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The Editor Notebook A CONFIDENTIAL CHAT WITH THE EDITOR

E DON'T like to start off our editorial this month with some bad news, but we've just heard about a tragic accident that happened to an old friend of yours and ours, and we feel that we should pass the news along.

RAY PALMER, former editor of AS and FA (who now edits his own stf magazines, "Other Worlds" and "Imagina-tion") had an unfortunate accident a few days ago. He had a severe fall in his home and injured his back. Right now he's in a hospital, and from all indica-tions he will have to remain there for

WE KNOW that this will be sad news for all of his friends in the fantasy world, and we know you'd all like to drop him a line of encouragement. Ray is one grand guy and a loyal fantasy fan like the rest of us. So let's help him along with some friendly letters. Address them to Ray Palmer, St. Francis Hospital, Evanston, Illinois. . . And we'd only like to add here, Ray, that all of your friends at Ziff-Davis know that the hospital bed isn't made that can hold you down long ...

RIGHT now Howard Browne, the guid-ing arm of AS and FA is in New York. We talked to him long distance just a few minutes ago, and he tells us that he's very busy seeing some of the top writers in the field lining up terrific h.a-



"ER-ANY CHILDREN?"

terial for our future issues. Of course, Howard is especially interested (as we all are right now) in getting the finest storie and science articles for AMAZING. To keep you informed, we'll say that the magazine is continuing to get better and better. and as each issue hits the stands it will be something to rave about. But more about that later ...

IN THE meantime, we just finished get-ting next month's feature novel ready A ung next monin's feature novel ready for the printer. As we mentioned in a previous issue, L. Ron Hubbard did the novel especially for FA, and at our re-quest, as a sequel to his famous "Slaves of Step". You'll read THE MASTERS OF SLEEP next month, and take our word for it, it's worth haunting the newsstands for to get the first copy on sale.

L ESTER del REY called us the other day and apologized for the long delay in finishing his new novel. He told us to look for the manuscript in the mails within a day or so. We said we'd be looking, and this morning-there it was. Naturally we sat right down and started to read it. We still haven't finished it as this editorial goes to press (business before, pleasure) but we can say right now that it's terrific. We'll try and have it in print with our December issue.

TUST A word about the World Science Fiction Convention this year. As you know it's being held in Portland, Oregon know it's being neid in Portland, Oregon over the Labor Day holiday. There will be literally hundreds of fantasy fans from all over the country attending the festivities—not to mention writers, artists, editors, and agents. It's the big show of the year for all lovers of science fiction and fan-tasy. One of your editors, Howard Browne (how that man gets around!) will attend.

We only wish that all of us could manage to be there, but unfortunately magazines don't wait for Conventions-you wouldn't want to miss a single issue. (Nor would

A T ANY rate, if you can make the trip, we know you'll have a swell

time meeting other stf fans and your favorite authors, artists and editors. For complete information on the Convention, write to Don Day, Chairman, NORWES-CON, Box 8517, Portland 7, Oregon...Which about winds up shop for this month......WLH

we!)

Fantastic Adventures

SEPTEMBER, 1950

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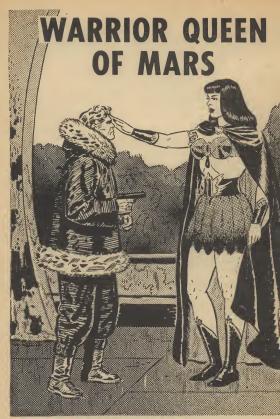
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all Stories Complete

Illustrated by Robert Gibson Jones
Out of the frigid fastness of Iceland came a strange threat to Earth—centuries old!
DETONATOR (Short—3,500)
It was dangerous trying to make the prisoner talk—the fate of the world hung on one word!
THE SHIP SAILS AT MIDNIGHT (Short—8,000) by Fritz Leiber 54 Illustrated by Henry Sharp
Helen took her place among the beautiful things on Earth—even knowing she couldn't remain
THE LAST BCUNCE (Novelette—12,600)
Illustrated by Henry Sharp A spaceman feared only one trip into the void—the one he would never return from!
NO MEAD FOR MY BIER (Short—9,000) by Lester del Rey
Valentine August's face was his fortune—and it seemed that a thief was holding it for ransom!
LORE_EI STREET (Short—8,000)
On the surface it was just an ordinary street corner—but it branched off into another world!
THE FIFTH CFIELD (Short—3.000)
Four children had been painted on the canvas-but as time passed their number increased

Front cover painting by Robert Gibson Jones, illustrating a scene from "Warrior Queen of Mars".

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The warrior queen stepped torward and signified she held no animosity for him.



By Alexander Blade

Iceland was the perfect place for a secret military operation. We thought of it, but so had the Martians — ages ago . . .

THE DOCTOR'S name was Foster. If he had a first name or even initials, no one could remember them. He was called Dr. Foster; he signed his prescriptions with an almost illegibile Foster; he

was so busy no one could gain his attention for more than a brief three or four seconds without being so ill that finding out his first name was farthest from their thoughts.

On top of that he was old, in a

well preserved, wiry, ageless sort of way. He had been looking sixty for all of the twenty some years he had been practicing in Reykjavik—which isn't on Mars, but is the biggest city in Iceland.

The woman lying unconscious in the snow appeared to be about twentyone or two years old. Not that the doctor was interested in how old she was. And all she was wearing was some fur panties and a translucent pearl-blue bra that seemed to be made of a flexible plastic.

Dr. Foster braked his motor sled to a halt just beside her so that all he had to do was prepare a space for the unconscious form and lift it in.

He marveled at the perfection of her figure, and especially her face. She was definitely out of place anywhere outside of Hollywood. And, though the doctor didn't waste time on such an idle pursuit as measuring her height, one corner of his mind guessed she must be about six feet four inches.

He tossed furs over her and started up again. The place he had been going was still the nearest habitation, so he continued toward it.

It was a type of dwelling that would have been called a hodan in the southwest United States. Its walls and roof were a mixture of stone and dirt. To look at it one wouldn't think so, however, because its occupants had taken snow and plastered it thickly over it for added insulation, so that it looked more like an igloo. A very large igloo.

The owner came out indolently as Dr. Foster drew up before the entrance. He wore layers of furs, looking like a very filthy rag doll with a handful of hair for a beard pasted where the face ought to be.

"Give me a hand, Lars," Dr. Foster ordered, uncovering the woman.

There was an audible gasp of sur-

prise and wonder from Lars' unkempt beard. The doctor wasn't listening. His eyes were fixed on the unmelted snow still adhering to the flawless pink skin.

"She's dead?" Lars asked.

"I—it looks like she might be," Dr. Foster said. He pulled off a glove and searched for a pulse with expert fingers. "No! There's a heartbeat. Help me get her inside."

If Lars was more willing to help carry the woman than he would normally have been to do anything, it merely indicated that somewhere inside him was still a recognition and appreciation of the finer things of life.

Lars' wife took over officiously when they had staggered under their load into the stuffy, gloomy interior of the hodan.

With flatfooted, stoic motions she produced a pan of cold water and a surprisingly clean rag, and started gently massaging the flawless pink skin, while Lars watched with round eyes, and Dr. Foster with a professional frown.

"Wipe her dry," Dr. Foster ordered quietly after ten minutes of this.

Lars' wife did so. By the time she had finished, the skin seemed to be damp again. The doctor bent down to look closer. His frown deepened. The moisture was obviously perspiration.

While Lars and his wife stood silent, waiting for the doctor to tell them what to do, Dr. Foster went out to the sled and returned with his black bag. From it he took a thermometer, which he shook down and inserted under the unconscious woman's tongue.

While he waited he used his stethoscope. His face was expressionless. When he looked at the thermometer three minutes later, he frowned.

He had shaken the thermometer down to sixty-eight degrees. It was still at that point

Still frowning, he searched in his black bag and brought out a laboratory thermometer he carried for measuring the temperature of hot water. It was ten inches long, with the gradations etched in it. He inserted it between the lax lips and held it upright with his band, watching the top of the mercury column.

Five minutes later he was still looking at it, a glazed look in his eyes. The thermometer registered thirtyone degrees. And the delicate pink skin was bathed with moisture. Thin trickles and rivulets of moisture laced the flat storagh.

Finally Dr. Foster sighed deeply like one awakening from a dream, and drew the thermometer out. He put it away in his black case

He stood up and looked down at the six feet four of female perfection. Suddenly he bent over and touched the skin at the solar plexus with his tongue.

With a grunt of satisfaction he straightened, licking his lips. That perspiration was almost, if not entirely, pure grain alcohol!

THE MAN was bundled up so that, with his huge goggles, there was barely a total of two square inches of his skin showing. But no one around him would have noticed him anyway, in all probability, since everyone was concerned with his or her own thoughts, preparing to board the huge four motor plane on the concrete strip just outside the waiting room.

The man merged with the crowd around the gate. When he was surrounded by people he took something out of his pocket. It was a can of the type that generally carry d. d. t. for spraying, with a small valve in one end that would spray when the button

on it was pressed down.

He did just that as he shoved gently through the crowd toward the gate. Nothing seemed to happen, nor did the man seem to be expecting anything to happen.

Finally he stood near the guard at the gate. His movements seemed to be slightly impatient now. He squirted at the guard, waited for several seconds, then boldly walked past the quard onto the field toward the plane.

One of the mechanics refuelling the plane glanced up at him and returned to his work. It was the job of the gate guard to prevent anyone from going to the plane ahead of time unless they were supposed to, and the guard was standing at the gate without making any attempt to call the man back, so it must be all right."

The bundled up man walked up the ramp without being stopped. He paused at the door of the plane, looked around, his large glasses winking owlishly in the feeble sunlight, then stuck his hand inside the plane and squirted some of the contents of the can in there.

A moment later he stepped in the plane. There were two stewardesses standing in the aisle. They were looking at him as he stepped in, but they neither smiled nor gave any other indication of being aware of his presence.

