

STARTLING STORIES

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A Complete Novel



THE BLACK GALAXY

By MURRAY LEINSTER

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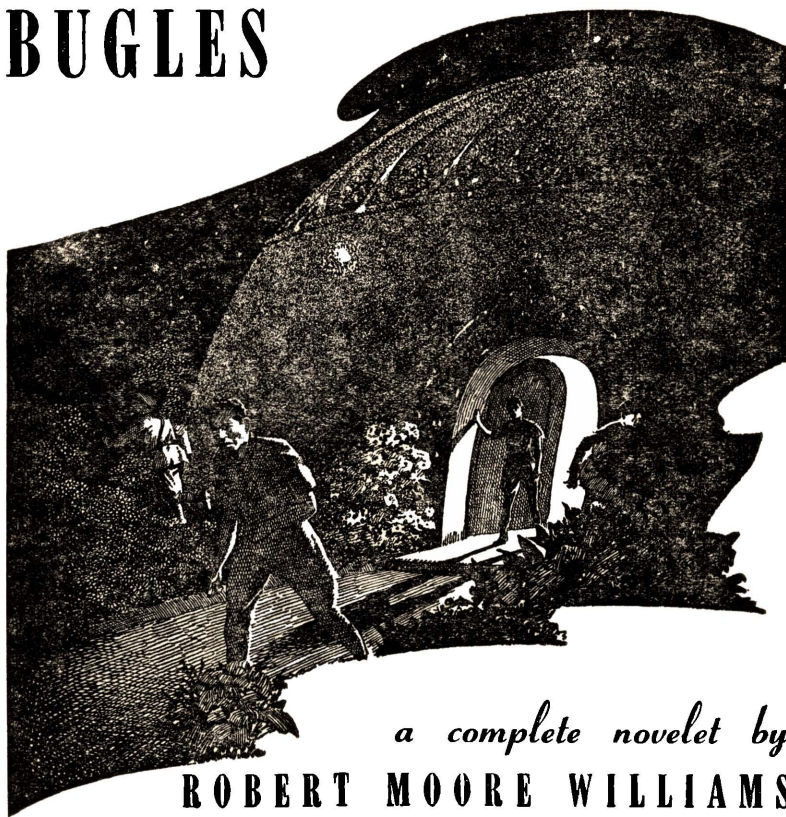
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THE SOUND OF

Doak screamed in mortal pain as the ball touched him



BUGLES



a complete novelet by
ROBERT MOORE WILLIAMS

CHAPTER I *The Great Doak*

THE SHIP from Earth arrived in midafternoon. Kennedy, working himself and his two assistants into nervous exhaustion setting up recording instruments around the rectangle of white sand, saw the ship come in. At first he was afraid it was

going to land in the rectangle where the Martians, at this moment, were forbidding even a fly to trespass, but the pilot changed course slightly and set it down, with much blowing of landing jets, less than a quarter of a mile away.

Kennedy was relieved. It had taken a lot of talking and, considering the language difficulties involved, a lot of arm waving and

“By the sweat of your brow shall ye earn your daily bread—” is still true on the hard-working Earth—but what of the fiery Planet of Mars?

picture drawing, to get Tryor to give him permission to set up his recording instruments so near the rectangle.

The Martian had not fully liked the idea of the recording instruments and Kennedy suspected that if Tryor had really understood their purpose, which was to trace the lines of force flowing from the machinery that *must* be hidden somewhere here in this city, and thus locate the machinery itself, he would have liked it even less. Kennedy wondered what the Martian would have said, and done, if some blundering human had landed a space ship in this restricted area.

For that matter, why had the ship landed here at all? Traxia was a small, unimportant city, well off the routes of even the tourists rich enough and hardy enough to make a trip to Mars.

Watching, he saw the port swing open. Three men emerged.

For a few minutes they stared around, looking at the city set like a small jewel in a cup in the desert, looking at the sand and the sun and at the range of low hills off to the south, accustoming themselves to the lesser gravity of the Red Planet, then they spotted Kennedy and his two assistants. One flung up an arm to point. Kennedy swore. Of course, newcomers would head straight toward the nearest humans in sight, in fact, the only humans in the city of Traxia.

"Probably to ask us for a road map!" he said. He had no time to answer questions. And no interest in answering them. But the three men were moving toward him with sure purposefulness.

They came up, three stalwart fellows in trim uniforms, straight to him. "Beg pardon," their leader said. "We're looking for Mr. John Kennedy. Could you tell us where to find him?"

Kennedy stared at them. He had never seen them before. But he had seen the likes of them brawling in the streets of the New York Space Port, drunk and raising Cain, and in Mars Port, and in Moon Port, where the glass of the enclosed city area looked up at the frozen sky. The breed was the same all over.

"I'm John Kennedy," he said. "What do you want?"

"Mr. Doak's compliments, sir. He will see you in his cabin, immediately," said the spokesman.

"Mr. Doak? And who is he? Your captain?"

VARYING shades of surprise showed on the faces of the three men. "You don't know Mr. Doak? He—he's the owner." The speaker seemed astonished to learn that anybody lived in the system who didn't know Doak.

"I don't know him," Kennedy said. "I don't know that I want to know him—"

Behind him, he heard Blount stir protestingly. Blount and Anders were his two assistants.

"I've heard of him," Blount said. "He's a financier, or something like that. He put up the money to finance Threlkeld's investigation of the ultra-drive for UN."

"Come to think of it," Anders spoke for the first time. "I think he put up part of the money to finance us."

"Uh," Kennedy said. He was a field man for the UN Council of Science and he was responsible to the Council and to nobody else. The Council paid him and furnished the money for his work. It was their job to find the money and his job to do the work, a division of labor which satisfied him. But if Doak had put up part of the money, he felt he had to be nice to the fellow, for the sake of the Council.

