



The **MYSTERY** of **ELEMENT 117**

By MILTON K. SMITH

When an element is too unstable to exist, but does exist, where could it be? There's only one place, the fourth dimension. But could a human being live there?



A shot sounded out in the hall. Then the door swung open violently.

JERRY CHANE dozed in the great barrel chair, his feet resting on a stool that held them about even with his lax head. His black hair was mussed, his tanned face badly in need of a shave. The collar of his white shirt was unbuttoned, the knot of the hand-painted tie carelessly askew.

The chair and Jerry Chane were in a corner of a large room—about twenty-five feet. In the center of the room was an expensive desk with nothing

on its glistening surface.

Bookshelves and filing cabinets took up the space along one wall, windows a second wall. The frosted glass door and four by eight fibre board occupied a third wall.

Through the frosted glass of the door could be seen the reversed lettering of the simple announcement, "Jerry Chane." Above it was the number 305.

The fibre board had half a dozen typewritten sheets held in place by

thumb tacks. Most of the typing was mathematical equations, typed with an engineering typewriter.

Along the full length of the fourth wall was a work bench backed by a panel on which hung neat rows of tools and several shelves filled with mason jars that had small copper parts in them. Underneath the long work bench were banks of shallow drawers.

In one of these cubbyholes under the bench a large black spider crouched motionless. That is, it looked like a spider and its glittering dark eyes seemed alive. Its body was as big as that of a chicken and its inch-thick legs would have straightened out to a full three feet in length apiece if they were not gracefully curved to support the huge body.

If it were a spider it was of no species of spiders known on Earth—or for that matter, any other place in the universe other than Jerry's mind and workshop.

It was a robot shaped like a spider. Jerry had built it to act as a body-guard, and put into it reflexes that would cause it to attack anything that entered the room. When he slept the robot's reflexes acted and the spider stood guard.

When he was awake he could control it verbally or by a pocket radio. The word "quiet" shut off its reflexes. After nearly losing his life once when he fell asleep without turning on the spider's reflexes, he had fixed it so that his breathing while asleep would activate its reflexes so it could protect him.

He had built it in the shape of a giant spider because a man is more afraid of that shape than any other—especially if it is unbelievably large and springing through the air with its glistening eyes and clashing man-

dibles. The sight of it would paralyze the most daring of marauders automatically, leaving them wide open.

While Jerry slept the robot lurked under the workbench, its eyes taking in the whole room, its legs motionless until some sudden movement would cause them to spring.

JERRY'S ears suddenly brought him the sound of someone or something landing on the floor with a light thud. His eyes flashed open in time to see his spider crossing the floor rapidly, a girl standing near the desk. Her eyes widened in terror and a scream passed her lips. Then she was clumsily fumbling with something at a wide red belt that circled her waist.

"Quiet," Jerry said quickly.

The spider froze where he was and kept his eyes on the figure of the girl. She looked fearfully from the spider to Jerry and back to the spider again. Concluding that she was safe for the moment she calmed down, but her finger stayed on a button of her belt that looked like an ornamental stud—one of several that dotted the red leather around her waist.

Without moving from his relaxed position Jerry's eyes appraised her slowly. She was blonde, with generous tresses that looked like they had just been worked on by an expensive hairdresser. Her cream colored dress was of the latest style; throat-hugging neck and pleated skirt, with form-fitting tailoring in between. Loose sleeves hid the shape of her arms down to the wrist where they were pleated into a tight cuff.

The hands were long and slender, the fingers looking as though they might belong to a musician or a typist.

Jerry's eyes came back to the face and settled there. The firm chin and flawless skin were set off by a nice

nose and deep blue eyes, framed in dark lashes. Her age couldn't be more than twenty or twenty-two.

Jerry's eyes glanced quickly at the closed and locked door, then back to her face again. A puzzled frown formed a crease between his eyes.

"How did you get in?" he asked, without moving from the position he had been in while he slept.

"You are Jerry Chane?" she asked, ignoring his question.

He nodded briefly. She opened her mouth and closed it again as if hesitating about what to say next.

"How did you get past the locked door and burglar alarm?"

"I didn't come in through the door."

"I suppose you came up through the floor," Jerry said, an amused smile playing about his lips.

"In a way I did," she replied. She returned his smile, and he noticed with approval the way her nose crinkled when she smiled.

Jerry dropped his feet from the stool and stood up, stretching.

"Back," he said tonelessly. The spider turned around and went back under the bench. The girl watched it with wide eyes. Involuntarily she shuddered.

Her eyes returned to Jerry who stood politely waiting for her next move.

"I'm Gertrude Mouru," she said. "I—we need your help."

Her eyes flashed him a single, pleading look, then were hidden by the dark lashes.

"Mouru," Jerry said thoughtfully. "Seems to me I've heard that name before. The House of Mouru. No, not in the newspapers. Some book, I think. Something about it being mysterious and older than history or something." He chuckled. "You don't look older than history, Miss Mouru; or should I say Mrs. Mouru?"

"Just call me Gertrude. I'm Miss Mouru, of course," she said with a sudden show of friendliness. Then she seemed to sink back underneath the air of fear and anxiety that hovered around her like an aura.

"What's the trouble?" Jerry asked.

"I can't tell you," Gertrude replied. "It's my brother. He sent me."

"I remember now!" Jerry said, snapping his fingers. He went over to the bookcase and searched quickly, pulling a book out from one of the shelves.

The title page carried the legend, "Study of the function, $f(x,y,z,iw,t)$ ". The author's name was Frank Mouru with a string of degrees following it.

APPARENTLY ignoring the girl, Jerry thumbed through its pages, his mind recalling the details of the contents which he had thoroughly mastered a few years previously.

When his eyes lifted from the book they held a new look of comprehension.

"So you *did* come up through the floor!" he exclaimed.

"You might call it that," she said. "But I think you know that I must have come into the three-space of this room from a three-space adjacent to it where there wasn't a room."

"Yes, I know," Jerry murmured, returning the book to its place on the shelf. He walked slowly over to his desk and sat down on it, one leg reaching down to the floor.

"Well," he said, "What comes next? Do I get an explanation or am I supposed to follow you blindly someplace and learn what it's all about from your brother?"

Jerry took out a pack of cigarettes and offered Gertrude one. She accepted it. Jerry took one for himself and snapped his lighter open.

He watched Gertrude's face closely as she leaned forward and lit her

cigarette. Her hands were trembling almost imperceptibly and there were faint traces of tenseness about her mouth.

"Frank told me that if you had heard of him and his work I should tell you as much as I can," she said after taking a deep drag on the cigarette. "After he wrote that book he kept on along the lines he laid down for research. I don't know much about it except what he has seen fit to tell me from time to time. You probably know more about the theory than I ever could, Mr. Chane."