He walked around them, being careful not to touch them, and walked up toward the front of the plane. Two thirds of the way up to the door leading to the pilot compartment the man stopped.

The seats here were made up of four individual seats connected together, making one long seat at least seven feet wide. The man got down on the floor and carefully rolled under the seat. There was just room enough for him to do so.

He twisted his head around, apparently making sure he wasn't too noticeable. There was just room for him to maneuver one of his arms. He put the spray can in the pocket of his fur coat, took off one fur glove by pulling on it with his teeth, reached into an inside pocket and brought out something that looked like a small capsule, popped that into his mouth, worked his glove back on, straightened out his body and turned over on his stomach and pulled one arm up as a cushion for his head.

He swallowed loudly once, apparently finding it difficult to swallow the capsule without a drink. After that he didn't move. The passengers boarded the plane, occupying every seat. The foot of one of them kicked against him. Its owner bent down and saw nothing but a pile of inert furs, and straightened up, his curiosity satisfied.

curiosity satisfied

The plane took off. The two stewardesses went about their business of checking the passengers without apparently seeing him. In fact, they would have had to get down on hands and knees to see him through the forest of legs that concealed him.

It landed at La Guardia Field. The passengers all got off. After a while the pilot and co-pilot and the two stewardesses left the plane. A tractor hooked on and dragged it into a large hangar for going over before its return trip.

Two janitors entered the passenger part of the ship and began up at the pilot's compartment, working slowly. The man under the seats lifted his head, listened for a moment, then rolled out from under the seats and sat up cautiously.

He didn't lift his head far enough so that the janitors could see him if they chanced to be looking that way. Instead, he brought out the can and did some spraying. When he stood up the two janitors were standing where they had been at work, apparently deep in thought. They seemed not to notice the man when he rose and calmly walked down the aisle, and left the ship, still wearing his furs.

IT WAS dark outside the hangar. The sky was high and very blue, dotted with twinkling stars. There was no snow on the ground, but it was far from warm.

The man walked along the edge of the runway strip from the hangar to a side gate. There was a small shack there. As he approached the shack a guard came out. The guard opened his mouth to make some comment.

The man sprayed the guard from the can he was holding in his hand. The guard's mouth remained open, as though he had forgotten it. He seemed to be looking across the field, lost in thought, as the man in furs opened the gate and walked out.

He stood at the curb, apparently waiting for someone, without looking back at the guard who remained staring off across the field.

A low slung black sedan that had been parked next to the curb a block away started up, gained speed, then pulled to a stop in front of the man in furs. He opened the front door of the car and climbed in.

As the car pulled away, the guard seemed to come to life, He closed his mouth. His eyes looked where the man in furs had been standing when he squirted him. He blinked his eyes several times, licked his lips nervously and went back in the shack.

The black sedan sped across town to an apartment building just off Fifth Avenue. The man in furs got out alone. He entered the building as the sedan drove off.

Inside were four people just coming out of the elevator, They opened their eyes and their mouths simultaneously in astonishment. He calmly squirted them, then stepped past them into the elevator and pushed the button for the fifth floor. The elevator door closed with the four people still standing where they had been.

On the fifth floor he pushed the elevator button for the third floor and stepped out before the door closed. The hall was deserted. He went to the nearest door and, using a key, opened it and entered.

Turning on the light, he began divesting himself of his furs without even a glance around, as though it were his own apartment and he had left it only a short time before. With the furs and goggles off he was revealed as a rather muscular young man with a high, intelligent forehead, wide mouth, black hair combed straight back, and an expensive suit that looked like it had been slept in.

He carried the furs into the bedroom, hastily completed his disrobing, and dived under the shower. Ten minutes later, with fresh clothing on and a shave, he lit a cigarette and sat down at the desk in the living room.

He picked up the phone and dialed a number, his cigarette dangling from a zuy lips. The phone at the other end didn't complete its first ring. A voice barked, "Hello!" so loudly the young man winced.

"Curt Widner," the young man said. "Just got in ten minutes ago."

"What'd you find?" the voice at the other end barked.

"If I told you, you'd think I'm crazy like we thought Mosely was," Widner said, his grin moving his cigarette to the side of his face.

"You mean he was sane?" the voice at the other end said incredulously. The young man was holding the receiver away from his ear to protect it.

"Perfectly, Mr. Rains," he said.

DR. FOSTER, his breath forming a cloud of steam each time he exhaled, squatted by the sled and watched the woman—or girl. It was hard for him to think of a well formed girl six feet four inches tall.

Her breast rose and fell rhythmically in sleep or unconsciousness. It was really a combination of both, so far as he could make out. She didn't seem to be drugged. At least she exhibited none of the usual symptoms of being drugged—except that she wouldn't awaken. His examination had revealed no sign of injury. But it had brought out some rather interesting facts.

Her eyes were purple with tawny orange stars, but were normal in shape. Her fingernails and toenails were paper thin and the skin under them was a bright red. Her hair was a rich brown in color, and so fine that it seemed to be strands of pure silk rather than hair.

He had moved her back out into the freezing air because she had begun to show signs of real discomfort in the warmth of the hodan. With air that would have frozen a normal skin blowing on her from the slight breeze, she seemed to relax in comfort, and since she seemed to breathe normally, he was forced to conclude that for some reason her temperature of one degree below freezing was normal to her.

It shocked his scientific mind, but he was forced to accept facts as they were. He wished he had a portable laboratory handy to make blood tests, a microscope to make detailed examinations, but he had nothing except his bag of ordinary diagnostic tools and an assortment of sulfas and shots. All he could do was wait until she recovered consciousness.

The sun had set hours ago, and a bloated moon hung low on the southern horizon when it finally penetrated that perhaps he had something more than just a medical curiosity on his hands. He had coordinated the fact of the woman's perspiration being largely alcohol with the fact that not even an alcoholic can absorb enough to sweat it out in pure form. He had coordinated the fact that she was alive with a body temperature of one degree below freezing with the fact that no human being could remain alive, let alone perspire, at that temperature.

Now, suddenly, the realization struck him that this meant that the unconscious woman wasn't Icelandic, American, English, nor any other race of people. He examined her features more closely. He pulled back an eyelid again and studied her eye.

It was possible that changing from a water metabolism to an alcohol metabolism could produce the unusual color and shape of the iris, and the paper-thin fingernails and toenails. But body cells couldn't just change in such a basic thing in one generation.

As he looked at her and thought about these things the realization grew on him that, human though she might be in form, she was farther from the human of known races than any animal.

Was she from some other planet? Dr. Foster look speculatively up at the sky, as though he might find the answer there. Then he let his eyes drop to his more immediate surroundings and slowly surveyed the bleak expanse of snow covered wasteland that stretched to the horizon in all directions, to the uninviting canyons that cut into the mountain that rose in back of the hodan. There was no movement visible on that white panorama except the almost iridescent swirl of fine snow caught up by the night wind here and there.

Nodding to himself as if he had reached some conclusion, he took off his heavy gloves and extracted a prescription pad and a pencil from somewhere within the depths of his thick coat.

He wrote slowly, stopping often to ponder what he had written. When he finished he stood up and went inside the hodan.

"Charlie," he said, shaking the sleeping male occupant.

"Huh?" Charlie said, turning over and blinking up at him.

"Get up, Charlie," Dr. Foster said.
"I want you to take a message in to
Reykjavik and give it to the telegraph man at the airport."

Without protest or question Charlie rolled over and got up. He took the piece of paper and carefully put it in a pocket, then dropped an enormous fur parka onto his already overloaded shoulders.

The snowshoes he strapped to his back were not for the journey on the hardpacked snow, but were taken in case it snowed before he got back.

He left without glancing at his wife, who was watching from her own pile of furs without moving. Dr. Foster followed him out and resumed his vigil, now and then looking in the direction Charlie had gone, and following his progress until he disappeared from view.

DR. THOMAS S. FARMER was considered the world's foremost biochemist. The list of his discoveries in medicine read like the pharmaceutical catalogue—and took up a good part of it. He was the world's greatest experimental ornithologist. He had discovered five types of in-sect blood, and had isolated and catalogued the components of each type. He was considered one of the greatest mathematicians in the world, having discovered the basic fallacy of

early twentieth century infinity theory and redefined the mathematical point to eliminate that fallacy. He was listed as one of the three greatest physicists, having advanced the theory that the mean density of stars would remain a constant no matter how far larger and larger telescopes penetrated space-a theory that had come to be generally accepted recently. He was a leading authority on having formulated education. educational program for primary schools which would actually increase intelligence and alter aptitudes.

Anyone in the world who cared to could send ten dollars to Lloyds of London and receive by return mail a nicely engraved certificate entitling him to a thousand dollars in cash if Farmer died within twelve months from date of purchase. It had become a popular international lottery, and of the thirty to a hundred million dollars Lloyds made on it each year, they handed ten percent directly over to the doctor. This was very unusual, since Dr. Farmer was already well over a hundred years of age and therefore should have been considered out of bonds for insurance companies. Legally dead, so to speak.

But it was no more unusual than his appearance, which was that of a man of perhaps twenty-eight years of age. This in itself did not seem unusual unless one knew who the apparently young man was.

And since most people recognized him at once when he appeared in public, he very seldom appeared in public—or so the public was led to believe.

His secretary and errand boy, a man somewhat older in appearance, with a squarer jaw and darker complexion, was something different. No one paid much attention to him. Reporters had found that anything he said would almost certainly later be denied by Dr. Farmer himself. Officials and businessmen had found that any messages they sent through him to the doctor generally didn't reach that famous man. So Jack Tracey had come to be totally ignored by everyone except as a curiosity. And no one except a very few very important people knew that Jack Tracey and Dr. Thomas S. Farmer were one and the same man.

