knowing cry, a sound of discovery and moved back, putting her hands first to her face and then to her spindly breasts and then traveling all up and down her arms and legs and fumbling at her empty mouth.

Her shout brought Joseph Pikes running.

He pulled up at the door only in time to see Grandma Loblilly dancing and jumping around on her yellow, high-peg shoes in a wild gyration.

She clapped her hands, laughed, flung her skirts, ran in a circle, and did a little waltz with herself, tears on her face. And to the sunlight and the flashing image of herself in the wall mirror she cried:

"I'm young! I'm eighty, but I'm younger'n him!"

She skipped, she hopped, and she curtsied.

"There are compensations, Joseph Pikes, you was right!" she chortled. "I'm younger'n all the dead ones in the whole world!"

And she waltzed so violently the whirl of her dress pulled at the box and whispers of chrysalis leapt on the air to hang golden and powdery amidst her shouts.

"Whee-deee!" she cried. "Whee-heee!"

An Analysis of the Work of an Early American Writer With Prophetic Gifts in the Realm of Science Fantasy

# THE FABULOUS FANTAST

A legend in his own lifetime, Fitz-James O'Brien is still widely discussed today

 ${f A}$ NY SERIOUS student of American letters, asked to name the half-dozen writers of the nineteenth century who exerted the greatest influence upon the development of the American short story, would be most unlikely to omit Fitz-James O'Brien. In all honesty, he would have to admit that O'Brien's high standing as a practitioner of the short story was earned primarily on the basis of the science fiction he wrote, secondarily on his works of fantasy and horror and on his other works. not at all.

His most famous story, The Diamond Lens, became the literary sensation of the year when it



Friz-James O'Bries

## by SAM MOSKOWITZ

appeared in the ATLANTIC MONTHLY for January, 1858. The story deals with a young microbiologist, who, in his thirst for knowledge, is frustrated by the limitations of his instrument. To find a way of constructing a superior one, he consults, through a medium, the spirit of Leeuwenhoek, known as the father of microscopy. Informed that he needs a diamond of 140 carats in order to construct a finer instrument, he obtains such a stone by killing a close friend who owns one.

Through a special lens, ground from the diamond, he views in a drop of water a microscopic world of surpassing beauty. In



that tiny cosmos, his attention is drawn to a humanlike female creature he names Animula. He falls hopelessly, dispairingly in love with the small unattainable woman, whose grace and delicacy make the most accomplished women dancers of the ballet appear gross and clumsy by comparison.

Fitz-James O'Brien was one of the great pioneers of the American short story. He was a contemporary of Poe and Hawthorne and his style was distinguished without being in the least pretentious. His "Diamond Lens", "What Was It?" and "The Wondersmith" have found their way into many anthologies and his place in American letters is secure, though he died too young to produce more than a handful of science fiction classics. Locating this story represents the latest of an exciting series of science fiction discoveries by Sam Moskowitz, following such recent research and scholarly finds as Edward Everett Hale's "The Brick Moon" and the revelation that Tennessee Williams, one of America's leading dramatists, got his start in the fantasy pulp, WEIRD TALES.

Though the drop of water containing the fantastic, minute world was coated in oil of turpentine to insure its protection, it gradually evaporates. Helpless to do anything about it, the young scientist watches his beloved Animula shrivel and die.

Shattered by the experience, he loses the will to work and spends the rest of his life on public charity. Occasionally he is invited to lecture at optical societies, where his theories are always regarded as good for a laugh.

The tale carries the reader along with such verve, displays such a richness of imagination and engenders so high an interest, that it is little wonder that the editor of ATLANTIC felt that he could claim sole credit for publishing an original work of fiction which was destined to change the entire direction of American short-story writing.

This claim was not completely substance, for though without O'Brien did not write with the brilliant economy of means and accomplished style of Edgar Allan Poe, he did add an effective note of credibility to his stories by placing them in the familiar setting of the New York City of his day. The result was the beginning of a trend which the famous critic, Arthur Hobson Quinn, in his book AMERICAN FICTION termed "The Transition to Realism." That O'Brien was able to contribute to

and profoundly influence a trend towards realism with stories of scientific extrapolation is impressive evidence of his originality and literary skill.

Fitz-James O'Brien was not to be permitted to enjoy the plaudits of the critics for long. No sooner did The Diamond Lens achieve wide popular recognition, then O'Brien was accused of having derived the theme of his story for unpublished manuscript by William North, entitled Microcosmus. Since North was dead and the manuscript in question was not found among his effects, the accusation could not readily be confirmed or disputed. As a result, O'Brien found himself trying to stamp out rumors that springing everywhere up like prairie fires.

Finally, Dr. Alfred H. Guernsey, editor of HARPER's came to O'Brien's defense by publicly stating that he had read North's manuscript, which had previously been submitted to him and rejected, and that there was not the remotest similarity in the handling of the microscopic world theme by the two authors. North's manuscript was never found, so the science fiction world lost a story of historical interest, if not of significant literary importance.

The long-range influence of *The Diamond Lens* is nowhere better displayed than in the great number of similar stories which were

submitted to editors after Ray Cummings' *The Girl in the Golden Atom* appeared in ALL STORY MAGAZINE for March 15, 1919.

What of Fitz-James O'Brien himself—his origin, background and life?

O'Brien was born in Ireland on December 31, 1828, the son of a well-to-do lawyer. Even as a youth his stories and poems were published in Irish, Scottish and British magazines. He squandered an inheritance of eight thousand pounds in two and one half years. Following an unsuccessful attempt to run off with the wife of an English officer, he fled to the United States. He arrived in December 1852, and within a few short months succeeded in placing poems and stories in several American publications.

His earliest reputation rested largely on his somewhat flowery poetry and for some years his verse was lavishly praised by the critics of the period. When William Winter put together the first hard-cover volume of his work—it was published by James R. Osgood and Co. of Boston in 1881 under the title of *The Poems and Stories of Fitz-James O'Brien*—the poetry was placed ahead of the fiction and occupied nearly half of the book.

The literary downgrading of his poetry came quickly, however. In the second edition of the book under the title *The Diamond Lens* 

and Other Stories, published in 1885 by Charles Scribner's Sons, New York, all of the poems were omitted.