"Don't call me Mr. Chane," Jerry said with a laugh. "It makes me feel like I was old enough to be your father."

"All right, Jerry," Gertrude said smiling. "As you probably know Frank believed that space is four dimensional. He was convinced that the substance out of which our three-space universe is composed extends a small distance in an out-space direction; that is, matter is four dimensional. Not very much so, though. I think my brother's words to demonstrate his idea were that a common brick is two by four by eight inches in our space, and perhaps a ten millionth of an inch thick in the fourth dimension."

"Yes," Jerry said impatiently. "I gathered all that from his book. He thought that this four dimensional nature of matter could be gotten hold of in some way so that an object could be moved completely out of our three-space along the fourth dimension, and then back in again. How, he didn't know. He concluded his book with the words, 'Any successful attempt to move an object along the fourth dimension must come as the result of a thrust from some other three-space in physical contact with ours.' I gather he was successful, or you couldn't have come into a room

out of thin air. If he thinks I could help him in a technological capacity, however, he'd better get someone else. I have my own private research."

HE NODDED toward the spider lurking suspiciously under the workbench and grinned. Gertrude looked at it and shuddered again.

"No," she said, "he doesn't need any help like that. It's something too big for him to handle. I don't know what it is myself. In reaching into the fourth dimension he opened the way to something he never dreamed of. He—he told me not to tell you more than that. He said you would have to see for yourself to believe it."

"Why didn't he come himself?" Jerry asked.

Gertrude's face colored becomingly. Then she smiled at Jerry.

"He said you were more likely to fall for a pretty face than a mystery," she said banteringly. "Anyway, he didn't dare leave the—"

She came to a stop abruptly and, from the expression on her face, she had almost said too much.

Jerry grinned at her.

"So my reputation gets around!" he said banteringly. "Does your brother expect me—oh, to—?"

Gertrude reached inside her blouse and extracted a long envelope, and handed it to Jerry without speaking. He opened it and took out a thin sheaf of bills. There were ten one thousand dollar bills. Jerry whistled an off key melody while he examined them carefully.

"That's a retainer," Gertrude said hastily. "There will be more—much more, before the thing is through, if you succeed. If you don't you won't have much need of money."

"I see," Jerry said tonelessly. "It's like that, huh?"

"Yes," Gertrude answered vaguely. "It's pretty bad."

Jerry walked around his desk, his eyes on the floor and his hands in his pockets. He stopped again in front of Gertrude.

"Look," he said. "When anyone offers me ten thousand dollars it's generally because they think I can get them a lot more than that or save them a lot more than that. Most people don't offer that much right off the bat to prevent themselves from getting killed. The average voluntary retainer from a guy who thinks he might get murdered is only around five hundred. When it goes above that it's generally connected with money."

He stopped, waiting for some comment from her.

"Will you stop hedging?" Gertrude said in exasperation.

"It seems to me you're the one that's doing the stalling," Jerry said coldly. "You haven't even mentioned how I'm going to meet your brother, or where. You haven't told me what I'll be expected to do either. Am I to find someone? Am I to fight someone? Will I need a gun or just a notebook? Money talks, but in this case I think it needs an interpreter. I don't happen to be short right at the moment, so I may seem a little unreasonable in closing my eyes and grabbing the bait without quibbling."

"Please," she said, giving Jerry that appealing look once more. Then she added, "I'm sorry. I should have been more explicit. Frank said to give you this money and get you to agree to see him. He will explain the whole thing to you himself. All you have to agree to do is come with me and see him."

"That sounds more reasonable," Jerry said. He walked across the room and unlocked a drawer under the work bench. Inside was a metal box. He lifted the lid and laid the

currency in on top of a small pile of other money. Then he dropped the lid and slid the drawer back in place, locking it once more.

A SHOT sounded out in the hall. The shot blended into the sound of shattering wood and metal. The frosted glass panel of the door cracked and the knob jumped visibly. Then the door swung open violently.

"Quick," Gertrude exclaimed. She jumped to Jerry's side and took hold of his hand just as the door opened, revealing three men with guns pointed through the door.

Then she fumbled with a stud on her red leather belt. A shot rang out. Then the room faded from view.

For an awful instant Jerry felt like he was in the vacuum of outer space. The air rushed from his lungs. Then he was gulping in cool air and looking down on the city from a dizzy height.

The city seemed hazy, as though it might be a structure of celophane that was only semitransparent. His eyes could see through the buildings and quite a distance into the ground underneath.

It solidified for several seconds, then grew hazy again. But it grew closer now. Gertrude still kept a firm grip on his hand.

The ground came slowly upward until they were only a few feet above it. Sewer and water pipes appeared under the street and sidewalk as they might if viewed through a super x-ray.

Just as the two seemed about to sink through the sidewalk the ground became normal. Jerry felt his feet land with about the force they would have if he had jumped a foot off the ground and fell back.

A sallow complexioned youth was half a block away, walking toward them. He stopped, then seemed to

change his mind. He turned around and started walking. After a few steps he looked back over his shoulder and then started running. At the first corner he disappeared, still running.

Gertrude chuckled. "He probably thinks he saw a ghost," she said.

"How did we get out here?" Jerry asked, his mind still whirling from the many strange sensations it had experienced in rapid succession.

"I didn't have time to tell you," Gertrude said. "When I took your hand you became attached to the dematerializer with me. What really happened was that we moved just far enough in the fourth dimension to clear the depth of the building. It had to be that far or we couldn't have gotten out of the room and escaped getting killed. As soon as we were clear I moved us back to where we could breathe again. Meanwhile in those few seconds the curvature of the earth had apparently lifted us up a thousand feet, although we were just moving in a straight line along the direction we had been moving in space at the instant we dematerialized. By materializing judiciously and allowing gravity to pull us back we landed here. That's all there is to it."

"Yeah. I see," Jerry said dryly. "Simple when you see it, isn't it?"

"My car is downtown," Gertrude said. "We can catch a bus and pick it up, then go to where Frank is."

"First we're going back and see how much damage those boys did," Jerry said determinedly. "By the way, just why did they come? Are they connected in any way with you?"

"I don't know," Gertrude said worriedly. "The—forces fighting us could very well have made them try to kill us. I never saw those men be-

fore, though."

Jerry grunted.

A bus came down the street and pulled into the curb. Jerry and Gertrude climbed aboard.

AT THE building that housed Jerry's office several police cars were clustered around the entrance. Jerry took Gertrude's arm and pushed through the crowd. The elevator boy's eyes were large and round.

"Gee, Mr. Chane," he said. "Some gangsters were shooting in your office. They're all dead. Lucky you weren't there or they might have killed you."

The elevator came to a stop at the third floor and they stepped out. The elevator boy opened the door just enough for them to get through, then closed it quickly.