If the messenger boy who brought the telegram to Dr. Farmer's New Jersey country estate had known of Jack Tracey's reputation for unreliability he would have insisted on seeing the doctor in person before relinquishing the yellow envelope.

If he had seen Jack Tracey rip the envelope open the minute the door was closed he would have been even more doubtful. But before his motor tricycle found a break in traffic so it could scoot onto the highway and head back to town, Jack Tracey had connected with the airport and made a reservation on the next plane for Reykjavik under the name of Frank Bond.

As Frank Bond he had an apartment in Greenwich Village and a reputation of seldom being home. Also as Frank Bond he had a reputation of being a fairly prolific writer of mysteries that were consistently good.

After he had made the reservation and learned his plane would leave in six hours, he called the telegraph office in Newark and sent a reply, informing Dr. Foster that he was sending a thoroughly capable man, Frank Bond, to investigate.

That done, he repaired to his makeup room behind the bookcase in his bedroom and spent half an hour transforming himself into Frank Bond.

As Frank he was an inch taller, which makes a difference when you

are five feet eight, and considerably more muscular in build. His hair, normally parted and loosely combed, was still the same shade of gray, but combed straight back and plastered down. His clothes were in better taste and more expensive than those usually seen on Dr. Farmer. His teeth were whiter and slightly irregular.

He had crossed the bedroom and entered the spacious front room when the doorbell rang again. Hesitating only for the barest instant, he went to

answer it.

"Is Dr. Farmer in?" one of the three men standing outside asked po-

litely

"Why, no," Frank Bond said, his eyes flicking over the three men and growing uneasy. "He left just a few moments ago."

"Who are you?" the man asked, pushing past him and entering the house. The other two men followed with that air of confident insolence posed by a man who habitually gains

his courage from a gun.

"Tm Frank Bond," the disguised Dr. Farmer said, assuming an air of mystification. "I gather you're friends of the doctor. He was called to Iceland, I believe, on some extremely urgent business, and is catching the next plane. If it's important I think you can catch him at the La Guardia Airport if you hurry."

The three men grinned at him wolfishly.

"Thanks. It is urgent," the spokesman said.

"I'll call the airport and have him paged," Frank Bond said as the men

hurried out the door.

"Do that," one of them said over his shoulder.

Dr. Farmer, disguised as Frank Bond watched them as they got in the lowslung black sedan and sped recklessly down the driveway.

Then he went to the phone and

called—not La Guardia—but the Newark airport. When he hung up he was smiling his satisfaction. In half an hour he would be taking off for Iceland in a chartered plane.

FRANK BOND, the writer, landed at the Reykjavik airport four hours ahead of the plane he had wired that he was arriving on. Consequently he wasn't surprised that there was no one there to meet him. With four hours to kill he decided to do a little scouting around.

Before he had walked across the waiting room of the airport to the newstand he became aware of something. Some sort of joke was extremely popular, having infinite variations that were being tossed around on all sides. The gist of the humor seemed to center around "the little man who wasn't there".

He bought the local paper and went into the coffee shop and sat down at the counter. He had slept during the later part of the trip over the Atlantic. So he ordered a breakfast of ham and eggs and coffee. Then he opened the paper.

The headlines captured his immediate interest. They read, MYSTERY OF DISAPPEARING MAN GROWS. A full double column told of the developments in the mystery, beginning with the latest development, the account of the guard at a side gate at La Guardia Field who claimed that a man answering the description of the reports from Iceland had approached his gate shortly after the plane from Sweden had been taken into a hangar for checkup.

"I noticed that he was dressed unusually," the guard said, "but I didn't think anything about it. I stepped out of my shack to inform him that only known employees were allowed to use my gate. Suddenly he seemed to vanish before my very eyes. I blinked, and he was gone. I turned around quickly. I could see flifty yards in every direction, but he wasn't in sight. I would have kept quiet about it, but he answered the description published in these other reports exactly, so I know I wasn't seeing things."

The account went on to tell of the previous appearances of the mysterious man who was bundled up in furs and wore goggles. His first known appearance was at the Reykjavik Airport: but the reporter who wrote the article predicted that accounts of him being seen in Sweden would turn up, and that he was probably a Surussian spy or refugee going to the United States without passport. The reporter made no attempt to solve the mystery of how the man had managed to disappear so many times and while so many different people were looking directly at him.

Dr. Farmer read the newspaper account carefully several times while he ate slowly. He disagreed with the reporter on where the mysterious little man who wasn't there originated, but he did so with the conviction that he had more to go on.

What did he have to go on? He took the telegram out of his pocket and read it for the hundredth time. It read, "Have discovered extraterrestial human female with C three Height O three metabolism. Urgent. Danger. Ask at window for Charlie. Reply time of arrival."

That gave no hint of any connection with the man who wasn't there, but it seemed a certainty there must be a definite connection. There were the three strangers who had arrived shortly after the telegraph boy. They too were almost certainly connected with the other two facets of the budding mystery.

There was a radio playing softly at the far end of the coffee shop. The music was suddenly interrupted by a male voice.

"We interrupt this program to bring you the latest bulletin. The plane that was due to arrive at the Reykjavik Airport in a little over three hours has not made its scheduled flight report. That report is ten minutes overdue. The airport radio operator has not been able to get a response to his call signals from the plane. There is as yet no cause for alarm- A report was just handed to me. The U.S.S. Nielson just radioed that an explosion took place high in the stratosphere and several miles north of the ship fifteen minutes ago. The position of the U.S.S. Nielson is approximately that of the plane, so it is possible that what they saw was an explosion on the plane itself. The ship has turned off its course to investigate. We will bring you whatever message its skipper sends as soon as it is received."

Tom Farmer crumpled his newspaper. He dropped a dollar bill on the counter and left the coffee shop, noting the white faces around him, and compressing his lips grimly.

"So they planted a bomb to kill me and prevent me from getting here," he said in his thoughts. "At least seventy-five people, on the off chance that I was among them in some disguise."

THE ATMOSPHERE of jocularity that had been in the waiting room was gone. People stood around in quiet groups. Tom went to the ticket window and asked the way to the telegraph office. He learned that there were two. One in the same building, and one in town.

The were half a dozen taxis outside. He got into the first one in line and gave the driver orders to go to the telegraph office in Reykjavik.

As his cab pulled away from the

airport building he twisted around and looked through the rear window. He saw two men getting into the second taxi.

He frowned. It could mean nothing, or it could mean they intended to follow him. Did he want that yet? He studied the problem. What he wanted te do if possible was get in touch with Charlie before the time the plane was supposed to arrive. At the telegraph office he might at least get a description of the man so that he could identify him when he ran across nim.

He looked back. The taxi was still following, but it would have to anyway, since there was no other road as yet. He settled back, deciding to let things take their course.

Ten minutes later when he got out at the telegraph office the other ca's

was not in sight.

The man behind the counter in the telegraph office was in his late thirties, of Danish or Scandinavian descent. When Tom Farmer entered the man laid his pipe carefully on the ashtray on his sending desk and came to the counter.

"I'm looking for a man named Charlie," Tom said. "He sent a telegram several hours ago and received a reply."

The smile on the operator's face vanished abruptly.

"You're the second man asking for Charlie," he said. "I wish now I hadn't given the first one his description. Who are you?"

"Frank Bond," Tom said.

The operator looked at him keenly, then seemed to make up his mind.

"Charlie is a backhills character," he said. "There aren't many of them. You won't have any trouble finding him. He has a beard that's never been washed or combed, and will be so bundled up in motheaten furs that you can see nothing except the furs and beard. He has a mud and rock sty about fifteen miles due north of town in the foothills."

"How much did you tell the other man who asked about him?" Tom asked.

"The same, Dr. Farmer," the operator said quietly. "I wish I hadn't. And don't try to deny that you're Dr. Farmer. Your disguise would fool most people, but the shape of your ears and your eyes give you away to me."

"O. K,," Tom said, sighing. "It might be wise if someone knows. There seems to be something going on that has a great deal of danger connected with it." He sketched the events he knew of.

The operator nodded gravely as Tom spoke.

"I've been thinking some about that telegram Charlie sent myself," he said. "By the way, my name's Nels Larson." He shook hands gravely with Tom, "The way I see it," he said, going to his desk and picking up his pipe, "is that some Martians or something have landed somewhere on Iceland, and they got into the wrong hands. That girl Dr. Foster has is one of the visitors. The little man who wasn't there may be one, but I think he's one of the gang that found them, and he just used one of their things to make it easier for him to get back to the States and get reenforcements-and maybe financial backing.

"There would be millions in it for unscrupulous people. Scientific devices the world had never heard of, Hundreds of patents could be obtained. They could even patent the spaceship and control space travel with their patents. The only way they can do that is to keep it secret that a Martian spaceship had really landed."

"Maybe you're right, Nels," Tom said. "Certainly there must be millions of dollars at stake for even an utterly unscrupulous group to deliberately kill seventy or more people just to get at me, as they did if they blew up that plane."

He took out a cigarette and lit it thoughtfully.

"I may be running into real trouble," he went on. "Here's what I want you to do. Keep everything quiet for three days. If I'm not in here in that time notify the police and also send this wire to the State Department at Washington."

He wrote hastily on a telegraph blank. When he finished he handed it to Nels.

"Put it in your safe and keep it locked," he said. "I think someone was able to come in and read the telegram Charlie sent under your very eyes without you knowing."

"Huh?" Nels exclaimed.

"If the little man who wasn't there could vanish right in front of people's eyes," Tom said, "maybe he could remain invisible while he came in and read the telegrams on your spindle."

"Maybe you're right," Nels said gloomily. He looked around half fearfully, picked up the written telegramand went to the open safe and put it in a locked drawer. When he came back to the counter his mood changed.

"There's something I've always wanted to find out," he said. "Does diet have anything to do with your experiment on immortality? I know you refuse to give out any information until you either die or reach the age of a hundred and fifty in good health, so you can be sure no harmful effects develop; but I thought maybe you could give out a little information that would maybe keep me going strong a few extra years."