In the United States, O'Brien lived the life of a true Bohemian, almost as if he considered Bohemianism inseparable from the literary accomplishments of a true man of letters. He never married, or worried where his next dollar was coming from and he played literary God to the aspiring writers of his circle. He was welcome in the better social as well as literary circles. His literary career in the United States lasted only ten years.

When the Civil War broke out, he enlisted in the Union army and was wounded in one of the earliest skirmishes. His wound became infected and he died shortly after an operation in which part of his left arm and shoulder were removed. The date of his death was April 6, 1862. O'Brien, then a lieutenant, was only thirty-three years old!

While The Diamond Lens derived much of its form from Poe and Hawthorne, The Wondersmith, another highly admired short story, which first appeared in the ATLANTIC MONTHLY for October 1859, was patterned after the style of E. T. A. Hoffman. The tale is a superbly atmospheric blend of science and fantasy, so individualistic that it remains

unique of its type in American literature.

The use of wooden manikins which can perform many of the actions of a human being make this tale historically important as one of the earliest robot stories. What no one has ever mentioned is the debt A. Merritt's classic horror-fantasy Burn Witch Burn! owes to this story. Not only the basic plot, but the other devices the fiendish, soulless devil dolls; the evil mover behind the scenes; the tiny, needle-like weapons dipped in poison, employed by the dolls; the malevolent eyes of the manikens—are all so similar to those in The Wondersmith as to make coincidence unlikely.

In The Wondersmith, there is a truly memorable scene in the battle between the 'Lilliputian assasand two caged, sins' talking Mino birds. During a battle, in which the Mino birds have inflicted heavy casualties on their murderous adversaries, they are outflanked: "Quick as lightning the Mino turned to repel this assault, but all too late; two slender quivering threads of steel crossed in his poor body, and he staggered into a corner of the cage. His white eyes closed, then opened; a shiver passed over his body, beginning at his shoulder-tips and dving off in the extreme tips of the wings; he gasped as if for air, and then, with a convulsive shudder, which ruffled all his feathers, croaked out feebly his little speech. 'What'll you take?' Instantly from the opposite corner came the gurgle, as it were, of 'Brandy and water.' Then all was silent. The Mino birds were dead."

Earlier the same year, the March issue of HARPER'S NEW MONTHLY MAGAZINE had carried O'Briens story What Was It? A Mystery, which is a well conceived, almost documentary account of a man who is attacked by an invisible creature and who, after a terrific battle, subdues it. A plaster cast is made of the mysterious thing, which reveals a humanlike form with a hideous face. The creature refuses to eat any food set before it and starves to death. carrying its mystery to the grave with it.

Chronologically, this story precedes Guy de Maupassant's The Horla and Ambrose Bierce's The Damned Thing, both with very similar plots. There is strong internal evidence that Bierce drew heavily upon the idea and techniques of presentation of What Was It? in composing his own story. It is extremely doubtful that de Maupassant was actually influenced by O'Brien, since there is no bibliographical record of O'Brien's story being translated into French. It is more likely that the invisible creature in The Horla was de Maupassant's symbolization of the mental twilight that he knew was encroaching and eventually did engulf him completely.

Probably the least known of all of O'Brien's science fiction stories is How I Overcame My Gravity. This story may have been the last piece of fiction by that author to appear in print. It was published anonymously, more than two years after his death in the May, 1864 issue of HARPER'S NEW MONTHLY MAGAZINE and was never reprinted until SATELLITE SCIENCE FICTION resurrected it to accompany this article for its June, 1958 number.

While marred by the use of a dream ending, which is now virtually taboo in science fiction writing, the story is nevertheless skillfully written. It has a distinct historical importance for suggesting the gyroscopic principle as a possible antigravity method and for advancing the theory that a weightless object, hurled hard enough by a catapault, might travel away from the earth forever.

Had O'Brien dared just a little more in the direction of this line of reasoning, he might have preceded Edward Everett Hale, by a few years, as the first human being to suggest in either fact or fiction, the concept of an artificial earth satellite. As it was, O'Brien might very well have sparked Hale's thinking along such lines, since both were contributors to the same periodicals during the same period and it is more than likely

that Hale read most of O'Brien's output.

Another Hale—Edward Everett Hale's sister, Lucretia Peabody-has involved the name of Fitz-James O'Brien in a literary mystery that still has not been solved to everyone's complete satisfaction. A set of books published in 1884 titled Stories by American Authors, carries as the lead story in Volume 3, a tale entitled The Spider's Eye. This story, originally published anonymously (as were most stories of that period) first appeared PUTNAM'S MONTHLY MAGAZINE for July, 1856 and dealt with the possibility of reading people's thoughts through acoustics.

The entire plan and development of the story and even some of the phrases seem typically O'Brien's and a pattern can be shown in the plotting similar to that of The Diamond Lens, which appeared two years later. When the story was included in Stories by American Authors, O'Brien was given credit for authorship both on the front binding cloth and inside of the book. However, a second edition of the set, published in 1898, attributes the story to Lucretia P. Hale, who made reputation writing charming juveniles such as The Peterkin Papers and books on crocheting like Faggots for the Fireside.

Were it not for the fact that Lucretia P. Hale has written at least one other fantasy, which appears to be incontestably her own, the story in question could probably be listed without challenge as one of O'Brien's. It is a story, whose imagination and execution would bring him no discredit.

The facts of the matter are that Lucretia P. Hale has had published under her own name, in both Atlantic Tales and in a separate book, Queen of the Red Chessboard, a fantasy bearing the last mentioned title. In its original, anonymous publication, the February, 1858 issue of AT-LANTIC MONTHLY, only a month after the appearance of O'Brien's smash success, The Diamond Lens. in that same magazine, Queen of The Red Chessboard, judged by its adroit writing and perfect short story form, could easily have been mistaken for a work of the transplanted Irish author.

The story is a slickly written fantasy of a chess queen who turns into a real woman and is followed into the real world by the White Prince, who has held her prisoner on the chessboard. Given the choice of marrying a real human and remaining free, she chooses to return to the chessboard as a prisoner of her White Prince.

Internal evidence in the story would have made its classification as one of O'Brien's very likely, since there is one passage which remarkably expresses the basic idea of *The Diamond Lens*, as follows: "Is all this beauty around you created merely for you—and the other insects about us? I have no doubt it is filled with invisible life."