"I'm busy now," he said, his eyes straying to the rectangle of sand where the Martian guards stood elbow to elbow. "Tell Mr. Doak I'll see him tomorrow." He turned back to his instrument.

It was a magnetic detector and it was designed to detect and to trace lines of magnetic flux now present—or soon to be present—in this area. He was aware of the man speaking again.

"But Mr. Doak said *immediately*."

"I'm busy now. He'll have to wait."

"Mr. Doak is not used to waiting."

"Then he'll have to get used to it."

"But this is important," the man from the ship insisted.

"I'll say it is!" Kennedy said, glancing up at the rectangle of white sand.

Blount cleared his throat. "I don't want to urge you, but Anders and I can take care of everything here."

"*Et tu, Brute*," Kennedy said. He was perplexed and indignant. It was most important that he stay right where he was but it was also important that he do nothing that might shut off part of the flow of funds to the Council. He glanced at his watch. Thirty-three minutes before the deadline Tryor had set.

"All right," he said, impatiently. "But I've got to be back here in twenty minutes."

Swearing under his breath, he stalked off across the sand toward the waiting ship. The three men followed him. The lines of Martians guarding the rectangle watched without obvious curiosity. What were the doings of this brawling race to them, who had inherited a thousand centuries of tradition and wisdom? And something else, which they had never revealed to any man.

Doak was a big man with heavy shoulders and a thick neck on which his bullet-like head sat like an impatient gargoyle. His face was the face of a frog that had huffed and puffed and huffed and puffed and blown himself up until he was as big as a man. They shook hands. Doak seemed to think it was the thing to do.

The cabin was richly furnished, with a big desk with a row of push buttons on it, and a swivel chair, both bolted to the floor. There was a viewport with the sun screen open, so that the city of Traxia and the rectangle of sand and the Martian guards and Blount and Anders were visible.

"You wanted to see me?" Kennedy said. He would be polite if it killed him.

"Yes, yes. I read a copy of your report."

"You read my report?" Kennedy repeated the words, in a whisper, to make certain he had heard them just right.

"Yes. Your report to the executive committee of the Council on your preliminary investigations on Mars." Doak gestured toward the viewport. "It was very interesting. In fact, it was the reason for my coming here."

"I'm glad you found it interesting," Kennedy said. "It was also marked TS—Top Secret. Or I thought it was marked that way."

"It was so marked," Doak said.

"Are you on the Executive Committee? Any report marked TS and addressed to a committee is usually read only by the members themselves."

DOAK showed no signs of embarrassment.

"That is true. However a few of us—" he hesitated.

"VIPs," Kennedy supplied. "Very Important Peoples. I get it." His voice took on a cutting edge and he stared with obvious distaste at the man sitting across the desk from him. In the back of his mind, a cloud

no bigger than a man's hand, was the sudden feeling of fear.

Out of the corner of his eyes, he could see the rectangle of sand, and beyond that the city of Traxia.

A garden spot, a city of bright crystal domes of rose and amethyst and coral and sky blue, a city of winding walks that curved in and around the low domes in eye-delighting variety. A flower garden, where bloomed in carefully tended plots every exotic flower that had ever put forth blossoms into the thin air of this ancient planet.

Running along each walk were streams of bright clear water, irrigating the flowers, adding freshness and beauty to a spot already so beautiful that an artist would go mad trying to catch the color tones and the balanced symmetry of dissymmetry expressed in changing curve and shifting straight line. Beyond the city was the main canal going off to the low hills which once had formed the shed from which this city drew its water.

The reservoir was still there, the hills were there, all open to the sky from which no rain had fallen for a hundred centuries. And the water was there too, in the reservoir. It was always there, flowing through conduits that had been built when water fell from clouds the way water was supposed to fall.

Kennedy had seen the watershed, the reservoir, the canals. He had studied everything—and the result of his study had been baffled, bewildered perplexity. Moses, where art thou? he thought. Moses, with thy staff to strike the rock!

The block of pure white sand was there too, like unexposed picture film, like clay waiting the touch of the modeler's fingers, like marble awaiting the sculptor's chisel, like—Kennedy shook his head. Tryor had permitted him to examine the blueprints, complete in every detail, every curve of every walk, every flower bed, every rounded dome of pearl or coral. Yes, Tryor had said, the population increased. Slowly to be sure, but it increased. And increased living quarters were needed—Doak spoke again.

"I was greatly interested in your account of the Martian eating habits. You said they eat essentially the same basic foods we do, with perhaps some variation in the subtle vitamins."

"That's right," Kennedy said.

"But you added that you had not been able to discover the source of the Martian food supply."

For a second, Kennedy hesitated. That, of course, was the essence of the report. It was also, in essence, the secret of Traxia, and of every other city on the Red Planet. He nodded, slowly.

"Nor have I been able to discover the source of their water," he said.

"But hang it, man, they eat, don't they?" Kennedy nodded.

"They drink water, don't they?"

"They do."

"It's got to come from somewhere, hasn't it?"

"Has it?" Kennedy said.

DOAK's face revealed that he liked neither the answer nor the attitude of this field man. "What about farms?" he said. "Don't they raise their grain on farms?"

"I haven't seen a farm on Mars," Kennedy answered.

"Hydroponics, then?"

"Once they used such a system," Kennedy answered. He had asked Tryor the same question at least fifty times, before the Martian had finally understood and had answered. "But not in the last five thousand years."

He looked at his watch. He could give Doak five more minutes.

"But they manufacture their food from grain, don't they?"