"No," Tom Farmer said, his voice kindly, "diet has little or nothing to do with it. It's an extremely delicate balance of chemicals that do specific things to the body. The main ones are harmful by themselves, so I can't just pass out part of the thing. It has to be all or none, so it will have to be none."

"I expected as much," Nels said, sighing. "But there was no harm in trying." He grinned sourly. "Maybe you'd better hope that immortality stuff prevents your death by accident too."

"Sorry," Tom said, grinning broadly. "I'm as vulnerable to a bullet as you are."

LE RETURNED to his waiting cab and ordered the driver to go back to the airport. That would be the best place to start looking for Charlie.

As the cab left the thickly settled part of Reykjavik, Tom remembered the two men and the cab. He twisted and looked back down the narrow, snow covered highway. Two blocks back was a cab. It might be the two men following him—or it might be merely a routine cab trip not connected with him. There was no way of finding out.

At the airport he paid the cab driver and went inside, stopping just inside the door to wait for the other cab to arrive. A moment later it pulled up.

A man climbed out. He wasn't either of the two who had climbed into a cab when he left the airport. He was carrying what seemed to be a can wrapped in paper. The can had apparently been rolled up in the paper and the ends bent over loosely. He held it gripped in his fingers with one finger holding down the folds of wrapping paper on one end.

The man wore goggles. They were the type many people wore in the north in the winter. There was nothing unusual about them, nor about the man himself. Tom Farmer left the doorway and circled about the waiting room looking for Charlie. He found him almost at once, sitting sound asleep on a bench. He shook him gently.

"Are you Charlie?" he asked.
"Sure," was the matter of fact an-

"I'm Frank Bond," Tom said.

"Come," he ordered. He headed toward the exit with the peculiar stride

Tom glanced around the waiting room. The man who had just arrived in the cab was at the ticket window talking to the agent. Other people were standing about, numbed expressions on their faces. Evidently positive confirmation of the plane's being wrecked hadn't come in yet.

Before Tom and Charlie reached the exit four men suddenly came to life and hurried out. When Tom got outside two of the men had entered cabs alone, and the other two had entered the third cab. That left only the cab that had followed him out from Reykjavik.

Tom's eyes narrowed in suspicion. The other three cabs were in motion. The fourth cab pulled forward even with him and Charlie. The driver reached back and opened the door.

Charlie was climbing in without waiting.

"Pardon me, but could I ride back to town with you?" a polite voice asked. Tom turned his head. It was the man with the wrapped can.

Tom blinked his eyes, then blinked them again in amazement. Instead of standing by the cab he was comfortably seated in it, and it was already nearing the city limits.

Charlie was wedged against him. The man with the can was next to Charlie. The cab driver turned his head and glanced at him.

"He's awake," he said.

Tom jerked his eyes to the man on the other side of Charlie. He saw the wrapped can start to rise. He closed his eyes. When nothing happened he opened them again. The cab was speeding along a residential street! Tom closed his eyes quickly. The driver had been busy with traffic and hadn't seen him.

Through slitted lids he looked sideways at the man with the can. It was obvious now that whatever caused the lapse of consciousness was contained in that innocent appearing can. It was squirted out like d. d. t. is sprayed, Did it act through the eyes exclusively. Or were the goggles merely an added precaution?

The cab was slowing down. The driver was in on this thing too, and they were nearing their destination. It could be the large white house just ahead. There was no time to lose.

Tom lunged suddenly. His fingers closed about the can. He jerked and felt it come free. Without thinking he swung the can against the man's head and felt it connect. He saw him start to slump and turned his attention to the driver.

The driver had stepped on the gas. Now he was frantically trying to turn the cab into the driveway of the white house. Tom hit him on the back of the head with the end of the can. The driver tried to avoid the blow. In trying to avoid it he let the car straighten out. It skidded briefly, then crashed sidewise into a light pole on the curb at the side of the drive-

Tom was cushioned by Charlie and the stranger. He opened the door and half dragged Charlie out.

Charlie stood up when his feet touched the ground. He stood passively, his eyes staring straight ahead. He was still in that mysterious blankness. Tentatively Tom started to lead him along the sidewalk. Charlie's feet

moved obediently.

"Run," Tom ordered, pulling on Charlie's hand. Charlie began to run in a clodding shuffle. Tom ran along beside him, guiding him. He put the mysterious can in his coat pocket.

At the corner he stole a quick look back at the scene of the wreck. There were several men there. One had a gun out, and another was apparently arguing with him

Charlie stumbled and fell with a surprised exclamation. He had re-covered consciousness. Tom smiled at the realization that apparently an instant ago, to Charlie, he had been in the car. He had blinked his eyes to find himself running on the sidewalk!

"Get up, Charlie," he said. "We've got to run for it."

He saw Charlie shake his head and look back the way they had come. There was the sound of a shot. At the same instant the snow kicked up several yards away on the sidewalk. Charlie needed no more coaxing.

IT TOOK half an hour for Tom and Charlie to reach the outskirts of town. They traveled on foot. After it became certain that they had shaken off pursuit Charlie had insisted that it was his job to take Frank Bond to Dr. Foster and "the woman", and wouldn't listen to anything else. He had shaken his head violently to Tom's suggestion that they get help from the Reykjavik police.

"No," he said. "Dr. Foster said to bring you. I bring you. No monkey business." That seemed to be a favorite phrase of the man behind the most unkempt beard in the world. He repeated it, savoring its flavor. "No monkey business."

So Tom let him have his head, and managed to always remain half a step behind his guide so that Charlie had to turn his head to see him.

As he hurried along, taking three

steps to Charlie's two, he studied the man. When they reached open country and no one was in sight for the mile or two to the horizon in every direction, Tom took the can out of his pocket carefully. His fingers explored the valve under the paper until he was sure he knew which way it would spray.

At an opportune moment he pointed it so that the spray would shoot ahead of Charlie and pressed down briefly. Nothing seemed to happen. Charlie kept walking.

Tom increased his pace until he could see the man's eyes. They were blank. Breathing a sigh of relief, Tom put out his hand and stopped him.

Then, hooking his fingers in the dirty beard, he pulled. The beard came loose. The face that was revealed was rather square cut, the chin strong. It was the face of a Georgian, a White Russian. It was cleanshaven.

Tom nodded in satisfaction. He had noted little things that made him feel Charlie was not what he appeared to be. His beard had been unkempt, but his eyebrows had been trimmed. He wore filtly rags under his motheaten fur parka, but there was a smell of talcum and shave lotion around him.

Thoughtfully Tom replaced the beard and started the man to walking again. After a few moments the supposed Charlie turned and glanced at him suspiciously, but said nothing.

Tom smiled to himself. The spray was strange stuff. It blanked out consciousness so subtly it was difficult to be sure. It was a potent weapon.

It was nearly five hours before they topped a slight rise and the sled with Dr. Foster standing beside it came into view.

It was really Dr. Foster. Tom remembered him. He had met him thirty or forty years before in New York at a meeting of the A.M.A.

Dr. Foster started toward them the moment they came into view. He met them a hundred yards from the sled and the ghostly mound that was the hodan.

"Dr. Farmer!" Dr. Foster exclaimed. "I'm glad you could come."

"I'm sorry, Dr. Foster, but I'm not Dr. Farmer," Tom said, winking at the doctor so that Charlie didn't see him do it. "I'm Frank Bond, a friend of Farmer's. He was busy and sent me."

"Oh that's too bad," Dr. Foster said, frowning, but indicating by his manner that he had caught the wink and would play along. "Has Charlie told you about the woman?"

"No," Charlie muttered. He turned his face away and went on toward the hodan, leaving the two doctors alone. "What's wrong?" Dr. Foster asked

in a low voice.

"I wish I knew, doctor," Tom said gravely. "There isn't time to go into it now. Show me what you've found."

THE SUPPOSED Charlie had gone into the hodan. Dr. Foster led the way to the sled, but when Tom caught a glimpse of the figure lying there he increased his steps.

He thought he saw the woman's eyes flash open for an instant, but couldn't be sure. When he knelt over her she seemed to be unconscious.

He pulled back an eyelid. The eye remained unmoving. It was a very unusual eye in every respect. At one time Tom had made a study of iris patterns, not only of all races of humans, but of many animals. It had been a lengthy study.

It was possible to tell whether a person had been drinking, from their eyes. It was possible to tell whether even a sixty-fourth mixture of some races was present in the owners of the eyes. It was generally possible to tell the nationality of a person by

his eyes.

Whether Dr. Foster knew any of this or not, he had been right. The beautiful amazon, judging from her eyes alone, was not a member of any race of Earth! She was human, yes; but so far removed from Earth races that she was of an unknown race.

Tom let the lid close, marvelling at the girl's self control if she were conscious. He was beginning to doubt that he had actually seen her open her eyes to look at him.

He let his eyes roam over her perfect figure with its flawless skin of delicate pink, and felt his heart quicken its beat, and his breath come faster.

He swallowed loudly in the frozen, soundless hush that hung over things. Then, taking the can out of his pocket, he squirted a fine spray of its contents into her face.

"What was that?" Dr. Foster asked curiously.

"Till tell you later," Tom said.
"Right now I want to bind her hands
and feet together. It wouldn't do for
her to recover consciousness and suddenly get up and run away. Judging
from her legs she could outrun us
easily."

"You're right," Dr. Foster said, "I never thought of that. I have just the things in the sled. Sometimes I have an unruly patient who objects to being taken care of."

He rummaged through a pile of things in a box and brought out canvas straps. Tom hurriedly fastened them in place. He had used the barest minimum of the spray.

Almost at once the girl opened her eyes. Anger flooded her face. Her lips opened as if to speak. Then—

It was the strangest melody Tom had ever heard. Its notes were fluid, rich and staccato as those of a piano. They coursed over three octaves of soprano, each note blending with the next, so rapid did they succeed one another in musical tones.