This fantasy demonstrates that Lucretia Hale was perfectly capable of writing a short story of the calibre of *The Spider's Eye*. It seems probable that when that story was collected for the book, it was understandably mistaken for one of O'Brien's works. The error was undoubtedly spotted by Miss Hale who probably saw to it that a correction was made in the second edition.

Perhaps this controversy may have a salutary effect and result in unearthing other stories of a similar nature by Miss Hale, so that she will at least be considered when appraisals of American fantasy writers are made.

The Golden Ingot by Fitz-James O'Brien (1858) may ring familiar to some, since it was adapted to television only a few years back. It tells of an old scientist, searching for a way to turn baser metals into gold, who believes he has succeeded when one morning he finds a gold ingot in his crucible. He dies of a stroke upon learning that his daughter, in order to make him happy, has saved her money and secretly purchased a gold ingot. While almost

a bit too direct and bare and containing a note of the over-melodramatic, the story is nevertheless an effective one.

Among the better known fantasies of Fitz-James O'Brien is The Lost Room (1858), which tells of a man who leaves his room on an errand; then returns to find it filled with strangers, and the furniture changed. Unable to prove it is his room, he tosses dice for it and loses. He is ejected. When he tried to regain entrance there is only a blank wall and he never again finds his room. This story has inspired the writing of dozens of others on similar themes. Despite some not-too-convincing dialogue on the part of the lead character, the overall effect is powerful and memorable.

One of the most charming and delightful fantasies woven by O'Brien is The Dragon Fang Possessed by the Conjurer Piou-Lu (1856). In modern times, only Frank Owen has come as close to capturing the complete essence and mood of Chinese story-telling. This tale of a Chinese conjurer is strikingly successful and truly outstanding.

If there was any factor that characterized O'Brien's talent, it was his professional versatility. This is aptly displayed by his mastery of the standard ghost story gambit in *The Pot of Tulips* (1855). In that story the ghost of a man who hid evidence of his

wealth, so that a child he thought was not his own would fail to inherit his property, returns from the grave to remedy his error by pointing out the hiding place of his legacy. It is a good story of its kind, strongly reminiscent of another great Irish fantast, Sheridan Le Fanu.

A beautifully wrought weird prose pastel by O'Brien, Child Who Loved a Grave, has never been reprinted since its original anonymous publication in HARPER'S NEW MONTHLY MAGA-ZINE for April, 1861. It tells of the unhappy boy of drunken and bickering parents, who forms an attachment for the quiet grave of a child. He gains solace by spending time there. When it develops that the grave belongs to a member of nobility, it is dug up and the remains removed overseas. Deprived of his only source of comfort, the boy before going to bed that night, tells his father that he is going to die and begs that he be buried in the newly opened grave. The next morning the father finds him dead.

It is quite possible that O'Brien may have written one of the earliest surrealistic fantasies in From Hand to Mouth which was originally serialized in THE NEW YORK PICAYUNE during 1858. Disembodied eyes, ears, hands and mouths fill a hotel room in this story, which, though skillfully composed, loses the reader with

situations so complex, that no one can figure them out, not even the author, who never finished the last installment.

The publisher of the weekly, Frank H. Bellew finally completed the story himself. Despite this, From Hand to Mouth was twice reprinted in book form, once in 1868 in Good Stories and again in Famous Stories, believed to have been issued in 1879. In any form, it remains a collector's item.

Other stories by Fitz-James O'Brien, worth mentioning for their elements of the supernatural or horror are The Bohemian (1885), which employs hypnotism to induce extra sensory perception. Though the devices of the story are dated, a number of passages are sheer poetry. Jubal, the Ringer (1858), concerns a bellringer who employs a flock of bats to losen the plaster binding the stones of his belfry, then utilizes the acoustical vibrations of his bell to bring the stones crashing down into the church, killing himself and the woman he loves (who is marrying another), together with the marriage procession. A Terrible Night (1856) is a suspense story where a man kills his best friend as a result of a fear-induced nightmare. The wife in Mother of Pearl (1860), kills her child and attempts to kill her husband while under the influence of dope.

O'Brien's failing, from the longterm literary view, was that he was too talented, too versatile and too conscious of what the market of his period preferred.\* O'Brien was a true professional—whether in story, essay, poem, song, play or critique, he could usually strike the mood of the times and give the editors and the public just what they wanted. Making a sale was not his problem.

The result was that if O'Brien depended upon his general fiction and verse for his standing among American authors, anything more elaborate than a footnote in a general history of literature would have been an act of courtesy.

Only when he turned to science fiction or fantasy did he begin to display the full force of his truly outstanding talents. At such times his interest in the subject matter compelled him to write with his mind on the story instead of the editor or the public. Though his output of such work was small, the average quality is truly remarkable and its far-reaching influence is still visible in the field of science fiction and fantasy today.

<sup>\*</sup>A comprehensive picture of the life and writings of Fitz-James O'Brien, including his poetry and non-fantasy can be obtained by reading Francis Wolle's biography and bibliography titled *Fitz-James O'Brien*, a work of top-rank scholarship.

## A SENSATIONAL SCIENCE FICTION DISCOVERY

# How I Overcame My Gravity

# by

# FITZ-JAMES O'BRIEN

It took a great deal of science know-how to master gravity a century ago. In fact . . . it still does!

I HAVE all my life been dallying with science. I have coquetted with electricity, and had a serious flirtation with pneumatics. I have never discovered any thing, nevertheless I am continually experimentalizing. My chambers are like the Hall of Physics in a University. Air-pumps, pendulums, prisms,

galvanic batteries, horse-shoe magnets with big weights continually suspended to them: in short, all the paraphernalia of a modern man of science are strewn here and there, or stowed away on shelves, much to the disgust of the maid-servant, who on cleaning-day longs to enter the sanctuary, yet dare not trust her broom amidst such brittle furniture. To survey my rooms, you would infallibly set me down as a cross between Faraday and Professor Morse.

I dabble in all branches of Natural Philosophy. I am continually decomposing water with electricity, and combining gases until they emit the most horrible odors. I have had four serious explosions in my laboratory, and have received various warnings from the Fire Marshal. The last was occasioned by the obstinacy of an Irish maid-servant, who, happening to behold a large mass of phosphorus in the dark, would insist on "putting it out" with a pail of water. The consequence was, of course, a conflagration that was near destroying the entire establishment.