In the hall several policemen were standing in front of 305 with guns drawn, an air of fear about them.

Jerry walked up to them, a tight grin plucking at the corners of his mouth.

"This your office?" one of them said hoarsely. Jerry nodded and stepped past him.

The door was open. Inside three men lay motionless on the floor. Atop one of them was the shattered remains of the spider robot.

A look of frustrated rage entered Jerry's eyes. One of the policemen was speaking.

"We shot the spider thing," he was saying apologetically. "The elevator boy told us afterward it was a mechanical gadget of yours, but we thought it was alive at the time. The three dead men are hoodlums. We know them down at police headquarters. Lucky you weren't here. They have been suspected of being professional killers for a long time, but we never got enough on them to put them away."

Jerry's eyes had been on the dead men. Now he looked at the policeman.

"Before you leave make sure the building manager has a new door put on, will you?" he asked. "Leave the remains of the spider here. I may be able to salvage part of him to build a new one. I'll be back in a while."

"Yes, sir," the policeman said respectfully. "Good thing you weren't here or we would have to hold you."

"I realize that," Jerry said, walking toward the elevator. "I'll see you when I get back. That should be in a couple of hours if everything goes all right."

GERTRUDE'S car was only a block from the building. She settled down in the driver's seat and started the car without speaking. In twenty minutes it reached the city limits and rolled along a state highway, picking up speed.

Half an hour later she turned the car off the highway onto a driveway leading into a conventional looking rural residence. The landscaping had that look that only a professional landscape gardener can produce. The white shiplap bungalow was an architect's dream.

Gertrude stopped the car in the driveway, braking to a stop, cutting the motor and climbing out almost in one smooth motion. Jerry was right behind her when she stopped on the front porch and fumbled through her blouse pocket for a key.

Before she could find it the door opened, revealing a man who was perhaps thirty, with coal black hair and a deep tan. On first glance he looked like an American who has spent some time in Florida. On second glance he looked like an Englishman who has spent most of his life in India. On third glance he looked like someone from the middle East with a mixture

of oriental and Hindu blood in him. Then he seemed to be a blend of all three impressions.

Jerry remembered a little more about him now that he saw him. This was Frank—a throwback to the ancestors of the Mouru line, a family that had played mysterious roles in the secret history of the development of the middle east.

A Mouru several generations back had taken a handsome British girl for one of his wives. One of his descendants had married an American girl on a visit to the United States.

The grandfather had done the same, but the father had married a native girl. Frank had all the physical and mental characteristics of his eastern ancestors. His sister, Gertrude, had taken the occidental appearance.

The article on the House of Mouru had said that the Mouru line was reputed to go back seven or eight thousand years. It painted Frank as a mysterious figure who swept through American colleges and grasped the most intricate of sciences with incredible ease. Fabulously rich, he had kept a staff of tutors almost as large as the staff of professors at the University he attended. One of the professors had said that he felt more like a child explaining nonsense to an adult than a professor when he taught, with Frank's large, deep, oriental eyes upon him and his quiet reserve which was broken only occasionally to ask penetrating questions—questions to which he seemed to know the answers and which invariably gave the professor a greater insight into his own subject than he had had before.

After graduation Frank had returned to the Orient. To Tibet, some had said. From time to time a book would appear under his name, or an article would appear in some journal. Each time the subject matter would

shake the scientific world. The man himself had remained hidden—perhaps in some Tibetan temple, the author of the article had hinted.

And here he was in the United States, standing in the doorway of a conventional house, a smile on his face as he welcomed Jerry and invited him to step inside!

JERRY followed Gertrude in and watched Frank as he crossed the room hastily and put his eyes to what looked something like a telescope. After a hasty glance in the thing he turned away from it and flashed Jerry another smile.

"Would you like a drink?" he asked pleasantly.

At Jerry's nod he crossed to a liquor cabinet. Jerry noticed that the liquor cabinet was one of the very latest with refrigerated mixer dispensers in it.

"Rum and coke. Two jiggers," Jerry said.

"An interesting drink," Frank said as he prepared it. He mixed two other drinks, then brought the three glasses over to where Jerry and Gertrude were standing. His footsteps were noiseless on the thick rug.

"I suppose you are overflowing with curiosity," he said, sipping his drink. "After you have caught your breath a little I'll explain what it is all about. That is, I will if we aren't interrupted."

He walked over to the telescope thing again and looked through it, humming a tune under his breath.

Gertrude sank down in a deep chair and kept her eyes on her glass.

Jerry stood where he was, his eyes roving over the room, studying everything in sight. They kept returning to the telescope. It began like an ordinary telescope, but its large end seemed to blend off into nothingness. It was pointed toward a wall, and if

its large end had been solid it could have only brought an enlargement of the wallpaper to the eyepiece.

Jerry remembered his trip from his office with Gertrude and surmised that this was a telescope for looking into other three-spaces.

There was danger—so all this implied. It must be danger from some other three space. Was it directed only at Frank? Or was it a threat to the world? Jerry cursed Frank's casual appearance under his breath.

Frank straightened from the telescope and turned back to Jerry.

"I think things will be safe enough for the time being," he said. "So I'll tell you a little of what you're getting into." He picked up a light chair and turned it backward, then sat down on it, his legs straddling the back and his arms resting across the top.

"You have read my book on the family of three-spaces?" he began. At Jerry's nod he continued. "Several years ago I began to get experimental results from my theory. The first seemed to be more or less accidental. I built a viewer somewhat like the one over there. Sometimes it would work a little, then it wouldn't.

"I won't go into the details of it right now except to say that back in the mountains of Tibet I built a big atomics lab and synthesized element number 117. It belonged to the iron-nickel family and was highly magnetic, with one peculiar difference. A bar of it made a single pole magnet!

"It's chemical properties were much like those of silicon. Its oxide made a glasslike substance which still had the single pole magnetic property. When made into a lens and subjected to a conventional magnetic field it opened up vision in the fourth dimension! I don't mean four dimensional images, but three dimensional images, in our space, of scenes in

other three-spaces adjacent to ours.

"Later on I found that two like poles of 117 metal repelled each other in the fourth dimension, and could be incorporated into a gadget that would actually pull or push a person out of our three-space and into another. I'll tell you more about that later. Right now I want to tell you what I found out about the three-spaces adjacent to ours and in functional contact with ours.

"In rough outline they are universes much like our own, so far as matter and laws of nature are concerned. Gravity is a strictly three-space phenomenon and very thin in fourth dimensional depth. You can still encounter obstruction from dense matter when you have moved far enough to get away from weight."

"THAT explains something," Jerry interrupted. "Gertrude switched us in the fourth dimension to escape some thugs. When we were moving through the building I experienced the feeling I rather imagine I would get in a complete vacuum. I wondered about it."