It was speech, in a way, as though the notes of an electric organ had been attached to the keys of a typewriter, each note being sounded by a letter of the alphabet as a rapid typist copied the pages of a book. There was no slightest enunciation. Just pure and incredibly rich tones.

Still emitting the rapid jumble of melody she sat up, tossing her head imperiously, her nostrils flaring.

Unsuspected muscles appeared under the smooth' skin of her arms as she strained at her bonds. Tom watched her, speechless with admiration. Her rich brown hair, so fine in texture that it seemed a mere cloud, was caught in the wind.

She seemed to notice the admiration in his eyes suddenly. Her musical explosion stopped. She arched her head, smiling. She held out her bound wrists toward him, a pleading expression on her face.

Tom felt his senses reel. She excited emotions in him that he had thought were completely dead. Without thinking he undid her wrist straps.

She was nodding her head happily and speaking in her rapid fire melody of pure notes. It was unbelievable, beautiful beyond description.

The spell of her voice was shattered more abruptly and more completely than the breaking of a glass by a harsh voice.

"Don't move, any of you," it said.
Tom, Dr. Foster, and the girl
turned their heads slowly in the direction of the sound. It was Charlie,
standing just outside the hodan, a repeater rifle to his shoulder. Beside
him, a malicious smile on her lips,
stood Charlie's wife.

"Don't you know that isn't your husband?" Tom said to her.

"I know," she said. "But he's promised me riches so I can go to America and live. That is better than Charlie."

Tom stole a glance at the girl. Her eyes held a puzzled frown. She was studying Charlie and seemed to be trying to understand his words.

Charlie looked past them toward the distant rise that was the horizon. From his beard came a loud, shrill whistle.

Tom dropped his hand and unfastened the buckle of the canvas belt that still held the girl's ankles. He kept his eyes on Charlie while he did so. When it was done and he had his hand elevated again he stole a glance at her. She flashed him a knowing smile that made him short of breath.

THERE WERE men coming toward them. They were on skis and were travelling swiftly. Tom counted them. There were ten of them. They

turned their skis and used the edges to brake to a stop. It was then that Tom saw the small motors fastened to their backs, with propellers.

The motors, from their lack of sound, were the new gasoline turbines, miniature turbine weighing barely fifty pounds and capable of generating thirty horsepower.

They were speaking to Charlie in a strange language. From a familiar sounding word here and there Tom knew that it was Russian.

His eyes widened as he recognized one of the men. He was a man that the new Russian government had offered rewards totalling over a million dollars for. He was the last of the old Stalinist Government. The only one who had escaped.

Tom felt a hand slipping into his pocket. The girl was stealthily taking the spray can out.

Some of the Russians were stepping out of their skis and showing intentions of coming over to look at her.

Tom fixed his eyes on the horizon and gave a muffled exclamation of



surprise and pleasure. Startled, the men turned to see what ne was looking at. Tom felt the can leave his pocket and smiled.

pocket and smiled.

"What did you see?" the leader of
the Russians asked.

"Nothing," Tom said.

The man walked up to him taking off a heavy glove. When he reached Tom he suddenly slapped him viciously across the side of the face with it. Tom fell, dazed, landing on his hands and knees. He snook his head, trying to clear it.

Something heavy fell on him, flattening him so that his face pressed momentarily into the snow. Dimly he heard angry shouts.

He pushed upward and felt something slide off his back. He rolled over and sat up. The girl was gone from the sled. And in the distance he



the spray can at them and a misty stream enveloped them...

could see fast moving figures on the snow, heading toward the northern skyline.

It confused him for a moment. They couldn't have gone that far in such a short time. Then his eyes encountered the spray can in its paper wrapper lying by the sled and he understood. He picked up the can and put it in his pocket.

She had used it on the one who had slapped him with the glove, and chosen the moment of confusion to try to escape. She would be caught quickly by the men on skis with motor driven propellers on their backs. They would catch her and speed back. He would have to take advantage of every second while they were gone.

Dr. Foster was lying on the snow unconscious. Tom examined him briefly and decided the old man had

probably been knocked out rather than gassed with the spray.

He let him lay and quickly bound the Russian with the canvas straps he had used on the girl. That done, he went into the hodan. Charlie's wife was crumpled in a miserable heap on her bed of furs, sobbing heart-brokenly. The man who had masqueraded as Charlie wasn't there.

Tom wasted no time inside, A brief glance around had shown him there were no weapons around. Charlie had probably owned just the one rifle, a basic necessity for survival.

HE HURRIED outside and lifted Dr. Foster into the sled and started the motor. The sled was undoubtedly much slower than the men on skis. There wasn't much hope of either catching up with them or of

being able to accomplish anything singlehanded if he did.

He turned the sled about and headed back toward Reykjavik to get help. And as he drove, peering ahead until he was suffering from snow blindness, the face and tawny eyes of the strange girl rose in his mind. Her melody speech sang in his ears.

The thought came to him that he was falling in love with her. He shook his head in emphatic denial. Her alcohol metabolism made her even more unattainable than her probable extracterrestial origin and strange speech.

But suddenly something clicked in his thoughts that made him suck in his breath sharply. It was his charts on his own metabolism. His experiment on immortality had been going on for sixty-three years now. Slowly, over those years, his own body had been altering its processes. One of the major changes was the alcoholic content of his body. It had been increasing until now it was greater than that of a normal person could ever get and remain conscious. It was still less than two percent, but it was increasing at a rate that would bring it to better than eighty percent in a thousand years if the curve kept going up.

The implications made him weak. It was impossible, of course. His thoughts brought several basic body elements to mind from his vast well of knowledge. Those elements weren't alcohol soluble, nor could they form without ionization.

The sound of a rifle report broke off his thoughts. He looked back and saw two skiers speeding toward him. They were still half a mile away. He turned back and pressed the throttle as far down as it would go.

A moment later he rounded a curve and saw the edge of Reykjavik just ahead. It would be close. He cursed desperately. He heard a shouted command and looked back again. The two skiers were a mere hundred yards away. One of them was sinking into a crouch to take careful aim with his rifle.

Tom slid down as far as he could so as to present as small a target as possible.

There was the sound of another shot. With it came a dull thump from somewhere in the sled. It was followed by several shots in rapid succession, sounding more like pistols than rifle shots, and coming from ahead.

He lifted his head enough to look. Several blue uniformed men were coming toward him on skis. It was the police!

"TELL you we've got to hurry!"

Tom said irritably.

"What's the hurry?" the gray haired police chief said unperturbed. "They can't get away."

"That's what you think," Tom said.
"There's a ship somewhere out there that's quite capable of leaving the Earth."

"A spaceship?" the chief said skeptically. "Did you see it?"

"No," Tom confessed. "But I'm sure it's there."

"Our men are pursuing those two who shot at you," the chief said. "II they lose them, all we have to do is telegraph the other towns to be on the watch. We've notified the Russian Government that their man is here in Iceland and invited them to send planes and men to search for him. Frankly, I don't have the budget to place more men on this."

"I'll foot the bill," Tom groaned. When the chief shook his head he went on, "Then is there anything against my chartering a plane and going after them myself?"

"You can do that, of course," the

chief said. "But we can't be respon-

sible for your safety."

"To hell with that!" Tom said, rising. He paused at the door. "You could at least give me the protection of a police car to the airport and make sure I can get a plane."

Sighing, the chief rose from his desk and followed Tom into the front of the police station where he ordered two men to take Tom to the

airport.

At the airport as he was hurrying across the waiting room to the air traffic office he saw the pilot who had brought him to Reykjavik from the Newark field.

"Hello!" Tom said, frantically searching his mind for a memory of the pilot's name. "I thought you would be returning to Newark by

now."

"I thought I'd stick around a day or two," the pilot said, grinning broadly, "I know you said you'd be catching a scheduled flight plane back, but—" He shrugged his shoulders to indicate it didn't make much difference to him.

."Maybe I can use you," Tom said. "I've got to fly north of Reykjavik. But you'd have to get a plane equipped with runners for landing on ice"

"It's already done, Mr. Bond," the pilot said. "And my plane is refueled and the motors checked. I can be ready to take off in half an hour."

"You've got yourself a job," Tom grinned. "Get going. I'm going to be on the phone while the plane's warm-

ing up."

"When you're ready to go, come over to number three hangar. That's where the plane is. If you don't see me around just ask for me. Ken Davis."

"O.K., Ken," Tom said.

He watched the trim back of the young pilot as he hurried away, then continued on to the offices. In five minutes he was on the radio telephone in contact with the New York exchange. He gave the number of a large electrical corporation that he owned a block of shares in.

He asked for Dave Gunnarsen, president of the corporation. It took several minutes of hasty phoning at the other end to locate the man. Finally he was on the phone.

"Listen, Dave," Tom said. "You recognize my voice? Don't name any

names, but do you?"

"Of course," Dave Gunnarsen answered. "The operator said you're calling from Iceland. What are you doing up there?"

"No time right now to go into that," Tom said. "Do you have a

stenographer handy?"

"No," Dave said, "but I can hook in the tape recorder."

"Do that," Tom said. "I want something built." He waited until he heard the soft note that signaled every ten seconds that the conversation was being recorded.

"I want a frequency selector bank that will throw small relays for specific frequencies. The full eighty-eight notes of the piano keyboard. The leads from the relays are to go to a sliding contact bar made as small as possible, so that each relay can be connected to one key of an electrical typewriter. Incorporated into this setup must be an electric organ setup as small as feasible, so that the frequency that contacts any letter of the typewriter can also make that same frequency sound in a loudspeaker if a switch for that operation is in."

"Let me get this straight," Dave Gunnarsen said. "You want something that will type the letter a, say, when the note, a, is sounded by some outside source, and will in turn sound the same note over a loudspeaker when the key, a, is pressed manually." "Right," Tom said. "And I want it as soon as possible. I want it completed and rushed up here by plane. And if it gets here tomorrow that won't be too soon."