"They certainly do," Kennedy answered. He had studied that too, as he had studied the water supply, with much the same result. "They have storage bins in every city in which they keep their grain, the greater part of which consists of a cereal much like wheat. They mill it much as we do on earth and it comes out a very good grade of flour. From there it goes to the individual homes and is baked into a hard bread which they call *yussa*—"

"But how does the grain get into the elevators?" Doak demanded.

"That is what I have never been able to discover," Kennedy said. He rose to his feet. "Nice to meet you, Mr. Doak. I imagine I'll be seeing more of you before you leave."

He held out his hand.

Doak didn't rise to speed the parting guest. He didn't seem to see the extended hand. His eyes came up to Kennedy's face and his gaze was cold.

"Sit down," he said.

CHAPTER II

The Pressure Goes On

KENNEDY lifted one eye-brow an eighth of an inch. He had always described himself as one part scientist, one part mystic, and one part adventurer. The remaining quarter of him was pure cut-throat. He was a combination of qualities and character-traits that would have driven a psychiatrist cock-eyed trying to follow the curves and twists and angles and knotty knobs of his personality.

As a field man for the Council, he had had need for every knotty knob on his personality, as well as a need for the knowledge of how to use a pair of brass knuckles expertly in a knock-down drag-out fight, with the loser getting a pair of spaceman's landing boots on his head the instant he was knocked down.

Doak, apparently, had only read his report and had not gone to the trouble of checking on the man who had written it, automatically assuming that a scientist good enough to be a field man would be hollow chested, have flat feet, wear glasses, and would possess the daring of a rabbit whose mother had been frightened by an atom bomb.

The fact that Kennedy was none of these things, that he stood a good six feet tall and was broad in proportion, that he had hot gray eyes and did not wear glasses, did not seem to mean anything to Doak. So the financier said, "Sit down."

"Go chase yourself," Kennedy said.

Doak blinked. "I—"

"That's from me, personally," Kennedy said. "It is entirely unofficial."

Doak sat up very straight in his chair. Kennedy, the cut-throat in him very much in control, knew he shouldn't do this. But he knew he was going to do it. Reaching across the desk, he placed one big hand on Doak's shoulder—and shoved down.

When he finished shoving, Doak was sitting very low in the chair. The financier looked like a surprised frog that had tried to duck hastily under water but had forgotten to close his mouth as he went under. Kennedy grinned at him, sweetly.

"Again unofficial, but so far as I am con-

cerned, you can jump in the lake!"

Doak tried to shove the chair out of his way, forgetting it was bolted to the floor. He kicked at it and got to his feet. Kennedy, already thinking the man looked like a frog, had no difficulty in imagining the frog spewing water from its mouth as it came up.

"Do you know who I am?" Doak said.

"I don't give a cuss," Kennedy said. "Take it easy, big shot. And if you discover the source of the Martian grain supply, and of their water, and their homes and everything else they possess, let me know, will you? I'm curious myself." He turned to the door.

Doak opened the drawer of his desk. The gun there was an automatic, flat and thin, but no doubt efficient. Kennedy, looking at the gun in Doak's hand, saw that he had made a mistake. Or maybe it wasn't a mistake. He had at least forced the issue to a head and knew exactly where he stood—in front of a gun.

"Do you know who I am?" Kennedy said.

"I know," Doak answered. "And I don't give a hoot, either. Sit down, Kennedy. I want to talk to you."

"I'm a field man—" Kennedy started to say, then shut up. He had intended to say that, as a field man for the UN, he packed a little weight himself. But, looking at the gun, he realized that all the weight he actually packed was concentrated in his ability to write a report which would be read by somebody back on Earth, and, presumably, after going through the proper channels, would be acted on.

All of which would take a year. Presuming he was able to write the report in the first place. Presuming he had a chance to send it back to Earth. And presuming Doak wasn't able to interfere with the operation of the proper channels, which was doubtful, in view of his ability to read a TS report.

Kennedy looked at the gun again. From his position at this moment, Earth was a long way off. The gun was right here. He sat down.

Doak grinned. "I read your report with great interest. In it, you hinted that a miracle was responsible for the Martian food and water supply."

"I hinted at no such thing. A miracle involves the contradiction of known natural laws. So I did not talk of a miracle. But I did hint that the Martians seemed to know the secret of spontaneous generation of mat-

ter." Angry tones sounded in his voice as if he had tried to understand and had failed and was angry at his inability to grasp the solution.

BUT he knew it was not a solution you just reached out and grasped, as a hungry man reaches for a hamburger.

"Something from nothing?" Doak said.

Kennedy shook his head. "Shall we say that something tangible to our senses comes from something intangible to our senses. It makes a little more sense if you put it this way. Though not much more." He shook his head again.

"I don't understand this," Doak said.

"I don't either."

"I want to understand it."

"So do I," Kennedy answered. His tone was flippant. Deliberately so. Doak's eyes glistened.

The financier toyed with the pistol. "You are a competent scientist; otherwise you would not be a field man for the UN. You have been here almost two years, spending my money, investigating this phenomenon, without results? How do you explain your failure?"

"I don't explain it. I have a hunch I can easily spend the rest of my life here, without results."

"I think you're lying," Doak said. "I think you have made important discoveries and are attempting to conceal them." He sounded outraged.

"You're welcome to your opinion," Kennedy said. He glanced at his watch, then toward the viewport. "In just a couple of minutes, you will know as much as I do. Look."

Involuntarily Doak turned toward the port, then spun quickly back to face Kennedy, jerking up the gun as he did so. The field man hadn't moved from his chair. Kennedy laughed.

"Did you think I was trying to trick you? I wasn't. Watch that rectangle."