My friends visit me with fear and trembling. They are never certain that the bell-pull may not be the pole of an electro-magnetic battery, and when they seat themselves in a chair seem to expect some unwonted phenomenon to exhibit itself. You will at once perceive, therefore, that I am an enthusiast. People when they pass me in the street point me out to their friends, and whisper, "Very clever man, but so eccentric!"

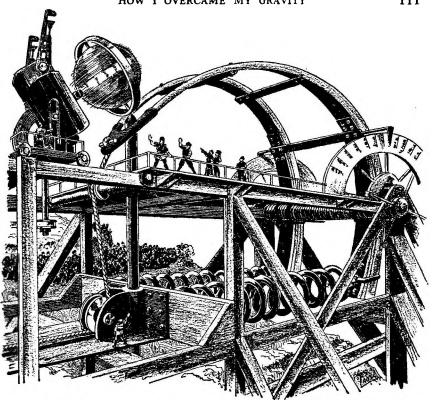
I have gotten an immense reputation for ability, yet I don't believe that my best friend would trust me with the management of the most trivial business matter.

I will confess that I am continually suffering losses on my own little property, and it would seem my fate to form relations with all the bankrupts and swindlers in the United States. These drains on my estate I always hoped to make good by an invention.

I am a very worldly fellow at bottom, let me tell you, notwithstanding all my scientific pranks. I keep an eye out for the main chance; and I always held the hope that even when my affairs were going most to ruin I would eventually light upon some lucky discovery which would make every thing right again. There's Professor Morse. He lit upon an invention, and see what's the result. Why, he's asked over to Moscow by the Emperor of Russia to be present at his coronation, and is given a palace to live in, with a whole Ukraine of horses and Cossacks at his disposal!

For a long time I had turned my attention to solving the problem of aerial locomotion. I fancy even now that I hit the white when I enunciated my grand principle of progression by means of atmospheric inclined planes; and at the time I made a model of a machine which illustrated theory very fairly, but I had not capital enough for experiments on a large scale; and so great was the prejudice against all kinds of ballooning among moneyed men that I could not find the means to exploit what is incontestably a great physical truth.

One day as I was walking down Mercer Street, in the neighborhood of Bleecker, I came opposite to the establishment of Chilton, the chemist, which stood on the corner. Revolving a thousand



The accompanying illustration is a pictorial interpretation of O'Brien's anti-gravity device by the dean of science fiction artists, Frank R. Paul. It is interpretive and highly imaginative in one sense—soberly realistic in another. For Paul has taken great pains to adhere strictly to the mechanical details outlined by O'Brien in the original story, and it is important to remember that all of the materials, techniques and equipment referred to in the story were actually available in 1862. The whirling, anti-gravity gyroscope has just been released by a lever-operated device, and the catapult, built of supple spruce, reinforced with cast iron, has been pulled taut. Two giant springs underneath will exert a tremendous pull at the moment of release. Utilizing his training as a mechanical draftsman, Paul has assembled a mechanism that, granted the conditions stated in the story, would actually function.

formless projects in my brain, my eyes, wandering like my mind, happened to light on the open door of the chemist's store. There, on a table placed a little way inside the entrance, I beheld a number of brass instruments lying, the shape and construction of which I was unfamiliar with.

Idly and half-mechanically I crossed over and entered the store for the purpose of examining them. The young man in attendance advanced to meet me—for I am known as a sort of amateur savant—and asked how he could serve me.

"What is this?" I asked, taking one of the instruments that had attracted my attention from the table. "It seems to me to be some novelty."

"It is truly a novelty," said my friend, the budding chemist. "It is a trifle—an ingenious trifle, certainly—discovered by a Connecticut genius, and its operations have as yet been entirely unaccounted for."

"Ah!" I cried, becoming suddenly interested, "let us look."

The machine which I held in my hand may be thus briefly described. Imagine a brass globe, some three inches in diameter, having its axis playing in a narrow but tolerably thick rim of brass, just as a terrestrial globe revolves in its horizon, the only difference being that the globe was not central in the rim, or

horizon; one of its poles being nearer to the end of its axis than the other. This peculiarity, I afterward discovered, was not essential to its working, being merely a matter of convenience. The remainder of the apparatus consisted of an upright steel rod, fixed in a heavy wooden platform, candlestick fashion, and pointed like an electrical conductor.

"How does it work," I asked, after examining it attentively, "And what principles does it illustrate?"

"It overthrows an established principle," answered my young friend, "and I am not clear as to what one it gives in place of it."

"Let us see it."
"Willingly."

So saying the young man took the globe, which revolved with little friction in its brass horizon. and winding a string round that portion of the axis which occupied the greatest space between the globe and ring, held the latter against his breast, and pulling the string violently, as boys pull the string of a humming-top, caused the globe to revolve with marvelous swiftness on its axis. The globe being thus in a rapid state of revolution in its horizon, he now showed me on the under surface of the last, and in a right line with the poles of the axis, a small cavity drilled, which admitted of the machine being placed on the upright pointed steel rod,

without any chance of slipping. This cavity was not a hole, only an indentation in which the point of the upright rod fitted, just as the axle of a watch wheel is received into the iewel.

When this pivot, so to speak, was placed by the young chemist on the steel-pointed rod, the globe and its horizon, to my utter astonishment, proceeded to revolve in a plane at right angles to the revolution of the globe! There was a weight of some six pounds supporting itself in the air, and revolving with a regular motion!

If my reader will take a long wedge of iron, heavier at one end than the other, and place the light end on the point of a rod stuck into the earth, and at right angles with it, and then conceive that wedge of iron revolving around the point where it touches the upright rod, he will have a pretty clear idea of the marvel which I witnessed at Mr. Chilton's.

The attraction of gravitation then was overcome! In the same position in which I saw it maintaining itself, if the revolution of the brass globe was checked the whole apparatus would instantly tumble to the earth. Why, then, did the simple centrifugal force of the globe enable it to thus marvelously poise itself in air? I was bewildered, and though my brain, from habit of dealing with problems, instantly groped for a reason, it could find none satisfactory.

"Has no explanation been offered of this wonder?" I asked the chemist.

"None, Sir," was the reply; "at least none that were in the least logical or conclusive. Several people have sent us elaborate explanations, but when all have been divested of their scientific phrase-ology, they amount but to one arbitrary assertion of the fact that it revolves contradictorily to the laws of gravitation."