"You were in a complete vacuum," Frank said. "She had to move the two of you more than a ten millionth of an inch out of our three-space to clear the material of the building. Then, as soon as she was sure she was clear, she came back close enough so that you could breathe."

He went back to the telescope and peered into it for a minute, then returned to his chair and went on talking.

"After I built the first four dimensional viewscope," he said, "I spent some time just exploring with it. You are going to snort at what I'll tell you now, but go ahead. Later you will find it out for yourself.

"One of the first things I found out was that there are people by the

millions in the three-spaces close to ours! I watched them, traveling around over the world with my sister so as to study all different types of people on the other side.

"I found many of them living in communities much like our own, with schools, buildings, and civilization. But I found that a large percentage of the populations in the three-spaces closest to ours were disorganized and were usually nothing more than roving bands of degenerates.

"The many peculiar things I discovered would fill a thick book! Underneath, my mind was mulling over the coincidence of human beings in many different three-spaces. I rejected mere coincidence at once; but how else explain it?

"One day the whole problem settled itself quite naturally. I saw a man in another three-space whom I had known in our own—and he had died quite some time before!

"THE whole picture burst into my realization like an atom bomb. What I was looking at was the so called spirit world! Oh, I know you won't believe me at first. I didn't want to believe it either. But then a lot of things clicked into place. Too many to mention now.

"I had rigged up my viewscope so that it could be extended quite a way in the fourth dimension. Now I turned it on Gertrude and extended it. I found that she was quite thick in the fourth dimension—much thicker than was necessary to exist also in the spirit plane, but that her appearance changed as the scope moved deeper, until finally she didn't look human at all.

"I turned the scope on these humans that I now knew to be spirits and found that they were also thick in the fourth dimension. I turned the scope on a chicken finally and found

it to be thicker than a brick, for example, but not as thick as a man. For the final experiment I watched it through the scope while a fellow killed it for me. He cut off its head with a sharp knife. Only the chicken in our three-space died. It peeled off from the four dimensional chicken like a celophane wrapper. The chicken was left intact and alive in a three-space so close to ours that our matter is fairly solid in it yet.

"Inside of half an hour this spirit chicken died also, but it had demonstrated something. I now knew beyond any shadow of doubt that all the millions of people I saw through the viewscope had once lived on Earth! They had material bodies just as surely as we do, but in a three-space just far enough away from ours so that to us they are non-existent except to those whose awareness extends slightly into the fourth dimension.

"My viewscope, of course, brought four-dimensional vision within the range of my normal sight, but I recalled all the stories of people called psychics and mystics and seers, who can see to some extent four-dimensionally."

Frank stopped talking and went back to the scope again. He noticed Jerry's glass was empty and filled it again before sitting down.

"At once the possibilities of the thing were apparent. I had been playing with the idea of using the element 117 some way to actually transpose my body to some other three-space. I had the theory pretty well worked out, so I went to work at once building the gadget. Gertrude has one on right now. So have I.

"My intention was to go into the so-called spirit planes and find old friends and bring them back with me. For example, my dad. He died when Gertrude and I were still kids. If I

could find him I would bring him back.

"Other possibilities came to me. When I die I can merely bring my spirit body into this three-space and keep on as before. Death is no longer the end of things!

"Well, I finished my fourth dimension belts. I made several of them until I had used up all of element 117 that I had. My plant in Tibet is still turning the stuff out, but it can make only a few ounces a year.

"I put the first belt on a dog and pressed the button. Then I watched him through the viewscope. He made it all right, but since he didn't know about stopping he's still going, so far as I know. He's dead and in an interstellar space, still moving in the fourth dimension through three-space after three-space.

"I watched his progress and satisfied myself that it wouldn't kill me to make the trip myself, provided that I could stop before I left atmosphere.

GERTRUDE watched through the viewscope when I made the trip. She had a belt on too, just in case. Everything worked out satisfactorily. I think you will understand when I say that from then on life was very fascinating. I would get whole shelves of books on spirit manifestations and read them, and then incorporate the ideas in them into my study to broaden my understanding and complete the vague theory they expounded.

"I found that some spirits can develop along certain lines until by an effort of will they can move to this plane. They materialize and walk among men, as one book put it. Well, I materialized and walked among spirits. None of them guessed that I wasn't dead. They accepted me as one of them for a long time.

"Everything went fine up to two-weeks ago. I was walking along the countryside not far from this spot when I was surprised by a band of cutthroats in the three-space that is generally referred to as the lower astral. They stripped me completely. Gertrude saw what was happening, but knew that she would be no match for them. She waited until they left, then came over into that three-space and brought me back.

"That gang of cutthroats, however, had my belt. In the excitement of the moment Gertrude didn't think to keep track of them."

"I see what you're driving at now," Jerry exclaimed. "This gang discovered how to work the belt and materialize on our hyperplane space, or three-space, and are carrying on their depredations, escaping back into the lower astral where they can thumb their noses at the law!"

"Exactly!" Frank said. "They are handicapped by only having one belt. The one that wears it can take only one other with him, then return and get another. That takes time."

Jerry began to chuckle.

"What are you laughing at?" Gertrude asked.

"I was just thinking," Jerry said. "I gather that those fellows that my robot spider killed were the materialized bodies of dead gangsters. When the police fingerprint them they'll find they have three corpses of men who probably died in the electric chair long ago!"

"It's more of a mystery than that to them," Frank said. "There have been several bank robberies lately, and the police get only fingerprints that check in the file of dead criminals. I've been present just outside our three-space and listened to them. They think some crook is playing with them by leaving plastic finger impressions for them. Naturally they

couldn't draw the, to them, insane conclusion that dead people are the culprits!"

"What a screwy mess," Jerry said, shaking his head. "I suppose what we have to do is find this gang and take their belt away from them. And I suppose that is why you called me in."

"Exactly," Frank exclaimed. "But there is immediate danger. The leader of this gang is a fellow called Blacky. He's smart. As soon as he found out how to work the belt he rightly surmised that I was a living person and that there were more belts. Come over and look through the scope and you'll see what we're up against."

Jerry sprang to his feet. He had been restraining his desire to look through the scope since he came in.

HE SAW A landscape slightly different than the one he knew existed in ordinary three-space. Scattered around were perhaps twenty vicious looking men, each with a gun, and each looking constantly around as if expecting something to appear.

"None of them have the belt," Frank said. "They are just preventing me from going into their three-space—or maybe hoping that I will so they can kill me and get another belt. They don't know about the viewscope. They think that I am as handicapped as they are, and must travel blindly."

"When Blacky decided to find me he brought them all over and they wandered the streets until one of them saw me one day. He followed me here. They have men posted all around the house in our three-space as well. They tried rushing the house and my burglar devices drove them off. I have invisible light circuits that set off gas to drive them away. If I were to try to get away they would follow me, and I might not be as safe someplace else. That's why I stay here."