Doak's face was alive with suspicion. "But nothing is there, except guards around a patch of sand."

"Watch!" Kennedy said. . . .

In the sunlight the sand was smooth and even. It had been smoothed and resmoothed during the preceding weeks, in preparation for this event, until Kennedy had had the impression that every grain of sand had been counted. The thought made him uneasy,

vaguely apprehensive. Machinery that took into consideration every grain of sand—What kind of machinery was that?

Outside the guards, the inhabitants of Traxia had gathered and were quietly watching. Kennedy could see Blount and Anders, busy with the recording equipment designed to trace that hidden machinery. Where was it? Under the city? Or elsewhere on the planet? Blount was looking often toward the ship, watching for Kennedy to return.

Came the blue haze.

It came from nowhere. It came suddenly, with no sign to indicate it was on the way. It looked like wood-smoke on far-off hills. It fitted the rectangle of white sand, exactly.

Kennedy came to his feet. Doak snatched up the muzzle of the pistol to cover him but he strode to the viewport without noticing the weapon. And Doak, after glancing at him, let the gun fall to his side. Doak watched too.

The blue haze thickened. Far-off came a soft crystalline chiming like glass bells ringing as they blew in a gentle breeze. The sound of the bells entered the ship. Kennedy wondered how that fragile chiming penetrated the insulated steel hull, but penetrate it did, a distant muted chiming, like atoms rearranging themselves within a crystal lattice. Within the blue haze the sand began to move. Nothing moved it. But it moved.

Blount and Anders were working with feverish speed. The instruments they were operating were enormously more sensitive than human senses. Kennedy wondered if they were sensitive enough to catch a glimpse of the sand movers. He was cold, cold. In the blue haze, shapes were taking outline. Like mushrooms, they grew. They firmed and their outlines hardened.

"Domes!" Kennedy whispered.

Somewhere ringing bells exulted. The walks began to take form.

"Where are those things coming from?" Doak gasped.

"Shut up," Kennedy growled, deep in his throat.

UNNOTICED, the conduits along the walks had gone in—and had been connected with the regular conduits from the city. Water flowed now along the walks. It moved along the porous conduits seeking—the shrubs, the plants, the flowers, came out of nowhere. Kennedy held his breath.

The swirling crystal notes leaped up in a flood—and died. The blue haze vanished. Before Kennedy's eyes, on what had been a rectangle of white sand, was—a new subdivision of the city.

The domes were dwelling places for a dozen families, perhaps more, perhaps less. Each complete with a flower garden. Soil and water where there had been sand. Flowers blooming in the desert.

The guards moved from their positions. During the time when the blue haze had been in existence, the watching Martians had not moved. Not an inch. Now they began to file through the newly created section of their city, examining the workmanship, seeing that everything was right, checking up to see if the sand movers had done their job well. Or were they admiring the beauty of the place? Kennedy did not know. Blount was looking desperately toward the ship.

"How'd they do that?" Doak croaked.

Kennedy shrugged. "You saw it. You know as much as I do. But that is the way they get their grain—and their water. The storage bins and the reservoirs—just fill up."

"But you must know something of the process," Doak said, desperately. "You've been here two years. You're a competent sci—"

"Blast it, man, that's what I've been trying to discover!"

Doak hesitated, his eyes on Kennedy. The frog face was labored with thought. A tongue flicked out and ran along the dry lips.

"How would you like to continue, on my pay-roll?" Doak said.

"What?" Kennedy gasped.

"At a hundred thousand a year!" Doak said.

"A hundred thousand dollars!"

"With a bonus of half a million dollars, if you solve the secret," Doak added.

Kennedy laughed. He couldn't help it. It was time to laugh. The offer was so silly it was ridiculous.

"I'll make the bonus a million," Doak said.

Kennedy gestured toward the viewport. "You idiot! If I knew that secret, what would a million dollars mean to me? Or ten million?"

Doak's face hardened. "I was afraid you would think of that," he said. He moved quickly, to place the desk between him and

Kennedy. "So I prepared another inducement. I believe that back on earth, in Miss Guthrie's private school, you have a twelve-year old daughter?"

"What?" The sound from Kennedy's throat indicated vocal chords in danger of being torn out by the roots.

Holding the gun ready, Doak took a newspaper clipping from his desk. He shoved it toward Kennedy.

CHILD MISSING FROM EXCLUSIVE SCHOOL

Joan Kennedy, 12-year-old daughter of a UN employee, was reported missing yesterday. The child, whose mother is dead and whose father is reported to be on Mars on an exploring trip, has been living with an aunt. No evidence of violence was found.

The muscles in Kennedy's neck became ropes. The veins stood out on his forehead. His face turned dull gray. "You rat! Is it worth that, to you?"

"Yes," Doak said.

"Why?"

Doak's eyes glistened. "If they can create water and grain—and a complete subdivision—they can create other things."

"What things?"

"That's my business. Your business is to find out how. That's all. My salary and bonus offer still holds good. In addition—the gun centered on Kennedy's stomach. "—you will get your child back, unharmed."

Kennedy cursed softly. He wiped sweat from his face, and wished there was some way to wipe sweat from the human soul.

"We're working on it, right now," he said. "Those two men are my assistants. The equipment they have set up is designed to trace the machinery that created the new homes."

Doak's eyes became alive. "There is machinery?"

"There must be."

"But it is hidden?"

"Well hidden!"

"Do you think your men have succeeded in locating it?"

"I don't know," Kennedy answered. "But even if they have got a line on it, we may need time to locate the hiding place."

"How much time?"

"A week, a month, six months. Man, I don't know!"