I bought one of the toys and went home. I was lost in wonder. What became of Newton's famous apple now? It was rotten to its core. Had the wind or some other subtle power impressed upon it such a force as to cause it to revolve with immense rapidity it would never have fallen, and Newton would never have discovered the so-called principle of the attraction of gravitation.

The more I pondered the more the marvel grew upon me. I spun the toy for hours, and was never weary of beholding it move in its appointed circle, self-sustaining and mysterious. After all, I considered it as only wonderful to me, because I have been so long in the habit of accepting the theory of gravitation as an established fact. This new force, whatever it is that supports this toy in air, is not a whit more mysterious than the assumed force which is said to draw all things toward the centre of the terrestrial globe.

Ask what it is, and people tell you "the attraction of gravitation." Ask them what "the attraction of gravitation" is, and they will tell you "the force which draws matter to the centre of the earth," and so the game of science runs. Arbitrary names are forced on you as facts. From battledore to battledore the shuttlecock is sent flying. The result becomes the definition and the explanation.

It was in one of those moods of mind in which a man sometimes finds himself, groping for day through a horrible and oppressive darkness, yet certain that the chink through which it will flow lies somewhere within reach, that I suddenly lit upon the conviction that in this new discovery I held the secret of aerial locomotion!

I argued in this way: If a violent rotary motion is sufficient to overcome the gravitating tendency of brass, it surely is that of human flesh. Neither is it at all necessary that the body of the person wishing to soar aloft should itself revolve. That would be fatal to life. But here, in this toy, I see the revolution of a brass globe supporting a heavy brass horizon, and if I were to put another weight, say a cent, on that brass horizon, it would still be supported; therefore if a machine on the same principle, and proportionately large, be constructed, it will support a man as this supports a cent.

I had lit upon the truth that "a body revolving on its own axis with sufficient velocity becomes selfsupporting, and can be impressed with a force that shall impel it in any given direction!

With all the fever of a man of science and an enthusiast I set to work. My machine cost me long nights of labor and brain-work. I will endeavor to describe it.

It was a copper globe of vast dimensions, hollow inside, and traversed by a huge axis, which buried its poles into an enormous horizon of iron. In the interior of this globe, parallel with the axis and a little above it, ran a false axis, also of iron, but playing loosely in holes bored in the globe itself, so that when the globe revolved this axis did not turn. On this bar of iron was placed a seat, which was intended for my own accommodation.

This arrangement, it will be perceived, insured to any person placed on the seat an equilibrium, no matter how quickly the globe by which he was surrounded revolved. It was, in fact, the same principle on which ships' lamps are suspended. There the lamp always remains horizontal, no matter how heavily the vessel rolls.

The machinery by which the globe was caused to revolve on its axis is much too complicated to admit of any description unaccompanied with diagrams; suffice it to say, that it was so powerful

as to insure a revolution of this enormous copper sphere at the rate of sixty times in a second. A vast iron pillar, answering to the upright steel rod of the toy, I had also constructed. This was destined to receive and sustain the brass horizon.

A machine constructed after the manner of the ancient catapult was also arranged for the purpose of launching the globe into air so soon as it had attained the necessary revolutionary velocity. The power of this catapult was cunningly graduated to certain distances. Assuming that the globe while revolving possessed no weight, it would with a slight push travel forever through space unless the resistance of the atmosphere lessened and conquered its motion.

But the globe would only revolve for a certain time, and in proportion as the velocity of revolution decreased so would its tendencies to the earth return; thus knowing precisely how long this velocity would last, and in what ratio it would decrease, I was enabled to calculate to a pound what force to impress upon it by the aid of the catapult, in order to send it any given distance.

Every thing being complete, and having invited a few friends to witness the experiment, I took my seat on the false axis with a beating heart, and gave the signal by which the attendants were to set

the globe in motion. In an instant the copper sphere was whirling around me with a velocity that I could not measure, but could only guess at from the humming noise that to me in the interior sounded like the thunder of a thousand skies.

The interior of the globe was lit by pieces of massive flint glass set firmly in a belt form round the centre. These windows, from the rapidity of motion, blended together in a zone of light that flashed continually before my sight. My seat on the axis, poised in the midst of this terrible whirl, remained steady and unaltered. Suddenly I felt a jerk, a singular sensation quivered through my frame, and, rather by instinct than sensation, I knew that the catapult had launched me into space.

I had calculated my distance for St. Paul's, Minnesota, and had accordingly set the catapult to the scale of force necessary to cast the globe that distance, making the proper allowance for the decrease of velocity. Would I succeed? I confess at this moment I felt grave doubts. A thousand things might happen. The theory was perfect, but how many perfect theories had failed in practice! My elevation might be improperly calculated, and the machine be dashed to pieces against some intervening mountain.

A few seconds would, however, decide all, as I had calculated that

the journey would not consume more than four minutes and a half.

While occupied with these considerations I chanced to glance at the belt of light formed by the quickly-revolving windows. It seemed to me to have changed its shape strangely. Instead of its previous regularity of form, it had become, as it were, ragged and uneven. On looking closer, and examining it as narrowly as I could examine any thing passing in such rapid revolution, I fancied that I saw it widen gradually before my eyes. And, as if to confirm my suspicions, a blast of cold air fell on my cheek, and immediately after a hollow roaring filled the globe.

The horrid truth burst upon me. I had forgotten to make the solidity of the copper globe more than equal to the centrifugal force, and the machine was bursting to pieces when I was at my highest elevation.

My brain seemed to whirl with the globe on making this discovery, and with staring eyes I glared at the awful rent that was so rapidly increasing. A hurly-burly like that of the infernal regions filled my ears. It was the air rushing into the globe. Then came a crash and a horrible splitting sound.

Instinctively I grasped the immovable axis on which I was seated. Another crash, and I saw dimly the huge mass of copper surrounding me fly into a thousand vast fragments, and I knew that I was falling. I gave one wild shriek, and—

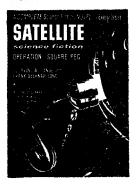
"Mr. Wisp! Mr. Wisp! What are you doing? Let the tea-urn alone, Mr. Wisp!"

I looked up from the carpet on which I was lying, and saw my wife, Mrs. William Wisp, extricating the silver tea-urn—fortunately not filled—from my embraces. I was never able to explain to the good woman why I abstracted that article of plate from the side-table during my dream; and for the first time in the history of science an inventor was to be found congratulating himself that his invention had not succeeded completely.