Jerry went to a window and peeked out, being careful not to expose himself. After a moment he found a face staring at the house behind some thin shrubbery.

"Poltergeist," he said softly to himself.

"That's what they amount to," Frank said at his shoulder.

"One thing puzzles me," Jerry said, then added, "Among other things, that is. I've read your book and a lot of other treatises. According to you the fourth dimension is a space dimension just like the other three. Since direction is purely relative in space, how does it happen that a universe gets partitioned from others just like space were absolute in directions?"

"That's something that has bothered me, too," Frank admitted. "There is only one clue that I know of to account for it. That's the square root of minus one. It's used generally to indicate a magnitude at right angles to some direction, and a real number indicates a magnitude along the line.

"If we use ordinary symbology we have x , y , and z for the three dimensions, and i , the square root of minus one doesn't fit. But if we put it in anyway as, say, iu , we have a fourth dimension that is somewhat different than the other three in some way I can't quite fathom.

"What I'm driving at is simply this; momentum is the product of mass and velocity. Suppose that besides real mass, there is substance that has imaginary mass. It would have to have imaginary velocity too to have real momentum. There might be a natural segregation so that the whole four-dimensional universe is made up of stuff having real momentum. If that is so, then if all the stuff in our three-space has only real momentum it naturally is partitioned

into one hyperplane of hyperspace, or one three-space slice of four-space.

"The succeeding layers of three-space wouldn't be entirely independent. The imaginary mass stuff with imaginary velocities would serve as a connecting link among them. I think that must be so or when a person dies his astral body wouldn't separate from his mortal one and there wouldn't be an astral body. It is created by the interaction between the two three-spaces of the imaginary-mass stuff, whatever it is."

"Hmm," Jerry said thoughtfully. "How do you think element 117 functions to move matter out of one three-space into another?"

"I'm pretty sure there," Frank said. "It has a single magnetic pole. As you know, that has been proven impossible. Well, I've looked at the pure stuff through the scanner and found that it does have another pole in another three-space. The principle of the belt is to have a shield between two pieces of 117 of unequal size. When the shield between attract each other unequally, moving everything physically connected to them in the fourth dimension. The movement is stopped by putting the shield back in place. The movement is produced by the unequal attraction of the two pieces."

"Ugh," Jerry grunted. "How do you reverse the process?"

"With two poles of the opposite polarity," replied Frank.

"Must not take very much," Jerry said, glancing approvingly at Gertrude's slim figure.

"It doesn't," Frank replied. "Both, or rather all four of the pieces are each smaller than a pea."

Jerry chuckled.

"My head's spinning around," he said. "And I don't know whether it's the rum cocktails or the larnin'."

"Probably a little of both," Gertrude said, laughing merrily. "Me, I don't even try to understand all that. It works like driving a car. You press one button and you go one way. Take your finger off and you stop. Press the other button and you go the opposite way, whatever that is. Take your finger off when you get back in terra firma and it stops the terra."

She looked mischievously at her brother and wrinkled her nose at him.

"I guess I'll have to join you at the foot of the class, Gertrude," Jerry said. "Too deep for me; but you can count me with you. We've got to get that belt or there's no telling what may happen. An invasion from the lower astral is what so-called spirit students have been prophesying for years. If that happened the living would be helpless!"

FRANK walked over to a picture hanging on a wall. He slid the picture aside revealing a small safe. He opened this and took out a red leather belt like the one Gertrude was wearing. He handed it to Jerry.

"Wear it under your shirt," he said gruffly. "The button on the right side takes you into the astral and the one on the left brings you back."

"What if you go back too far?" Jerry asked, pulling out his shirt and strapping the belt around his waist.

"For some reason," Frank said, "The spirit world all seems to be on one side, so to speak. The other side is full of queer scenery that twists at the mind. I'd advise you to leave it alone for the time being."

"Have you any ideas about a plan of action?" Jerry asked Frank.

"I thought I would leave that up to you," Frank replied. "After all, I'm not a man of action and you have a lot of experience in running down criminals and such. That's why I called you in. I didn't know who to

call on for help, and since I have unlimited resources money presented no obstacle. I picked the man who had the reputation of being tops in the field of tracking down criminals. You."

Jerry stood still, thinking. Finally he began to pace the floor. He gave that up and slouched down in a deep chair.

Gertrude and Frank left him alone and took turns watching through the viewscope.

Finally Jerry spoke.

"Our object," he said, "is to entice the wearer of the belt into exposing himself. We don't have to worry about killing him because he's already dead."

"That's right," Frank said. "He's very cautious because I've already tried. He stays out of sight on both planes and only helps his men through at a distance."

"We have one advantage over Blacky," Jerry said slowly. "With that viewscope we can see in both three-spaces, while he can only see in one at a time."

"That's true," Frank agreed. "But don't forget that Blacky has his men watching us on both sides. Obviously, if we left this house one of those men would go to some prearranged meeting place and inform Blacky. If we went into another three-space without leaving the house to do it, those men we see in the viewscope would give us the same problem."

"Unless we went the other way," Jerry said. "Since they don't have a viewscope we could go the other way in the fourth dimension and none of them would see us go. You said something about it twisting the mind or something to even look that way. What did you mean by that?"

"It can't be described," Frank said soberly. "I'll show you, though. After all, Gertrude and I have seen it.

There's no reason why you shouldn't, except that it is a very unnerving experience."

HE WENT over to the viewscope and made a careful adjustment on it. Then he stepped back and motioned Jerry to look through the eyepiece. Jerry hesitated long enough to drop his cigarette in an ash tray, then put his eyes to the viewscope.

The imaged landscape that met his eyes was predominantly a reddish violet shade. The instant he noticed this something whispered in his mind that the strange color was a true color—the next beyond the violet in the ultraviolet.

Several queer looking blobs floated above the strangely undulating earth with no visible support. Each was as large as a teakettle and vaguely resembled one with the spout pointed downward.

Vegetation was thick, but it defied description, being something like trees would be if their trunks and branches were translucent ropes of loosely twined, threadlike strands which came out from the main ropes as individual strands which floated upward out of sight, weaving in a way that seemed to be more thought-sound than visible image.

There were no men or animals; just strange, nausea-inducing blobs floating in a reddish-violet haze with a play of subtly varying color just under their surfaces that seemed to reach into Jerry's mind and twist painfully.

At last he jerked his eyes away from the viewscope and shook his head violently to shake off the depressing mood that the view had created in him.

His hands shook as he lit another cigarette and inhaled deeply.

"Did the scenery talk to you when you looked at it?" Jerry asked, look-

ing at Frank and Gertrude.

They nodded.

"Better let me fix you another drink," Gertrude said sympathetically.

"I could use a good stiff one after that experience," Jerry said.