"Go ask them what they have discovered. Report back to me here at noon tomorrow. And one more thing—" The eyes in the frog

face were like shiny beads. "Don't try anything, Kennedy. This ship is well armed. My men are loyal." He nodded toward the clipping lying on his desk. "And even if you tried to kill me, and succeeded, there would still be this."

CHAPTER III

Miracle on Mars

IN THE strained silence, Kennedy could hear himself breathing. "Suppose what we saw—was actually a miracle?"

"Miracles result from the operation of unknown laws. Just take the *un* out of that word, Kennedy."

"But what if I can't?"

Doak considered the question. "The Martians know where the machinery is located and how it operates," he said at last. "I can get the information from them, if you fail." He pressed a button on his desk. Behind Kennedy a door opened.

"Show this gentleman out," Doak said, to the guard who entered.

Kennedy left the ship and walked over to where Blount and Anders were fussing with the instrument. They seemed to be disgruntled and confused. When he asked them what they had discovered, they paid no attention. He repeated the question and Blount swung around with outstretched hands.

"But we didn't get a thing," Blount said. "Not a single thing." His voice was angry. Kennedy could see he was afraid.

"What?" Kennedy said.

Blount made a quick gesture. "Oh, we got a lot of stuff, before and after pictures, a partial spec analysis of that blue smoke, but we didn't get a single tracer on the source."

"But that's impossible!" The pressure of the emotions in Kennedy turned his normal voice into a shout. "We saw matter manipulated. That means titanic forces were at work. The magnitude of the energies flowing in that area while those domes were being constructed was great enough to strain space itself. The control forces did not have to be equally strong but they had to be powerful enough for our instruments to detect them. You blundered."

Blount shrugged. He was hurt at what his chief said and at the tone used. But more than anything else, he was scared. His fingers were trembling and his left cheek was developing a tic.

"We've got to find that machinery," Kennedy continued. "Got to! I was depending on getting a line on it from the creation of this subdivision."

"I know," Blount said. "But we didn't. Either the control forces bypassed our detectors or our equipment wasn't sensitive enough to catch them. You can look at the recordings yourself."

Kennedy turned away. If Blount said the recordings were blank, then there was no use in anyone else looking.

In the west the sun was setting in a cloudless sky. Long shadows reached out from Traxia. The new subdivision was already in shadow.

The population had increased, Tryor had said. So new housing had been provided. It was as simple as that. And as complicated. Back on Earth, building a new subdivision was also a complicated process, though the complications were different. They involved capital and labor, the work of skilled men, conformity with a building code, and the subtle factors of profit. And other things.

Trees were chopped down and the trunks sawed into lumber. Clay was dug and pressed into bricks. The lumber and the bricks were fitted together, each in its proper place. Copper was dug for electric wires and iron for nails. Gravel and cement for the foundation. If plastics were used, the manufacturing processes were different, but the end-product was the same and had the same function—a house where people lived.

On Earth you could follow every step of the process if you wished. You could watch the trees being cut, the brick clay being dug. You could see the raw materials with your eyes, feel them with your fingers, taste them, smell them. You could watch the men building the house, hear the ring of hammers driving nails, the rasp of the saw cutting boards to exact lengths.

Here on Mars you saw figures moving in a blue haze, you heard atomic bells ringing. Then the haze was gone and the end product was before your eyes. Dazed, you talked of miracles.

In a ship from Earth was a man who wanted the secret of that miracle. Kennedy

did not doubt that he knew the reason why Doak wanted that secret. It was not wealth. Doak already had the secret of wealth. It was power. The same process used to create a new subdivision could also be used to create a fleet of space ships. The machinery would have to be modified, the blueprints changed. That was all. The man who knew that secret would have power over all men.

AT THE thought, Kennedy knew he would cheerfully cut Doak's throat from ear to ear and spit in the man's face as he bled to death. When he thought of the twelve-year-old child, kidnaped back on Earth where such things could happen, he knew he would gladly use his fingernails to tear Doak's jugular vein from his throat. Fingernails were the far-removed remnants of the claws that men had needed once, to live, and needed still, and would need as long as there were Doaks in the universe.

A step sounded in the sand. Blount was there beside him.

"What's wrong?" Blount said quietly. "I know something is."

With Blount was Tryor. The Martian's ears, large for picking up every sound transmitted by the thin atmosphere, were turned toward Kennedy, questioningly. His figure was almost identical with the human figure, except for the larger, movable ears and the slightly smaller eyes with their extra membrane to cut out the sand glare in the daylight.

With slight variations, nature had apparently almost duplicated the human body here on Mars. As to whether or not nature had duplicated the human mind, no one knew. Kennedy suspected it had not. Ever since he had arrived here he had felt that the Martian mind was different but where that difference lay, he did not know.

Kennedy looked at the Martian. In his mind a slow thought turned. Tryor knew where the machinery was hidden. If he could reach the Martian's mind, convince Tryor of his desperate need! His eyes went to the ship, dull in the growing twilight. The hate in his eyes was a living thing.

Tryor's ears stood straight up. "Help," the Martian whispered. "You want—your need—" He fumbled with unfamiliar sounds and with alien concepts back of them. "You—need help?" he questioned.

"Yes!" Kennedy breathed. He told them what had happened.

"It's not possible!" Bount, instantly angry, blurted out. "He can't get away with this. Kidnaping and extortion are felonies. I don't care who Doak is, he can be put in jail for the rest of his life."

"He can be but will he be?" Kennedy answered. "The courts and the jails are on Earth. Doak is here. Tryor—"

The listening Martian had not understood one word in ten. His ears drooped and he appeared to meditate. Kennedy waited. Wild thoughts of shaking the information from the Martian mind flashed through his brain. Hopeless thoughts. There was no way of shaking comprehension from a mind. And comprehension was what was needed.