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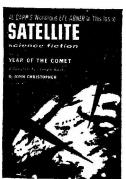
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# Collector's Item

It was a useful promotion stunt in its day. Selling bits of Plato Crater raised funds needed to reach the Moon. But the kickback, when it came, almost stopped Lunar progress.

## by MARION ZIMMER BRADLEY

EVERY DAY, at this time, Colonel Bart Arnesson, Base Commander at Denver, sat alone in his office. It was a plain and austere place, this office. In the ten years since he had been grounded to a desk job in the Space Service, he had added very little to make it more his than any other man's.

There were the usual fixtures—desk and dictatypes, interoffice visicom, a small TV plate hung on the wall as simply as a mirror, a framed oil painting of a lunar landscape and, in a battered leather frame, a faded old-fashioned portrait of a little boy seven years old, with a crew-cut and toothless smile.

Earlier today, the weekly supply-rocket to Luna had taken off with all the routine fuss and bother. On his desk lay the usual clutter of requests, requisitions and red tape for which nobody lower-down had wanted to assume responsibility. The office window, wide open on a desert landscape, gave a horizon-distant view of cyclone fences painted regulation space-service blue.

Arnesson yawned and opened the visicom. "Anything in the late afternoon mail, Sergeant?" he asked.

The visicom cleared, and the freckled face of his noncom secretary—a husky youngster, flunked out of flight training, but clinging to the fringes of the Space service—frowned in at him.

"Nothing much, sir," Sergeant Hunt said. "The graduating class at Bengal State Space Academy want you to address them, July first."

The Colonel flipped the pages of a desk calendar, after a quick glance at the picture in the leather frame. "I can make it. Write an



acceptance, and I'll sign it." He caught the expression on the non-com's face. "Well, Sergeant?"

"It's a helluva—I mean, it's a long trip to take at this time of year, sir." He did not add at your age, but the Colonel heard it, anyway.

He said roughly, "We get a lot of good men from Bengal. Anything else?"

"Another cablegram from Luna on that M-and-M injunction—the Plato Crater affair. Shall I read it?"

"Don't bother," Arnesson grunted. He had heard all he wanted to about *that* affair! Some half-witted legal foul-up had resulted in a court injunction re-

quiring the Materials and Mining Division to cease and desist their mining operations in Plato Crater. Arnesson didn't know the details, and it seemed that no one else did, either.

"Message them that, until the injunction's cleared away, we'll have to keep all operations suspended," he began glumly, "and we'll just hope that it will be cleared away. How in Tycho can there be a lawsuit about mining on the Moon? What kind of snarl has Material and Mining gotten into now?

"The roughest part of it is, until we can start in mining the allotropic carbons and liquid silicates again, we're losing twenty thousand a day, just maintaining a skeleton force there! Was that all?"

"No, sir. That Mr. Bentley still wants to see you."

"Well, get rid of him," Arnesson snapped, "I'm not seeing anybody today." He closed the visicom and turned over the top paper on his desk, but he didn't read it.

On an impulse, he flipped the TV switch, and a riffle of flickering notes flung into the room, with the faces of young cadets. Somehow, he had managed to tune in a broadcast from one of the Space academies. A male quartet—four serious, boyish faces under blue caps—surged upward to the final note of the hymn.

"... and men that seek the stars!"

Colonel Arnesson swatted the switch as if it were hot, his glance returning by habit to the portrait in the leather frame.

Space Academy! He had gone to Pensacola, himself, a cadet in the Naval Air Force. He was a quiet sentimentalist about the jets of his training days, something of an anachronism in a corps that had no use for anything before the Lunatic I.

Jerry had liked planes . . . He cut the thought off in irritation, and drew a letter toward him, but the visicom burped again.

Arnesson said, exasperated, not

turning on the visual, "What is it now, Sergeant?"

"Sir," the invisible voice sounded harassed, "This Bentley guy out here—he won't go away. Says it's important. He's been waiting here most of the day. If you—"

"If you," interrupted Arnesson, deliberately, "can't get rid of a nut, what the hell are you doing, sitting on your fanny in my office? I said, 'Get rid of him!' If you have to, call a couple of MPs, and have him put out." He paused. "How did he get through the men outside?"

"I've been trying to tell you, sir. He's got a special Base pass from M-and-M."

"Humph!" Arnesson grumbled, "Material-and-Mining gives a visitor's Base-pass to any tourist who asks for it, but that doesn't give him a right to barge in on the Base Commander!"

"I told him that, sir. Colonel Arnesson, he isn't an ordinary nut. He's very quiet and reserved, but he says he has something very important to show you, and he won't go away till he's seen you. And, when I told him I could have him put out by MPs, he said that it would make trouble for the whole Base if I did that."

Arnesson looked out the window at the afternoon, frowning angrily and pondering a course of action.

The noncom kid went on, with quiet persistence, "If you're really not too busy, sir, I think—"

"You think! When did you learn to think on duty?" Arnesson sighed. "Oh, all right—send him in. I'll give him ten minutes, and, if he's an ordinary crackpot, wanting to sell me a rocket-fuel made from orange-peel juice"—he paused, visualizing the invisible wince on the young sergeant's face—"then you can go back to walking guard on the fences, and I'll get a couple of WAFS in here."

He inspected the scribbled slip Sergeant Hunt pushed in through the slot, then looked up. He deliberately did not rise or make any gesture, as the young man came in.

About one thing, he decided, the sergeant had been right. This persistent newcomer wasn't an ordinary nut. To begin with, he was only a kid. He was dressed up in business clothes, complete with a neat briefcase, but he looked as if he belonged in levi shorts and a jersey and seldom wore anything else.

He wasn't tall—limber and muscular, but not much bigger than Colonel Arnesson—and he had a tan that looked like Texas or California. He looked like an athlete—not football, of course, he was too light for that—but soccer or tennis or track, in a high school that couldn't have

been more than a year behind him.

"You're John Mark Bentley?"
"That's right, sir." The kid sounded bashful, but with an odd undertone of self-possession. "It's good of you to see me."

"Oh, think nothing of it," Arnesson said, elaborately sarcastic. "I've nothing better to do than entertain visiting tourists. What do you think of the view from this window? Do you like my office? Is this your first visit to a Base?"