"Hold on a minute," Dave said. There was a delay of three or four minutes. Then he was back. "It won't take as long as I thought," he said. "I just talked to Croft. He says it can take stock parts throughout and be divided into half a dozen simultaneous jobs. The men will work until it's finished. Croft says it can be done and tested by midnight. He's starting on it now. What the devil is it all about?"

"I haven't the time right now to go into that, Dave," Tom said. "Send it prepaid to the Reykjavik airport to Frank Bond. If necessary, charter a plane to send it in."

"O.K., Tah-uh, Frank," Dave

said.

KEN DAVIS and his plane were in front of the huge hangar. The motors were running smoothly.

He grinned at the young pilot. The plane cabin was comfortably warm. He settled down in the co-pilot seat, noting the basket of food and the two huge thermos bottles of coffee.

Ken closed the door in the shell and contacted the tower for clearance. After a brief wait the tower clearance came.

Tom studied the pilot quietly as he maneuvered the plane and took off. Ken Davis lifted the plane in a steep climb until Reykjavik was far below.

"Where to?" he asked.

"Straight north about twenty miles," Tom said. And as Ken turned the plane's nose northward, "Been flying long?"

"Three years," Ken replied. "I started out to be an airline pilot, but an aunt died and left me thirty thousand dollars; I bought this plane and went into business for myself. Most of my trips are charter flights to Florida. Ten people can charter my plane and land at any field in Florida actually cheaper than they can fly down in the commercial airliners. I have a deal with three resorts down there so that they steer vacationers from New York to me. You know, several people make reservations for a certain date at a resort, the resort telegraphs me and I contact the people and offer them club rates. If four go I break even. All over that up to the ten I can carry are clear profit."

"Nice racket," Tom agreed. "But what made you stick around up here?

You're losing money."

He looked down. Charlie's hodan was in sight now, a small dot at the base of the mountain.

"Well, frankly," Ken Davis said,
"I smelled some excitement, and I've
always had a yen to get some. I
thought I'd stick around and see what
happened. Glad I did. For one thing,
I get to see something of Iceland. I
couldn't by myself. My insurance
doesn't cover solo. Only hired flights."

Without warning the plane gave a violent lurch. When Tom and Ken recovered sufficiently to see what had happened, the tail of the plane was gone completely.

"Quick!" Ken said. "Parachutes in the locker!"

He deserted the controls and opened the locker door. Tom shoved Ken away when he tried to help him put on a chute.

"Put one on yourself," he said. "I

Less than a minute later both men were in the air, dropping toward the white earth below. The plane struck half a mile to the north seconds later.

Tom searched the ground for signs of moving objects. To the north he saw a solitary moving dot. It would be out of sight when they reached the ground. He memorized the northern skyline so that he would know which way to head.

They landed within fifty feet of each other.

"What the devil could have caused that explosion?" Ken asked. "It was from outside the plane or we would have been killed by the blast."

"It must have been a small bomb tied to the tail," Tom said. "Did you see anyone hanging around your plane before I came out?"

"No." Ken said. His forehead creased into a scowl. "There were people all right, but—" He turned grave eyes on Tom. "This may sound screwy," he said seriously, "but everything seemed to be funny. The motors started up cold and coughing, then the next second it was running smoothly, the motor blocks throwing off heat like they'd been going twenty minutes. It was almost like I'd blacked out. But I couldn't have, because I'd have keeled over, and known about it when I came to."

"Like this?" Tom said. He took the paper wrapped can from his pocket and sprayed a whiff at Ken, then walked away about fifteen feet and waited.

Ken remained standing where he was, a placid expression on his face, for five minutes. Then his face came to life. He uttered a startled exclamation.

"How the devil'd you get way over there?" he asked. "Are you a magician?"

"It seemed to you like I suddenly vanished and appeared over here the next instant?" Tom asked. At Ken's vigorous nod, "It was that stuff I sprayed at you. You blanked out and I walked over here."

Ken nodded understandingly. "That's what happened to me at the hangar," he said. "And now I can remember. There was a guy walking

past me. At least I thought there was. But he seemed to vanish in front of my eyes. Funny I forgot about him."

"A CCIDENTS ARE funny," Ken said, picking the two unbroken thermos bottles of coffee out of the wreckage of the plane. He handed them to Tom standing outside.

Tom set them down on the snow and looked back through the jagged hole in the fuselage in time to see Ken take two forty-five automatics out of a small cubbyhole compartment by the pilot's seat.

"Maybe these'll come in handy," Ken smiled grimly,

He looked at the pile of things that had been salvaged from the plane. "Lucky there was no fire," he said thankfully.

Tom was already pouring two steaming cups of coffee. He handed one to Ken.

"I wish we had a radio," he said.
"The guns don't make us equal to
those ten Russians. We need reinforcements. Let's drink our coffee
quick and see what that solitary moving dot was on the other side of the
rise."

"We might as well leave most of the stuff right where it is," Ken said.

An hour later they topped the rise, and ahead to the north the snow covered plane stretched in utterly bleak barrenness for at least five miles.

A brisk wind was rising from the northwest. Clouds of fine dry snow were picked up and carried along by it, obscuring the view.

And nowhere in that desolate scene was there a moving thing.

Tom turned and looked to the south. The bloated yellow sun was half hidden under the horizon. Before long it would be gone. There would be at least fourteen hours of darkness.

"Looks like we're in for it," Ken said measily. "That's a storm blow-

ing up." He looked at Tom closely. "You're pretty worried about that girl, aren't you?"

He saw h's answer in Tom's expression. He started walking, but drew up short.

"What's that up ahead?" he asked. Tom looked where he pointed.

In the tricky light there seemed to be a solid mass of swirling snow with strangely black, curved lines, two of them, hovering outside it. Even when, for a brief moment, the swirling snow cleared, and it appeared in sharp outline, it was almost impossible for the mind to accept the evidence of the eyes.

It was at least a mile away, and even at that distance it was luge. It was covered with thick white fur.

was covered with th'ck white fur.
"A mastodon!" Ken breathed.

The two men stood speechless as the huge creature came toward them. Now and then it disappeared behind a wall of snow or was obscured by a cloud of windblown snow.

Then suddenly it was only yards away. The deceptive distances had made it seem far away until the last moment. It was running in a lazy lope, its thick, furcovered ears flaping at each step. Its eyes were a bright yellow, its long, curving tusks jet black tipped with yellow metal that seemed to end it sharp points.

But so gracefully did it carry itself that its size seemed a distortion. It was coming directly at them, head low, in a rapid charge.

"God!" Ken muttered. "It sees us. Run!"

A blast trumpeted from the raised trunk of the furry Mammoth. Ken and Tom turned and ran.

AS TOM RAN, something heavy in his pocket bounced against him. He remembered it was the can of the mysterious spray chemical.

The ground was quivering under

his feet from the nearness of the charging beast, as he pulled off his gloves and let them drop to the snow.

The can stuck in his pocket. He pulled at it, looking over his shoulder and seeing the white furred Mammoth almost over him, its trunk stretched toward him, steam blowing from it in puffs. Then the can came free.

He held it over his shoulder and pressed on the valve.

The hollow roaring breath of the Mammoth stopped. The ground, suddenly, was no longer quaking under his feet. Still running, Tom took his finger off the valve and looked back.

The Mammoth had stopped, and was standing still, waving its trunk in a leisurely manner, almost as though it were in a zoo behind bars.

Tom stopped running. He sank to the snow and lay there panting, the cold air torturing his nostrils and throat as his lungs bellowed in and out, searching for oxygen for starved tissue.

Finally he raised his head and looked around, searching for Ken. Ken was coming toward him, a concerned expression on his face, his eyes studying the Mammoth warily.

Tom silently thanked God the beast had chosen to charge him instead of Ken

"What happened to the brute?" Ken asked as he came up and sat down near Tom.

"I used that spray on him," Tom said. He struggled to his feet. "I'd better give him a good shot of it or he might wake up any minute."

"I'll do it," Ken said.

"No," Tom said. "I'm all right now. I've caught my breath."

Ken walked beside him as they approached the Mammoth. Tom put the can near the swaying trunk and pressed on the valve, holding his face away. He blinked his eyes—and the Mammoth was twenty feet away and

he was lying on his back in the snow.

"Damn!" he said in amazement. He knew what had happened. In spite of his precautions he'd gotten a whiff of the spray. Ken had brought him over where he was and made him lie down.

Ken was standing in front of the Mammoth, his face raised curiously, studying the giant furred brute. Tom got to his feet and joined him. Ken sensed his approach and turned 'smiling at him, and handed him the spray can.

"Thanks," Tom said. "That stuff acts without any warning at all. It's —magic!"

"So's this Mammoth," Ken said. "I've been examining it. Watch."

He slapped its trunk sharply half way up. The trunk curved to form a seat. Ken sat in it, and promptly the creature lifted him and sat him expertly on its head. The trunk dropped away and started swinging slowly again. Also the Mammoth's body started swaying in gentle rhythm, elephant-like.

Ken slid off, landing on his feet.

"Look at those metal ends on its tusks," he said. "They aren't gold. At least they seem too hard to be gold. And examine the brute's fur. It's plenty thick and pure white like it's been washed. But more important, it's been clipped so it's a uniform three inches in length. The hairs are thick enough so that you can see some of them are cut straight across and some at an angle."

Tom nodded his head in agreement as he took a look.

"It's domestic." he said. "Imagine it! Extinct Mammoths here in Ice-land, domesticated, and never a hint of it before this. It would seem that someone would have seen them. Planes fly over this country often enough so that such a thing wouldn't have escaped detection."

"Unless they just came recently," Ken said. "They might be off that spaceship too."