Kennedy had discussed both the source of the water supply and the grain with Tryor. The result had been embarrassment on both sides. Tryor had tried to explain. He had tried hard and long. Kennedy had been embarrassed because he had begun to suspect he didn't have the mental equipment to understand the explanation.

Tryor's embarrassment, he had suspected, had resulted from the unwillingness of the Martian to point out the deficiency of the human brain. The Martians were the politest people he had ever known, much too polite to embarrass a guest by saying or hinting that he was actually only a high-grade moron.

"Again?" the Martian whispered.

Kennedy told it again. He included the fact that his equipment had been set up with the idea of locating the hidden machinery. Tryor seemed not to mind that at all. Kennedy was relieved. Though there might have seemed to be an element of trickery in his own actions, he knew in his heart that he had been motivated by the desire to know, and by nothing else. Tryor seemed to understand, and to approve.

But the rest of it—

"*Mond notal te?*" the Martian said. ("Can you draw me a picture?")

Kennedy sighed. Always the Martians wanted a picture.

"Come my house," the Martian said. "Draw picture."

"You stay here," Kennedy said to Blount. "I'm going to try to draw a picture of the word 'help.'"

"You don't need to draw a picture for me," Blount said, hotly.

"I know. But you can't work miracles either." He looked at the ship and again the

hate in his eyes was a living thing. Doak, you made a mistake, he thought.

SIDE by side, Kennedy and the Martian walked toward the city. They passed through the new section that had been added. The residents were already in their new homes, preparing the evening meal.

On a plot of grass, a child was playing with a ball. He left off to wave at the strange alien striding along the winding walk. Kennedy waved back. In the thin soft air was the fragrance of flowers, blooms growing where an hour earlier had been the sand of the desert. A musical instrument was tinkling.

"This is Paradise," Kennedy whispered.

"Paradise?" Tryor sought the meaning of the word. "Picture?" he said, hopefully.

"There are no pictures of Paradise. It's only a dream of a land without hunger and without cold, without fear, where all men have enough and none too much. You've got it here in this city. Or you had it." He looked back at the space ship resting on the sand. "Now the serpent is at your gate—in a space ship."

"Serpent?" Tryor questioned.

Kennedy uttered an exclamation of despair and sighed.

Tryor lived in a rose-colored dome. Red flowers bloomed beside the door. On the walk, Kennedy paused. "This house?" He made gestures with his hands. "Was it made like the domes I saw yesterday?"

"Yes," Tryor said. "Of course. How else?"

The question seemed to astonish him. The fact that he had understood it astonished Kennedy and gave him hope. Not much hope, perhaps, but a little. They entered the dome. Soft lights sprang into existence as they crossed the threshold. Kennedy had never ceased being amazed at the feeling of comfort in this simply-furnished place. Even more than comfort, the feeling here was of fitness, of rapport with ancient unities.

He knew that Tryor spent much time here, reclining on the low couch against the wall, apparently asleep. But actually not sleeping. Dreaming would be a better word for it. Dreaming seemed to be the main occupation of all Martians.

A people who lived in a land where manna fell from heaven and housing problems were solved by miracles could afford to dream.

But humans could not. Humans still had to get things by hard work. They still had to fight and sweat, to know neither security nor peace of mind. Bugles always blowing! The challenge of soil and weather, of desert, mountain, and sea, the challenge of the atom and of space, these men had met. Did the bugles ever cease?

Here on Mars they had ceased. Or had never blown. But Kennedy knew that was not the correct answer. The slow failure of the water supply over the centuries had been in itself a supreme challenge. The Martians had solved it. And had solved all other problems with it.

Somewhere there was machinery!

Many times Kennedy had imagined the nature of that machine. It was not a mechanical device of turning gears and sliding valves. That was much too crude. Nor spinning generators nor grunting atom giants. Still much too crude. It was a machine in which the moving parts were molecules or atoms or parts of atoms. Maybe it was electrical, maybe it utilized some form of energy that men had not discovered. Out from it flowed subtle lines of force that transformed sand, or perhaps the intimate fabric of space itself, into pre-determined forms.

"Picture?" Tryor said, hopefully.

Kennedy tried to draw a picture of the word *Help*. True, Tryor had used the word but the Martian had not really understood it. All he had got was an impression of need. It was Kennedy's task to translate that impression into concrete terms. Once Tryor got that much it would be necessary to translate Doak and Doak's purpose into terms that Tryor could grasp.

Kennedy drew a picture of two men, one drowning in a pool, the other standing on the bank. The man in the pool was reaching up a despairing hand to the man on the bank.

Tryor studied it and looked up brightly to Kennedy. He got the idea. "Water?" he said, happily. "You want water?"

"No!" Kennedy said.

"Bath?" Tryor said.

"No," Kennedy said.

HE DREW another picture, this time of a woman and child, gaunt and starved. Beside them a fat man gobbled food from an overloaded table. They held out their hands to the eater, begging for crumbs, for life, for help.

Tryor studied the picture. He shook his head. "Wait," he said. He left the house.

When he returned, he had six Martians with him. One by one they examined the pictures while Kennedy tried in every way he knew to tell them what he needed and what they needed. If he failed, they were in danger. Before Doak was through with them, they too, would need help.

Not one of them got the idea. Suddenly Tryor brightened and left the room. He returned with the child that had been playing ball. At sight of the youngster the Martians nodded to each other.

The child studied the pictures. He shrugged, bounced his ball on the floor, and spoke rapidly in the ringing bell tones of the Martian language, bell tones with sound nuances so subtle that no human ear had ever been able to grasp them. The Martians listened. They turned to Kennedy. He saw comprehension in their eyes.