HIS MIND was drawn, fascinated, to his strange experience. The other planes seemed much like our own. You saw things and they were objects, whether living or inanimate. In the plane he had just seen objects were something *more* than just objects. They had new colors which physiologically, was impossible. The eyes could only register the ordinary colors. If an ultraviolet radiation registered in the eyes it would have to do so as an ordinary color. That was proven *fact*.

Starting from that one fact—how reconcile it with actually seeing a new color?

Light reflected from objects and striking the eyes produces an image in the mind. Nothing more. The *meaning* of the image can produce an emotion of fear or terror or pleasure or anger. How then can an image that has no meaning produce an emotion?

Gertrude handed Jerry his drink. He took it absently, his eyes on the rug and his mind intent on the puzzle of what he had seen.

A sudden thought struck him.

"Look, Frank," he said. "You believe that the spirit that lives after death is more or less a three dimensional being in a hyper-plane close to ours, and functionally connected to the living person during life by means of this square-root-of-minus-one matter that acts between hyper-planes? And that at death this other body breaks free undamaged, to go on living with all the mental faculties of the man?"

"It seems obvious from what we

see over there," Frank replied.

"Well then," Jerry said, "What's to prevent a similar being from coming into existence from the other direction? What I mean is, suppose that with the living man there is an entity in one direction in the fourth dimension which we might call the low, or animal self; and in the other direction in the fourth dimension there is an entity called the high, or mental self. In other words, the subconscious self. On death of the physical self these two would lose their *modus operandi*, so to speak, and become two, independent entities. Or maybe the high self entity is a being in its own right and attaches itself to a living person through the medium of the fourth dimensional matter, or imaginary mass."

"I see what you mean," Frank said thoughtfully. "That would account for the strange emotional reaction to actually looking into that plane!"

"Yes," Jerry said. "Freud had a theory about a censor that prevented the subconscious from being conscious except in a sort of symbology, and that most of our mental processes owed their origin to factors lurking in the subconscious. Looking into that plane would be something like getting rid of the Freudian censor."

"I think you've hit it!" Frank said excitedly. "That would account for a lot of spirit manifestations on record! It would account for a lot of psychological facts, too!"

"I don't know," Gertrude spoke up. "I think I see a flaw in your reasoning. Also in the idea that Blacky and his gang are the spirits of dead people. Suppose we are triune in structure with one body in the flesh plane and one in each of the planes on either side of it. Then, according to that, we should be visible in the three hyper-planes at once. Right?"

"Not necessarily," Frank said.

"When the three entities are connected they might be drawn so close together that they aren't in the other two hyper-planes entirely, but in an in-between space. When the attractive force that holds the three together is destroyed by death, the two surviving members spring apart by a sort of fourth-dimensional repulsion. A good analogy is three magnets lying on a surface such as a table top. I think I have three magnets that will do the trick."

HE WENT over to a closet door and opened it revealing shelves filled with all sorts of objects and several boxes. He came back with three bar magnets. Testing them to see which were like poles he laid a pair on the table with the north pole of one lying next to the south pole of the other so that they were together with their ends even. Then he laid the third magnet so that it had its north pole alongside the south pole of the center magnet.

"See?" he exclaimed. "The three hold together. What would happen if I yanked out the middle magnet so violently that it amounts to destroying it?"

He separated the magnets and tied a string to the one that had been in the middle. Then he put them together again. Next he gave a sudden jerk that yanked the middle magnet away without dragging either of the other two with it.

Promptly the two outside magnets moved a short distance away from each other because of their mutual repulsion when the binding magnetic force of the center magnet was removed.

"It would work even more perfect if the three magnets were electromagnets with no iron core," Frank said. "Then instead of yanking the middle, binding magnet out by brute

force, all I would have to do is shut off the current in the middle magnet. That would be equivalent to death in the living person."

"Well I'll be darned!" exclaimed Jerry. "We have two spirits then instead of one. I wonder which one of them is me?"

"According to the teachings of the great masters," Frank said gravely, "each man has three entities; the conscious, or physical self, the super-conscious or high self, and the sub-conscious or low self. I doubt very much if they knew about the true nature of the so-called spirit planes; but they called them planes and pictured a lower astral plane on which the animal spirit or low spirit of a man lived after the man's death, and an upper astral plane for the high spirits.

"They had a lot more to add to that. They claimed that there were still other planes, and that after a high spirit developed enough to progress to the higher planes he could come back and contact the earth plane, but did not like to. They also claimed that the low self, by successive-re-incarnations, could develop to the point where it would enter the upper astral.

"If we substitute hyper-plane for spiritual plane, then all these astral planes and the earth plane are merely three-spaces. A magnet, by its very nature, must have a north and a south pole. When a single pole magnet is formed in any three-space the opposite pole must form in some other three-space in order for the single pole in one three-space to exist. When I synthesized element 117 I did that. No doubt there is something about the living human that is a single pole magnet, so that it attracts or creates counterparts in adjacent three-spaces.

"Damn it," Frank concluded his

lengthy speech, "We are on the verge of the most outstanding discovery of all time, and we have to stay holed up and in fear of our very lives just because one of these belts is in the hands of a crazy lunatic in the lower astral!"

He turned angrily and took another look through the viewscope to see if everything was okay.

AFTER A moment of silence Jerry spoke.

"I think I have an idea," he said. "That viewscope can stay in fixed focus between two planes, can't it?"

Frank nodded.

"Well," Jerry said, "Suppose one of us takes it into the upper astral plane, so called, and looks through it into the Earth plane. He will be invisible to both groups of Blacky's watchers. Then the other two of us make some kind of a break for it. One of the watchers will undoubtedly run to the pre-arranged meeting place to tell Blacky, and the one of us that is hidden in the other plane can follow him and surprise Blacky with the belt."

"That's a darned good idea," Frank said, surprised. "But can any of us stand being in the upper astral long enough to do it?"

"Not only that," Gertrude said, "But are we sure there aren't beings on that plane that are like Blacky? Maybe some of them are worse. We don't know."

"Well, we've got to do something," Jerry said. "Whatever we do involves risk. I'd advise that you get rid of all those other belts you have some way. We wouldn't want them to get in the wrong hands. How'll you do it, though?"

A sudden idea made his face light up.

"Wait a minute," he said excitedly. "The only reason Blacky is interested in you is that he wants those other

belts. He's too handicapped with just one. Right?"

"Partly," Frank said. "He is also afraid of us because we are the only ones that could chase him from one plane to another, and if we let the police in on our secret we could organize to capture him."

"That makes it even better," Jerry said. "Now, what would happen if I put on two of these belts and set one to go forward and the other to go backward?"

"Their pull isn't more than a few pounds," Frank said thoughtfully. "I don't know, but I think that you would either stay in one plane, or part of you would bend into one plane and part into another. I really don't know. I hadn't thought of that angle before."