"That's possible," Tom said. He looked speculatively at the Mammoth. "I wonder if he would be any good to carry us."

"If he got rambunctious we could give him another whiff," Ken grinned into the creature's yellow eyes.

THE WIND increased gradually to bilizzard proportions, sharp bitting snow born on its frigid breath. Snow that came from that on the glacier-ice terrain, and perhaps from clouds. Tom and Ken clung to the back of the white furred Mammoth, gripping handsful of the bristle-like hair, to keep from being blown off rather than dislodged by the animal's motion.

They kept their faces buried in the white mat of fur, which served the double purpose of providing warmth against the sub-zero wind and of filtering the sand-like snow from the air they breathed.

They made no attempt to steer the Mammoth. They had long ago lost all sense of direction. Hours ago they had ceased talking. The wind plucked the words from their mouths, hurled them away, and flung sharp crystals of snow into their eyes and against their skin

And to each came an occasional fear that the Mammoth would awaken from its somnambulic anesthesia to rear up and dislodge them, and trample them underfoot in rage. This fear was tempered by the almost certainty that if it were to awaken it wouldn't even realize they were on its back.

As the hours stretched on interminably, staying awake became a nightmare of torture. Each man would cling, then awake to find he had dozed for a fraction of a second and relaxed his grip, with the realization that to fall meant certain death in the blizzard.

And as he huddled on the swaying, flat back in the carpet of long fur, Tom Farmer puzzled over the mystery of the Mammoth. Was it a creature of Mars or some other planet? Native to the world the girl had come from? Its metabolism was not an alcohol one. Its body gave off too much warmth.

The girl had to be from some other world. Never in the history of the Earth had any race of man used pure tonal notes for speech. Even if she were an immortal, born in some forgotten period of man's history, if there had existed any race using music for speech, it or at least some legend of it would have been handed down to the period of recorded history and legend.

Her being in Iceland would be a natural thing. Her body temperature was normally one degree below freezing. She, and any others like her that had arrived in a spaceship, would have chosen a climate and temperature as suited to their comfort as possible. More temperate parts of the earth would have been insufferably hot for them.

Where did the Russians come in? Had they escaped to Iceland to hide in its frozen stretches of uninhabited wasteland, and stumbled onto the ship and its inhabitants? And killed off all except the one whom Dr. Foster had found unconscious beside the trail over which he had been driving his motor sled?

Who was the man who had used the spray to go from Reykjavik to New York? A Russian from the same gang? It seemed likely. He would avoid haring to present identifications and a passport and giving away his identity.

Those three men who had called at his house and asked for him hadn't been foreigners, but native New Yorkers. That indicaced nothing in any direction. There were still sympathizers with the old Russian dictatorship that would work with and hide members of this gang hiding here in the heart of Iceland.

Or the "little man who wasn't there", as the papers had dubbed him, could be one of those native American sympathizers who was keeping his visit to Iceland secret because he was a known sympathizer and it would be suspected that surviving members of the dictatorship were hiding in Iceland if it were known he had come.

Suppose those escaped Russians had possession of the spaceship and weapons unknown to modern earth science. They might be able to make a successful comeback and destroy millions of people in regaining their hold on half the world!

That must be it. To such men the destroying of a plane with seventy-five people on it to kill one man would be justified for their irrational Cause. They would think nothing of it. To them it would be just another phase of the War....

Suddenly Tom jerked his head up. He had been asleep. He had been sleeping because the Mammoth's back was no longer swaying, and the blizzard had died down to almost nothing. It was snowing, and snow fell off the back of his head as he jerked upright.

He blinked his eyes and looked around. Rising a few feet away was a snowcovered structure which, from its outlines under its snow blanket, was man-made!

EVER SO slowly he turned and reached back to Ken, shaking his shoulder gently. Ken mumbled, lifting his head sleepily.

"Shhh," Tom hissed, "We're here."

He watched Ken look around questioningly, slowly waking to the meanings of what he saw.

"That big door," Ken whispered,

Tom looked. He had missed that. It was a huge door like the sliding panel of a barn.

"This Mammoth is liable to be noticed any moment," he said softly to Ken. "We'd better slide down and hide somewhere."

He suited his actions to his words, landing with a muffled thud in the fresh snow. While he was still falling a loud, snorting blast trumpeted.

He looked up to see the beast rising above him, enormous, with yellow fire in its eyes, its thick black tusks poised to fall on him.

To one side was Ken, tossed by the rearing creature. But Tom barely noticed this. His eyes were fixed on the poised ebony tusks with their gold caps, sharply pointed. The giant monster seemed to prolong his upright pose in order to gloat at him. His trunk was lifted delicately out of the way. His eyes glittered in their wall of white fur.

Then on the air sounded a rapid series of quick, peremptory notes. The light in the Mammoth's eyes changed. He flapped his furry ears protestingly, then half pivoted and sank to all fours.

The series of notes sounded again. They came from some distance away. The Mammoth lifted his trunk and uttered a soft blast. Uttering a succession of mulfled snorts he moved off in the direction of the sound, apparently forgetting about his prey.

"Out away from the building, Ken," Tom ordered quickly. "Cover yourself with snow so you can't be seen so easily."

They found a drift less than a hundred yards away, and burrowed into the soft snow, turning to watch in the direction from which the singing voice had come.

A moment later an amazing sight emerged through the gloom. The Mammoth was returning, It was dancing and cavorting about a girl who was walking with indescribable grace in every step. From her lips came a series of clear notes that skipped around in three octaves, each note barely uttered and as quickly succeeded by another, in a manner than not even an operatic soprano could approach in skill and firmness.

The Mammoth would half bow, the curve of his tusks in the snow, then gambol off in a great circle to return and repeat his playful maneuvers, like a puppy grown unbelievably large.

Speechless with amazement, Tom and Ken watched as the pair approached the door of the snowplastered building. The girl was wearing black fur in a costume something like a two piece swim suit. Her hair was encased in a large black fur turban-shaped hat with a trim of soft red like a skullcap. At her ears, and part of the headdress, were large, gleaming stones that reflected golden fire.

She went up to the door and pulled out a pin. She uttered more notes. The Mammoth inserted the metal tips of his tusks in indentations in the door and slid it sidewise.

Light flooded out, and with it sound. Tom and Ken gasped. Revealed through the opened door were other Mammoths, all of them the same pure white of the one that had carried them here. They were turning their heads in the direction of the door, trumpeting softly.

With a loud snort of joy the Mammoth lumbered through the doorway. The girl sounded several quick, commanding notes. He frisked his tail and turned back, snorting impudently. His head went behind the door. It swung closed. The girl dropped the pin back in place, then started away in the direction she had come.

"Maybe we should let her know we're here," Ken whispered.

"No," Tom whispered back. "She isn't the one I met at Charlie's. We've got to wait and explore first. They may be in with the Russians, and if they are we'd just be committing suicide by letting her know we're here."

Silent, they watched as the night

swallowed her up.

THEY LEFT the concealment of the snowdrift and followed the tracks of the girl in the snow.

"Wonder where they get all the hay it takes to feed that barn full of Mammoths." Ken asked after a few minutes.

"That is a thought," Tom said.
"There were at least twenty of them. It would almost take an airlift to keep them fed. You know, this is getting more and more mysterious as we go along. Creatures that are supposed to have become extinct hundreds of thousards of years ago, girls over six feet tall that use singing in place of words for speech, and have a normal body temperature of one degree below freezing.—"

"And still manage to raise mine a couple of degrees when I look at

them," Ken said.

Tom smiled. "That's against the laws of thermodynamics," he said. "And there's the Russians who escaped when the dictatorship went down. How do they fit in?"

"You said the girl you met at Charlie's hodan ran from them," Ken said. "That would mean that they weren't friendly. Maybe she was out for a ride when she got conked out and Dr. Foster found—"

"Shhhh!" Tom silenced him. "We're

coming to something."

Emerging out of the eye-lulling gloom was another regular shape covered with snow. Its wall rose to a height of ten or twelve feet, and above that rose another few feet of snow.

The two crept up to it warily. Tom scraped some snow off, revealing a

surface of concrete.

"A pillbox!" Ken exclaimed.

"Not so loud," Tom warned. "It's a concrete pillbox all right. I'm beginning to see a little daylight. This is man-made, and Russian. I've seen too many of theirs."

"That means this is one of the secret advance posts they built up."

Ken said.

"It also explains the presence of those outlaws," Tom whispered. "This fortress was never discovered by the Allies in the last war, and with the collapse of the dictatorship the personnel garrisoned here just remained. There must be a ring of these pillboxes. Wonder what they guard—an airstrip or a mine?"

"I just had a weird thought on that," Ken said. "They were built to ring the spaceship those girls came in

with their Mammoths."

"That's not so weird," Tom replied.
"It's probably true. We'd better be quiet. There may be men inside this thing who can hear us."

"What about the girl's footprints in the snow?" Ken asked. "Let's go back to them and see where they go."

They followed their own tracks until they returned to her trail. It led past the pillbox and on into the darkness. They went slowly, trying to pierce the darkness in order to see what was coming in time to avoid being seen themselves.

Another concrete pillbox appeared. Tom and Ken followed the trail past it, then paused. They had heard the sound of voices from the pillbox. Normal human voices.

They followed the sound. It was coming from a narrow slit high up in the concrete wall. The words were distinguishable now. But they were in Russian. Neither of them could understand it.

They returned to the tracks of the girl. Other pillboxes appeared. It was growing lighter. To the east the sky was a deep red. Shortly the sun would come up.

"We're right in the thick of it,"

Ken murmured worriedly.

"We have to risk it," Tom said.
"We have to find out all we can. If
we leave now they'll find our tracks
and follow us anyway."

The next structure was a wooden shed. The girl's tracks led past it and onward in a straight line.

"Let's see what's in that shed," Tom whispered.

They went up to the door. It was fastened on the outside with a hasp and a bent piece of iron wire. Tom lifted out the wire and pushed the door open swiftly to keep it from squeeking.