"A kid gets the idea where they don't get it," he mumbled. He was acutely uncomfortable.

"Help," Tryor rolled the word around his tongue. He had the idea now and was shocked by it. His face showed pain. Kennedy could see the Martian testing the word for its fringe meanings, following the idea out from its basic root meaning to its subtle secondary implications. If you needed help you were in danger, if you were in danger it was because something threatened you. What threatened Kennedy?

The field man drew a picture of Doak and of the space ship, he put a knife in Doak's hand, and drew another picture of himself with the knife threatening him. The child looked frightened. But he translated this picture too. And the Martians understood at least that Doak threatened Kennedy, and them.

They whispered to each other. Tryor spread his hands. "What do?"

Kennedy, with sweat on his hands, drew what he hoped was his last picture—of the new subdivision coming into existence. From it he drew lines of force radiating to the source of that construction miracle.

"The machines," he whispered. "The machines that can create a subdivision can also create weapons, forces powerful enough to disintegrate Doak and his space ship. Where are the machines?"

This was his plan, to use the titanic energies involved in the miracle his own eyes

had seen, to obliterate the enemy at the gate.

"Machines?" Tryor's voice wondered over the meaning of the word. "What machines? There are no machines."

"No machines?" Kennedy gasped. Deep in his heart he knew that Tryor must be lying. There had to be machines. Perhaps Tryor had not actually grasped how vital was the compulsion that drove him.

Kennedy drew his last picture then, of Doak with a knife in his hand. But now the knife was presented at the throat of a child.

CHAPTER IV

Helping Hand

CRUDE and melodramatic as was the drawing, it was no more so than life itself. And it was presented on a level so low as to prevent misunderstanding of its meaning. Basic concepts were here, the rawness of a knife and of death. The voice of the Martian child translating the drawing was the plaintive note of a frightened bird awakening in the night and crying out in fear. The child understood the meaning of that picture, too well. His soft whimper filled the room.

Instantly Tryor was on his knees beside the child, whispering to him, patting him, telling him everything would be all right. The other Martians crowded around. Kennedy was forgotten. The Martians patted the child. He would not be comforted. Finally in desperation one took him by the hand and led him from the room.

Tryor, his eyes blazing, rose to his feet. Never before had Kennedy seen an angry Martian. He saw one now.

"You frightened child!" he hissed. "Because of you, child grow crooked all his life. Child never forget."

It sounded like a damning indictment. Kennedy's voice was a choked and wretched thing.

"I'm sorry. I was trying to show you the pressure that is on me."

He pointed to the picture he had drawn. "This is my child," he said.

Tryor grasped the meaning. Apparently he had not fully understood the meaning of the child in the last picture. Now he saw

it. The rage began to go from his face. And little by little a warm sympathy replaced the anger. Tryor understood!

Kennedy wiped the sweat from his face. He had won a battle. The lines of communication were open at last.

Outside in the night was the sound of a man running and a voice calling, hoarsely, "Kennedy!"

Blount's voice.

Kennedy opened the door.

"Eight men from the ship!" Blount panted. "They jumped us. I think they killed Anders. I got away."

Something had gouged a groove down the side of Blount's face. Blood still flowed from the edges of the cut.

In the darkness a human voice called. Running footsteps sounded. Blount turned a startled head in the direction of the sound.

"They followed me," he whispered.

"Come in this dome," Kennedy said. "Quickly!"

Blount moved but the running footsteps moved faster. From the soft darkness a powerful flashlight juttred a sudden stream of blinding light.

"Stand where you are!" a voice ordered.

"They've got guns," Blount whispered.

"I don't doubt it," Kennedy answered. He turned his head and called within the dome. "Tryor!" There was no answer. The running feet came up the walk.

"Get your hands up!" Guns prodded them. They lifted their hands. Fingers probed their pockets. "They're clean," a voice said.

"Tryor!" Kennedy called again.

"Shut up, you!" A fist smashed against his mouth. "Mr. Doak? Here they are, sir."

"You've got Kennedy?" Doak called from the darkness.

"Got him!"

Kennedy hit the man who had struck him. All the pent-up emotional storm raging in him gave strength to the blow. The man turned a double somersault backward.

"Tryor!" Kennedy called again.

There was no answer. The flashlight poured over him and Blount. Soft clicks sounded in the darkness, safeties being released.

"Stand still, you! If you don't, I'll blow you in two."

Kennedy stood still. Blount stood still. Doak came out of the darkness. Doak seemed pathetically glad to see the field man.

"I almost made a mistake," Doak said.

"Uh!" Kennedy said. "So you finally thought of that?"

"I thought of it," Doak said. He spoke to his men. "Find out what is in this house." There was suspicion in his voice. And fear.

Kennedy knew that Doak had realized that the machines which could create a new subdivision could also create weapons. Doak was afraid of those machines, desperately. But Tryor had said there were no machines and Tryor had failed to answer.

A MAN stepped inside the door of the dome. His voice came back. "Just a bunch of goonies squatting in a circle. That's all." The voice was contemptuous of the Martians.

Then the voice came again. "There's something going on here that I don't understand. Come and look at this, Mr. Doak."

Doak moved forward. Kennedy followed. Doak stepped into the room. Kennedy halted in the doorway.

Tryor and the six Martians were squatting in a circle. The sound of the clamor outside, the pound of Doak's footsteps must have been clear to them, but they did not turn. In the center of the room, like a ball, floated a sphere of blue haze. As Kennedy watched, the haze seemed to thicken and become a darker shade of blue. He felt his pulse leap. The blue haze of the sand movers!