"This thing has got more possibilities than a card game," Jerry said. "Imagine an atom bomb started in another plane and set to explode when it gets in the Earth plane. The enemy could be right inside the bomb area and not get hurt from the explosion. That isn't what I had in mind though. Suppose we fix those belts so that when they are pressed to start them one way they can't be stopped? Then let Blacky's gang steal them? That'll get rid of the gang. Then we can smoke Blacky out into the open!"

"Maybe you've got something there," Frank exclaimed. "I hate to think what will become of the ones that wear the belts. By the time they figure out some way to stop them they may be in some three-space so alien that they can't exist any longer. It will be very simple to do, too. The way those buttons are made, all we have to do is loosen a small screw and they will push in but not spring out again. That way the shield will stay open."

Frank went over to the safe and brought out the rest of the belts.

There were twenty of them besides the three worn by Frank, Gertrude and Jerry.

IT TOOK almost an hour to fix them all. When they were through Frank straightened up and said, "Well, that's done. What's the next step?"

"Now I've got to convince Blacky that we want to join forces with him," Jerry said. "We've got to bargain with him so he won't suspect a trap. Remember, all we want is for all his men to put on these belts and push the button. Then we've got him. After we catch him and take his belt away we can figure out what to do about his men. Maybe we can catch up with them one by one and bring them back and take their belts away from them. First, though, we have to get the only good one besides the ones we are wearing. Catch?"

Frank and Gertrude nodded.

Jerry took out a clean linen handkerchief and tied it onto the end of a ruler he found in the closet. Then he cautiously opened the front door. He remembered they hadn't been shot at when they came. Also Gertrude hadn't been shot at when she went to get him. The gang evidently had orders not to do any shooting, but Jerry wasn't taking any more chances than necessary.

When the front door swung open Jerry stuck the end of the ruler with the handkerchief out where the thugs could see it. Then slowly he stepped out into full view and walked down the steps to the front lawn.

From there he walked over to the bush behind which he had seen one of them lurking. When he got within ten feet of the bush he said, "We want you to take a message to Blacky. We want to dicker with him about getting together—joining forces."

There was silence for several seconds, then a man stepped out. Jerry looked at him closely. He seemed no different than any other human being. There was something familiar about him.

Then Jerry recognized him.

"Say," he exclaimed, "Aren't you Butch Coletti?"

"Yeah," the fellow said, surprised. "Say! You're Jerry Chane, ain't you? Sure! I remember you now. You shot me that time you tracked us down out on the farm hideout. I guess you killed me, didn't you!"

"Yeah," Jerry said. "No hard feelings?"

"Naw," Butch said. "We've got it pretty nice now. When we get the rest of them belts we'll *really* be sittin' pretty!"

"That's what I want to see Blacky about," Jerry said. "Those two back there in the house didn't know what they could do with these belts things until they saw what Blacky did with them. Now they want to go in with him. They've got the belts and Blacky has the gang to use them. If they join forces they can really go places."

"What about you?" Butch asked suspiciously. "You're on the side of the law, aren't you?"

"What d'ya mean, on the side of the law?" Jerry snarled. "There was a big reward for you guys when I got you that time. I'm out for the money the same as anybody else. Well, with these belts we'll have the world by the tail. Right?"

"Right," Butch said. "Okay, I'll go tell Blacky." He lowered his voice. "Between you and me, Jerry, any time you want to cook up a deal to be top man in this racket, count me in, will you? I can't see you as the kind of a guy to take orders from Blacky for very long."

Jerry grinned knowingly at Butch.

"Okay, Butch," he said. "I'll remember that."

HALF AN HOUR later Jerry and Frank saw Butch return alone. He came walking down the street and up the sidewalk to the front door.

Frank opened the door when Butch was climbing the steps.

"Where's Blacky?" he asked.

"Blacky said he wanted to play it smart," Butch said. "He had a bullet proof sedan parked up the street a ways. The three of you are to come up there away from the house here and bring the belts with you. Then he will make a deal like you want. Them's his words."

Frank hesitated.

"He said you wouldn't be in no danger," Butch said soothingly. "He said you have your belts on and you could switch planes before he could start anything to take them away from you. He just doesn't like the idea of coming here because he doesn't know what else you've got lined up, that's all."

"Let's do it," Jerry said, giving Butch a knowing look. "Butch is right, and if we want to cash in on these belts we have to play ball with a smart organizer like Blacky to get anywhere."

"Yeah. Sure," Butch agreed enthusiastically.

"Okay," Frank gave in with seeming reluctance. He turned back into the room and picked up the stack of belts, then led the way down the steps and up the street.

A sleek black sedan was parked at the curb in the middle of the next block. When the three drew near they could see a man sitting inside.

They stopped beside the sedan and Blacky rolled the window down a bare inch so that he could talk to them. His eyes rested greedily on the belts under Frank's arm for a long

second. Then he said, "Butch tells me you want to make a deal with me. Okay, what is it?"

"Simply this," Jerry spoke up before Frank could reply. "We've got the belts. You've got the men to use them. We both want to do the same things with them and can do them better together than separate and fighting each other. We'll turn over the belts if you agree that we get half the stuff that comes in. You and your gang get the other half to split among you."

"Hah!" Blacky snorted. "Why should I do that when I can starve you all in another week or so? After all, we've got forever. We're immortal now that we're dead."

"That's right," Jerry agreed. "But you forgot one thing. Or maybe you didn't know about it. These belts wear out in time. They run on atomic power. Ever hear of that?"

At Blacky's puzzled nod he went on.

"It takes a lot of atomic power for one of these belts to work, and sooner or later they run down. Frank here knows how to renew them. You don't. You might starve us out. Then we'd be on the same plane as you and maybe we could manage it to hide some belts over there and get them after we died. Then we'd be just like you. Ever think of that? We're just as immortal as you are."

He estimated the effects of his words on Blacky.

"Tie in with us," he said calmly, "and we will keep the belts working. You get half and we take half."

"Give me sixty and you take forty and it's a deal," Blacky said shrewdly.

JERRY glanced questioningly at Frank and Gertrude. They nodded their consent.

"That's more like it," Blacky said

with a satisfied grunt. "Now we can get somewhere."

Jerry let out a long breath in relief. Then he played his last card.

"Fine," he said. "First though, we don't trust each other. How many men have you got?"

"Nineteen," Blacky replied. "Seven in the bushes behind you, and twelve on the other side somewhere around here."

"All right," Jerry said. "Most of them are on the other side. Go over and tell them we've made a deal. Then come back and take each of the seven men here over. We'll meet you there and hand over the belts. But when we hand over the belts we want you with us so there won't be any funny business like killing us or taking our belts away from us so we can't follow you wherever you go."