The kid wasn't thick-skinned. Arnesson, watching with grim humor, saw the ears under the crewcut slowly redden in a fierce blush.

Bentley said, "No, sir. I mean the view and the office are fine. No, this isn't my first visit. I visited the Antarctica Base last year, with my senior class."

His eyes, sliding away from Arnesson, came to rest on the painting on the wall—Tycho at sunrise. Arnesson's look followed his, and suddenly softened. There was worship in the kid's eyes. Facing the Landing at Tycho, he looked like a little boy, like Jerry.

"Yes, that's a real Bonestell," Arnesson said gruffly, "one of the early ones. Collector's item. Like it?"

"Yes, sir." The kid paused. "I intended to attend the Space Academy in Dallas, sir, but I couldn't afford the tuition."

"Oh?" The Colonel suddenly noticed that the boy was still standing. "Sit down, won't you? Why didn't you apply for a scholarship to the U.N. Academy?"

"I did, sir," John Mark said earnestly, "I passed the physical and the entrance exams, only well—I live in Arizona, sir."

"Oh, I see. Tough luck!" Arnodded, understanding. There had been plenty of squawks of favoritism when the Senior Senator from Arizona had awarded the coveted U.N. Scholarship in his district to the junior Senator's son, Garry Lyall III. But the Lyall boy had finished in the top 1/10th of 1% in scholarship in the whole state, and had passed the Space Academy's entrance exams and their rugged physical with honors.

The counter-cry had been raised. Must a Senator's son be denied the right to earn a commission in the Space service, simply because he is a Senator's son, and not the son of some deserving plumber?

Arnesson looked at John Mark Bentley fidgeting in his chair, and, because he had warmed to the kid, he grew suddenly angry. The flick of a habitual glance at Jerry's toothless photograph warmed his anger to fever pitch. The son of any officer in the Space service, ranking above Major, had the automatic privilege of attending the Space Academy. But a fall from a

high-diving board had broken Jerry's back and neck, three days before his ninth birthday, a week before the first manned rocket landed on Luna.

"Well, what the devil are you doing here," Arnesson flung at John Mark. "I'm not a politician, I haven't any appointments to the Space Academy in my gift!"

John Mark's ears were very red again.

"I know that, sir," he said, "and thank you for being patient. I really did come here on business." He was unstrapping the briefcase that was such an odd accessory for a youth his age. In a minute or so, he had extracted a white certificate, embossed with a golden seal.

"I wish you'd look at this, sir," he said, and laid it on the desk.

Arnesson did not touch it. "What is it?"

"I own some land on the Moon, sir."

"You what?" Arnesson picked up the sheet. It was dated fourteen years before, and an elaborate printed heading proclaimed—

#### PLATO CRATER LAND COMPANY

Scowling incredulously, Colonel Arnesson skimmed over the legal phraseology. "This indenture, etc, etc, a body corporate duly registered, etc... hereinafter called the Grantee... witnesseth that, for good and valuable considera-

tion . . . doth grant, bargain, sell, alien, release, convey and confirm . . . that certain parcel or tract of land lying between . . . more particularly known and described as Tract number . . ." He skipped over that, then read in disbelief ". . . and comprising, by admeasurement, one square yard more or less as more particularly described in the aforementioned subdivision plan . . ."

"What kind of joke is this?" he demanded, "This isn't a deed, it's one of the promotion souvenirs!"

John Mark's features did not ripple, as the storm of Colonel Arnesson's wrath washed against him. "It isn't a hoax, sir. These deeds are souvenirs, but that's a real deed. It was a promotional scheme to raise money, yes. Selling a square yard of land on the moon seemed like a good way to raise money for the early research, some years ago."

"But they're just souvenirs!" Colonel Arnesson snorted. "Collector's items, maybe. It might be worth something—as a collector's item. Not half as much as that Bonestell on the wall there, though."

"They were meant as souvenirs, sir," John Mark explained patiently. "The plan had been tried before. Some joker sold deeds to one square-foot of Texas for a dollar apiece, and one of the cereal companies gave away legal deeds to one square-inch of land

in the Gold Rush country, in Alaska. I had this checked by a lawyer, and he says it's a perfectly legal, watertight deed.

"The Plato Crater Land Company did secure legal title to the land in Plato Crater, and did grant it off, in one-yard lots, for approximately fifty cents apiece. They raised thousands of dollars for basic rocket improvement research that way, back in the early days of space-flight. I'll bet every school-child on earth owned one at some time or another."

Arnesson clamped his teeth, fighting a memory that hurt, a memory he couldn't shut off. Jerry had been six years old. He had bubbled over, full of his new possession, at the supper table.

"Look, Daddy, now I own a yard of the moon! Look, it's a real little deed, Daddy—I can frame it and hang it up on my wall. Daddy, when you go there, will you hunt up my property and plant a flag on it for me?

Arnesson had promised, but, of course, he hadn't remembered the promise more than a week. Probably, the little scrap of grimy paper had been torn and swept into a wastebasket, less than a month later. He looked furiously at John Mark.

"So you own a square yard, one lousy square yard of Plato Crater, and—my God!" he broke off suddenly. "Let me see that pass of yours from Material-and-

Mining! Are you the joker who's been tying up thousands of dollars worth of mining materials, and gumming up our whole attempt to make the Moon pay for itself, with your blasted injunction? One stinking little toy deed that amounts to nothing."

"I don't think you quite understand," John Mark said in his nice hesitant youth's voice. He opened the briefcase, and dumped.

"Holy jumping Lucifer!" Arnesson exploded in awe, as the little slips of paper cascaded out in a smothering heap.

John Mark bent to retrieve one that had fluttered off the table. He said, almost casually, though his breath was audible, "Colonel Arnesson, there are twelve thousand, four hundred and eighty-six of these deeds—which makes a pretty big tract of land, right in the middle of Plato Crater. I own it all, free and clear, and very legal." He paused.

"I've got an uncle who's a lawyer," he said, "and he talked it over with a member of the Jurisdictional Supreme Court. They're not perfectly sure whether the title is clear for mineral rights, or not. But I could get an injunction, forcing Materials-and-Mining to suspend mining operations on my property, and remove all fixtures and encumbrances."