There was no obvious origin of the blue sphere. It appeared to come from nowhere. Something from nothing, he thought. Then his own phrase came back to his mind. "Something tangible to our senses comes from something intangible to them." This was happening here.

The blue haze thickened, became a ball a foot in diameter.

"What is that thing?" Doak said.

The Martians did not answer. Their gaze was concentrated on the ball with a steadiness that nothing seemed capable of penetrating. The ball lifted a foot in the air. It was above the heads of the squatting Martians.

From his pocket, Doak jerked the flat automatic. It spouted three shots at the ball. The blue haze flickered with three tiny points of glistening light.

Doak looked at the ball and then looked beyond it, trying to see where his bullets had struck the wall of the room.

"They went in," he said slowly. "But they didn't come out."

He seemed to be trying to grasp the significance of something that went in but didn't come out. With a slow, almost imperceptible drift, the ball began to move toward him.

"Keep that thing away from me!" he shouted.

The squatting Martians seemed not to hear him. The ball continued to move. The pistol in his hand swung to cover Tryor.

"I'll shoot you!" Doak yelled.

The ball darted toward him. He pulled the trigger of the gun. In the quiet room the roar was thunderous. The bullets went into the ball. Turning, Doak fled through the door.

Like a maddened bull, Doak plunged from the dome. Kennedy got quickly out of his way. Behind Doak, moving far faster than he could move, came the blue ball. After he left the open doorway, it caught him.

He screamed, a sound wrenched from a throat in mortal pain and fear, as the ball touched him, then he was gone.

Gone in a direction that no eye could follow, gone from the space he had occupied to some other space, perhaps gone from something tangible to the senses to something intangible to them.

Kennedy thought he saw coruscating pinpoints of light flare in the outlines of Doak's body, he believed he saw the mouth gulp once, like a frog going hastily and unwillingly under water. Then the frog mouth was gone and Doak was gone and there was nothing in the doorway of Tryor's dome except a floating ball of blue haze.

"Ah!" one of Doak's men gasped. They ran, like crazy men, and they looked back over their shoulders as they ran, to see if the ball was following them. It floated serenely in the doorway. The running footsteps died in the silence of the Martian night.

"Come," Tryor whispered. "Come, friend."

Kennedy went into the dome. The ball preceded him. It took up its position again above the circle of squatting Martians.

"Tryor?" Kennedy said, huskily.

"No talk," Tryor answered. "Listen."

On the Martian's face, the lines of concentration deepened. The seven stared at the ball. There was silence in the room. The silence grew. There was a click, as of a door being unlocked somewhere.

"What is it?" Kennedy whispered. Somewhere a child was crying.

A man was trying to comfort her. The sobs turned into words.

"Where'd the man go?" the child's voice came. "He was here just a minute ago. You're a policeman, aren't you?"

"I'm a policeman," the man's voice said. "I want my daddy," the child's voice said. "I want my auntie. I want to go home."

FROM Kennedy's throat came wild words. "Joan! Joanie! I'm here, Joan. Are you all right, Joan?"

"Daddy!" the child's voice was a shout of glee. "I'm all right, Daddy. Where are you? I can hear you but I can't see you!"

The gruff voice spoke again. "Now, now, child. Your daddy ain't here. He's on Mars. But I'm here and everything will be all right. Don't you worry none. I'll take care of you." A gruff but soothing voice, it was, a kindly voice, but a startled voice too.

"But my daddy is here," the child protested. "I just heard him. Daddy!"

"Go with the policeman, Joanie," Kennedy said in choked tones. "Go with the policeman. I'll be home by the next space ship. Go with him."

"What the devil is that?" the startled policeman gasped. "Who are you? Where are you?"

The blue ball vanished. It went into nothingness, vanished into nowhere. The voice of the policeman was silent.

The squatting Martians relaxed. The concentration disappeared from their faces. Tryor smiled.

"That was my child!" Kennedy whispered. "I heard her." Tryor waved his hand in a little gesture that indicated the spot the blue haze had occupied. "Through that we reach all space," he said.

Kennedy sighed. "I knew you had machines, somewhere," he said. He did not in the least understand how this squatting group had reached the operators of the machines or how they had made their wishes known or how they had translated their wishes into

effective action across even the void of space. But it was not too important to know, now. Later he could learn.

Tryor shook his head. "No machines," he said, smiling. "It is here." He tapped his forehead and groped for words. "A something you have not yet, a piece of tissue, a lobe—" The faltering words went into silence. "Here, through this lobe, we touch all things, change all things. How say? How say?"

The words groped into silence.

"Good grief!" Kennedy whispered. A piece of tissue, a brain lobe, that was the ultimate machine. No spinning generators or grunting atom giants. No wheels, no cogs, no levers. Moving atoms, shifting bits of ultimate matter. The lobe of a brain.

"But how did you develop such a thing?"

Tryor knew the answer. Tryor tried to explain. When in the long ago the clouds had stopped forming and the reservoirs had stopped filling, when the desert had come up over the fat farm lands, when the Martians had faced death and extinction, there had been born a mutation, with the extra lobes.

"We are his sons," Tryor said, smiling. . . .

Outside, in the star-bright Martian night, Kennedy tried to understand what he had learned. In an extra brain lobe, the Martians had found the secret of Paradise.

It was a secret the human race could probably never probe, and almost certainly could never duplicate. A freak, a sport, a mutation. The chances of nature ever duplicating it again were ten times ten high ten—against.

For a moment, he was sad. Then the sadness was gone. He straightened his shoulders. For one race there was one destiny, for another race there was another destiny. What the Martians had received as a gift of the gods, humans would have to achieve with the work of their own calloused hands.

Ahead of him, ahead of all men, were bugles blowing.