"Suppose we work it this way," Blacky said obligingly. "I take my men over. Then I come back. You take the belts over—"

"Wait a minute," Frank interrupted. "The belts won't carry over that way. You'll have to bring all your men to this plane. Then you go back with us while they put on the belts."

"The belts won't carry over like other stuff?" Blacky asked innocently.

"No," Frank answered. "They won't move out of this plane unless they're set to move individually."

"I see," Blacky said slowly. "Well, I'll go bring the rest of my gang here and then we can go on from there."

With that he vanished. Ten minutes later he came out of the shrubery onto the sidewalk followed by twelve men. The men all had guns and the guns were all pointed at Jerry, Frank, and Gertrude.

"The deals off," Blacky said blandly. "Go ahead and press the buttons on your belts. You can't take the others with you. Go ahead. In about

five seconds we're going to start shooting if you don't. We'll take care of you later. Right now we want those belts."

Jerry turned angrily to Frank.

"You crazy idiot," he said fiercely. "I told you to let me do the talking. See what you got us into?"

"But don't they know that they need us to renew the belts?" Frank asked in seeming bewilderment, taking Jerry's cue.

"Ha!" Blacky snorted. "Think I fell for that gag? I know that atomic power never wears out. Anybody knows that that ever read the newspapers."

JERRY PUT a finger on the button on his belt and nodded to Frank and Gertrude. They followed suit, and the three of them faded from view to appear together far enough out of ordinary three-space to be safe from the bullets from the guns pointed at them.

They could still see what went on, and to those left behind they appeared as wraiths.

The stack of belts Frank had been carrying dropped to the sidewalk. There was a mad scramble as the gang pounced on them.

When each man had a belt fastened around his waist there was one left lying on the sidewalk.

"An extra one," Blacky exclaimed. "There might be something to what that guy said after all. I'm not taking any chances. I'll just take this one myself and hide my old one for an emergency.

He took off his belt and put on the one left. Then he put his old one in the glove compartment of his car and locked it.

"Okay," he said, turning to his gang. "Let's see how it feels to all jump out of this world at once. From now on we can really go to town.

Daylight bank robberies. Bandits vanish into thin air!"

He laughed loudly and jabbed his finger to the button that would carry him "out of this world."

One after another his gang followed him. When they were gone Frank, Gertrude, and Jerry materialized and looked at one another very pleased.

"That was more luck than we counted on," Jerry said.

"Aren't you going to rescue them?" Gertrude asked.

Jerry shrugged his shoulders.

"Why should we?" he asked in a flat voice. "If we brought them back they would always be a source of trouble. The way things are now there is no one who knows about the belts that might use them to make trouble."

He turned to the car and began working on the door lock.

"Jerry's right," Frank said. "I don't know what will happen to those men, but after all, they are already dead and I doubt if going forever through the fourth dimension will hurt them much. Eventually they'll all get the idea of taking off the belts and throwing them away. Then they'll be stuck where they are and learn to adjust themselves to whatever kind of a world they are in."

"That's the way I figure it myself," Jerry said, his eyes and fingers intent on the process of stuffing string into the key slot of the door lock. "We have one of the greatest discoveries of all history in these belts and the principle of their operation. It belongs to Frank, of course."

He straightened up and faced Frank and Gertrude. Then he went on.

"If you will count me in on it I would like to work with you," he continued. "There are things open to us now that are beyond our present ability to even imagine. For example, space travel. We could build a ship and move it far enough in the fourth

dimension to get away from gravity, like Gertrude did when we escaped from my office downtown."

A startled look appeared on Frank's face.

"I never thought of that," he ex-

claimed. "I guess you're in. I've been missing half the possibilities of this thing all the time. And anyway," he paused and looked slyly at his sister, "I think we both need you around to keep us out of trouble."

RAIN BY MAGIC



By Peter Robert



SOMETIMES in the more remote parts of the world when a drought has lasted for a long, long time, people get desperate after many appeals to their gods to send rain. They become too angry to waste their breath in prayer, and use threats and curses and even violence to procure water from the sky. In certain Japanese towns, when their god had been long deaf to their pleas for rain, they threw his image head first into a scorched rice field, threatening to leave him there till he should feel the same as their crops, burned by the sun for many weeks.

The Chinese make a huge dragon of paper to represent their rain-god, and carry it about in a procession. If rain was not forthcoming, they threatened and beat the god and tore him to pieces. In 1888, the mandarins of Canton prayed to the god Lung-wong to stop the incessant down-pour. When the rain failed to cease, they locked him up in the jail for five days. This was the proper punishment apparently, for the weather cleared and the god was restored to liberty. The Siamese set their gods out in the scorching sun when they want rain, and remove the roofs from their houses and let the rain drench their idols when they wish for dry weather. They feel that by putting an inconvenience on their gods, they will induce them to grant their wishes.

We may laugh at these foolish ways of obtaining the desired weather, but in our own day similar methods have been used in Christian Europe. In 1893, Sicily was in bad shape because of a drought which had lasted for six months. The crops were

ruined and food was scarce. Famine was in sight. The people were distraught for all the approved methods of rain-making had been tried. Men, women, and children had lain night and day before their holy images telling their beads. Consecrated candles were burned incessantly in the churches. Blessed palm branches were hung in the trees and the dust swept from the churches on Palm Sunday had been spread over the fields. The inhabitants carried their crucifixes through the towns praying every step of the way. Even the image of the great St. Francis, who annually performed the miracle of the rain, could not or refused to help his distressed people. Masses, vespers, concerts, etc. would not influence him. At last the peasants lost patience and banished most of their saints. At Palermo, St. Joseph was thrown into a garden to see for himself how the ground was scorched. They swore to leave him there till rain fell. Other saints were turned with their faces to the wall. Their beautiful robes were removed and some were exiled far from their parishes and were made to suffer such indignities as being ducked in horse ponds. At Caltanissetta, the golden wings of St. Michael were torn from his body and replaced by wings made of paper. His purple mantle was taken away and he was wrapped with a rag instead. Some saints faced much worse being stripped of all their garments, dragged through the streets, thrown in irons and threatened with hanging. After a few weeks of such treatment, the rains came and the saints were forgiven and restored to their rightful positions.

THE END

SPEED DEMONS



By Pete Boag



WITH THE help of our new jet planes, man is by far the fastest creature on earth, or perhaps we should say off the earth. Man can go close to seven hundred miles an hour in a jet plane. But the frigate bird, without the use of engines, can go over two hundred and sixty miles per hour, and the swift has been timed

flying two hundred miles an hour. The falcon can reach that speed in a dive. Incredible as it may seem, the dragonfly can give any "hot rod" a good race, for it can fly eighty or ninety miles an hour. The hunting leopard and various types of Asiatic antelope are able to travel close to eighty miles an hour.