Arnesson sat back and looked at the candid young face. His mouth opened and closed, but no words came. He got out at last, "Holy Moses! And I don't guess you're over nineteen years old!"

"Eighteen next birthday," said John Mark. "This April."

Arnesson felt numb. He fingered one of the scraps of paper. "Where did you get all these?" he asked. He didn't try to count them. He was sure that there were exactly 12,486.

"Well, I collected them," John Mark said, "like other kids collect stamps. I used to buy some every week, with my spending money. The kids I knew got tired of them, and sold them to me for a nickel or a dime, like they'd get tired of any other souvenir thing, and trade or sell it off."

He seemed to follow, accurately, the older man's thought, and added quickly, "I said I had an uncle who was a lawyer. Back then I thought I'd like to be a lawyer, too, so I had Uncle Dave draw up a form that was a legal bill of sale and printed it up on a toy printing press I had. Every time I traded one off or bought it, I'd have the kid sign it over to me. It was just a hobby, really. I never thought of using them for anything." He paused.

"A lot of people had kept them around, just for souvenirs, but you know how people are. They like to help a collector complete his collection, and, when I said I had hundreds of these little deeds, they'd laugh and tell me theirs."

Colonel Arnesson looked at him again, then at the scrap of paper he still held between his fingers. He read, ". . . that is to say it shall be lawful for the Grantee, his heirs and assigns from time to time, and at all times hereafter, peaceably and quietly to enter into the said lands and premises, and to have, hold, occupy, possess and enjoy the same without lawful suit, hindrance, eviction, denial or disturbance of, from or by the Grantor. . . ."

He read on aloud, groaned and finished with, "and the Grantor covenants with the Grantee that it has done no act to encumber the said lands, and the Grantor releases to the Grantee all its claims upon the said lands. . . ." He flung the deed down again, in disgust. "Well, I guess you can make it stick," he said wrathfully.

He leaned his head in his hands, looking across the desk at young Bentley. The visicom into the outer office burped again, and Sergeant Hunt's face looked out from the screen, but Arnesson cut him off. "Cancel anything that comes up, Sergeant—I'm busy," he said, and put the switch on a release position.

While he was fussing with it, he thought bitterly that the young man had them between the fuse and the jet. He could get the injunction, and he could squeeze a sizable young fortune out of it. He could be forced to sell—the liquid silicates were the only reliable lubrication for a rocket's inner turbines, the allotropic carbons were three times harder than a diamond and the only really efficient cutting tool ever invented. The government had given their priority to the Space service.

But, if young Bentley wanted to go to private industry with his deeds and his injunction, it could be the entering wedge of a legal fight that could be drawn out for years, could force a foothold for commercialization of the Moon whatever resources might turn up, unexpectedly, on the outer planets.

The Space service, the only international organization ever formed, would be attenuated, eaten up by private competition, eventually turned over to the corroding jealousies of nationalisms again. All because somebody had had a bright idea for raising money from the hopes and dreams of schoolkids who wanted to own the Moon—and because some bright little kid had grabbed his opportunity.

If they wanted to avoid it, they'd have to pay the kid off first. And, judging by the cold, legal way he discussed it, they'd be paying him plenty.

"You win," he said, with a sigh, "Space service will buy you out.

What's your price?"

"They're not for sale," said John Mark promptly.

Arnesson let a sneer touch his mouth for a moment. "I expected you to say that. Your legal advisers probably told you to hold out as long as you could."

John Mark sprang up out of the chair. His young face was red, and, oddly enough, his mouth twitched in the little-boyish way. Arnesson had seen Jerry look like that, once, when he had been slapped for something undeservedly.

John Mark said, quietly, "No, sir. The property isn't for sale—not at any price whatever. But I'll sign an unconditional quitclaim of all mineral rights, forever."

The colonel's mouth was tight. Yes, that was the clever way to do it—hang on to the property. Sign a quitclaim for mineral rights—the kid could almost name his own price. After all, this injunction was costing Material-and-Mining over twenty thousand a day—and then, if the mining rights fell through, the boy would still own the property for some as-yet unvisioned future use.

"What's your price?" he snapped, hoping he could startle some admission out of that careful innocent face.

But he had not expected John Mark to reply instantly. "Four thousand dollars."

"Four thousand—but that's only . . ." Dully Arnesson stared, not quite understanding what he heard. Then, suddenly, he caught

on. His eyes followed the boy's return glance toward the Bonestell moonscape, and understanding burst on him like sunlight. Four thousand dollars would exactly pay for four years' tuition at the private Space Academy, in Dallas.

"Okay, son," he said, "Okay." He pressed the visicom. It cleared in his direction first, so that he saw the sergeant at his desk, deeply immersed in a lurid-looking comic book. He cleared his throat so impatiently that the sergeant jumped visibly in his chair, and hastily thrust the comic book out of sight.

"Yes, sir? Yes, sir!"

"Get a Base lawyer in here, as soon as you can," he said, "and message M-and-M on Luna. Resume Mining Operations Plato, effective immediately. And then message Central Filing to get me a set of application blanks for the U.N. Space Academy, will you?"

In John Mark's incredulous ears, he added, "There are a few appointments-at-large every year. You'll have to go to Dallas this term, but I can have you transferred next summer. You'll get your four thousand anyway—you can save it to outfit yourself when you get your commission. By that time, you'll probably need a Mars surface-kit."

"Oh, sir...!" John Mark Bentley's face was like the lunar sunrise on the wall. "How did you know?" he demanded.

"I'm not a fool!" Arnesson shouted at him. With his scarred, old-man's hands, he selected one of the little papers at random.

"Mind if I keep one of these?" he asked, "One foot more or less won't make much difference."

Numbly, John Mark shook his head. "Of course not, Colonel. Only . . ." the unspoken question died as he saw Arnesson slip the little deed under the toothless youngster's photograph.

Then Arnesson looked up, and answered the question John Mark had not asked, and his voice was low and steady. "There's a little boy I want to take it to," he said, and his thoughts were in the Incurable Ward of a military hospital, with a man of thirty who did not know, would never know, that he was anything but a paralyzed and sick little boy, a little boy with a broken back and neck as well as the skull injury that had kept him still a little boy, for more than twenty years.

"Jerry always wanted to own land on the Moon," he said. Then, "and one kid, at least, ought to get a chance to visit his own property."

There was a not inconsiderable warmth in his eyes.



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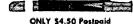
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