Inside, stacked against the walls, were. skis. In racks built for them were the motor driven propellers Tom had seen on the backs of the men at Charlie's hodan.

"This must be where they keep

their travel outfits," he said.
"Let's take a couple of them and get out of here," Ken said earnestly.
"I have a hunch if we're caught we

won't live ten seconds."

"I thought you wanted excitement,"
Tom said.

"I did," Ken said, "but this is too big. For one thing, the world should know what's going on here."

"That's true," Tom said with a worried frown. "Suppose you take one of these outfits and go back to Reykjavik and get help while I stay and see what it's all about."

"I'm not going to run out on you," Ken said emphatically. "If you stay, I stay."

"I'm serious," Tom said. "In another half hour it will be daylight. Take an extra pair of skis and an extra power unit with you and head about ten degrees to the right of where the sunlight on the horizon is strongest, and when you've gone a mile or two bury them in the snow. If I have to run for it and can find it I'll have a better chance of getting away."

"How about you going and me staying" Ken asked.

Tom shook his head. "It's a dangerous trip and I'm an old man," he grinned. "I'll wait until you bring a plane to take me out."

"You just hate hard work," Ken

said "All right, I'll go."

"There should be a large package for me at the airport," Tom said. "It'll contain a machine which will make it possible to talk with these girls. But the first thing you must do when you get to Reykjavik is call this number in Washington and whoever answers, just say A B sixty-three, and keep repeating that to each person until you get someone who says. 'He ain't here.' Then you say. 'Oh dear, and I so wanted to have lunch with him? Can you remember that?"

Ken repeated it slowly.

"You'll be connected to a person who can handle this in a hurry," Tom said. "Tell him only about the Russians and the pillboxes. That's enough. Don't tell him who you are. He won't ask. The fact that you got to him will be enough."

TOM WATCHED Ken from the darkness of the doorway until he was lost to sight in the gloom. Even

then he waited, listening for some cry or noise that would indicate discovery of Ken's flight.

Finally. sure that he had gotten away undetected, he let a long breath of relief escape. Then he left the wooden shack and followed the tracks the girl had left in the snow, going at a slow trot.

The gloom of night was softening. It was possible to see much farther now. In every direction were the pill-boxes. If there were any sentries it would be impossible to escape detection; but there was little likelihood of it. The Russians would never think of anyone being here.

The tracks curved now, going in close to one of the concrete pillboxes and hugging it as they went around it out of sight.

Tom slowed to a walk, stealing forward cautiously. He came to a steel door in the concrete wall. The tracks ended there. She had gone inside.

He listened against the door. No sound came from within. Cautiously he tried the door. It opened under his touch. He pushed it open farther, ready to spring back.

Inside a single small light globe was casting a feeble glow, revealing the place to be empty. He stepped in and closed the steel door behind him.

Around him was a pattern of order and wartime complexity. A dozen anti-tank machineguns perched in their steel frames inside the perimeter of the circular stronghold. Racks of shell clips were stacked in vertical tiers.

Tom took all this in grimly. If all the pillboxes were similarly equipped the place could withstand a full scale attack when fully manned.

In the center of the floor was an opening. It led to a circular well in which a steel staircase spiraled downward. The bottom of the staircase was visible. Tom went down slowly, setting each foot down on the next step with infinite care.

A myriad of sounds crept to him from the underground labyrinth. Sharp sounds of metal, the murmur of voices, the dizzy speech-melody of the alien females. It all had the quality of coming from a distance rather than close at hand.

Tom kept his eyes fixed below, to the small area of the passageway when anyone who intended coming up the stairway must appear first.

He froze suddenly as two figures came into view. When they passed out of sight without pausing or looking up, he relaxed.

After a moment he started down again, his legs feeling rubbery under him. He was fully conscious of his danger now. If he were seen an alarm could be sounded that would alert the whole nest of pillboxes. If he escaped he could be slot down by guns capable of churning the glacier on which they rested in their concrete emplacements to chipped ice in a few moments.

Then why, he asked himself, didn't he follow Ken? Why not take the sensible course and let the Iceland and United States Governments take care of it?

A face rose in his mind. It was the face of the strange girl in Dr. Foster's motor sled, feigning unconsciousness, but accepting him as an ally. The bond of understanding that had existed between them then hadn't seemed to have come into existence at all, but just was there.

Tom forced her out of his mind, shaking his head. It wouldn't do to daydream. He would need all of his seenses alert or he wouldn't live to see her again.

He reached the bottom of the spiral stairs. Which way should he go? He was standing in the intersection of two passageways. He could go in four directions.

He listened intently, trying to place the direction of the various sounds. In one direction there seemed to be total silence. He walked in that direction.

THE STEEL-LINED passageway led in a straight line for nearly half a mile. At intervals of a hundred yards it intersected passages running at right angles to it, and at each intersection was a spiral stairway leading upward to a pillbox.

There were no sounds now. This section of the maize under the fortifications seemed deserted.

But now Tom came to the end of the passageway. His further progress was blocked by a steel door that covered the whole cross section of the tunnel.

There was a wheel in the center of the door from which rods radiated, firmly held in holes in the frame around the door. By spinning the wheel the rods would draw in, leaving it free.

Tom studied the door and decided it must be an ammunition storeroom. He spun the wheel. The door opened a few inches by itself. He left it that way and leaned forward, trying to see through the narrow opening.

There seemed to be a continuation of the tunnel on the other side, rather than a storeroom. He pushed the door open and stepped through, closing it and swinging the wheel on that side to bolt it again.

The tunnel was different now. Instead of being prefabricated and bolted together in sealed joints it was pieced together with welded seams. It soon began to slant downward, curving gradually to the right. There were iron bars tackwelded to the floor to prevent feet from slipping.

and a railing to hold onto.

The silence was so absolute that he worried about the loudness of his breathing and the unavoidable scraping of his feet.

He tried to estimate how far he was descending. Eventually he was sure he had gone down at least five hundred feet below the surface.

The passage ended with another door similar to the first with one difference. There was a peephole covered by a sliding metal plate.

Tom slid it back slowly. To his disappointment the other side was covered by a thick coating of ice, as though water had dripped over it, freezing into a thick accumulation.

Light filtered through the ice strongly, bringing images too greatly distorted by refraction to make out. As he studied them he detected movement.

He turned his head sideways and listened. Voices came faintly. Suddenly a voice sounded near at hand, barely muffled by the door. It was an American voice.

"You'll get a flogging if Alex finds out you took time out to smoke, Mick," it said.

"Ahh, lay off, Ralph," Mick's voice answered. "Why don't you take a smoke yourself?"

"I think I will," came the voice of Ralph. There were two minutes of silence. The ice over the peephole brought a falsh of yellow light to indicate that Ralph was lighting a cigaret. They were just the other side of the door. Tom's heart beat loudly in excitement.

"What d'you think of all this?"
Mick's voice came.

"I think we're in for trouble when they cut the warrior queen loose and thaw her out," Ralph answered. "It may be a million years since she started out to conquer the world, but when she wakes up she'll be just as hot about it. The ones we've got so far are just buck privates in the Martian army, all except that one that

got away."

"Yeah," Mick said, chuckling. "They cut her out first because she was in a cage on top that Mammoth, while all the others were like statues of people in motion. She thought they would help her when she told them all about the plans of the queen to subdue the earth."

"But was she plenty warlike when she found out they planned on thawing out the others and helping then," Ralph said. "She still doesn't know it's been at least a million years since the ships landed them here. None of them do. They think the ships went back for another load of Mammoths and girl warriors!"

"I wonder what really happened," Mick said.

"They got a whiff of the sleep spray," Ralph said matter-of-factly. "The experiments of that Russian scientist showed that when a person is frozen while under its effect he'll still be alive when he's thawed out. That proves it. Otherwise at least the Mammoths would be dead."

THE ICE over the peephole suddenly gave vay, falling with a clatter. Swiftly Tom slid the cover in place.

"What was that?" Mick's voice came nervously, muffled by the metal.

"Just some ice breaking loose, stupid," Ralph's voice answered tauntingly.

"Maybe it's someone coming through this door," Mick's voice sounded. "If I had it to do over again I'd never come up here in Iceland to hunt for Uranium ore."

"You and me both," Ralph said bitterly. Tom slid the cover just enough to reveal a crack of light. The voices were louder. Ralph's voice became dreamy, "Five years," he said. "At least I think it's been five years. I have a wife and two kids back in Detroit." He uttered a snorting laugh. "They're living off my life insurance by now. Martha must be in high school. And Jimmy is in the third or fourth grade. Maybe they even have a new dad—and a half sister or brother."

"Maybe," Mick said softly.

Tom slid the peephole cover open farther. He could see clearly now.

The two men on the other side of the door were leaning against the ice wall of the raw glacier itself, in a cubbyhole indentation where they couldn't be seen. They wore fur parkas. Beards covered their faces, leaving only their eyes and cheeks exposed.

Past them in the distance was a huge cavern. It was at least two hundred yards across. On the far side Tom saw a scene that made his senses reel.

There were at least fifty men, all dressed in fur parkas, working with hatchets and small picks on a white wall of ice. Ten of them were concentrated on what appeared to be an ice statue of a Mammoth on which rode one of the Martian amazon warriors.

At another place along that fantastic wall of ice was a canvas tent that apparently covered something as large as a Mammoth. Tom nodded his head. Under such a tent the temperature could be raised gradually to thaw the creature out slowly.

He turned his attention to the two men, Mick and Ralph, again. They were silent, puffing idly on their cigarets and looking at their feet with faraway expressions, lost in memories of home.

Tom hesitated, then placed his lips to the opening in the door and his voice came in a whisper.

"Don't move or say anything," he said. "This is a friend. Nod your heads if you hear me."

He looked quickly. The two men had startled looks on their faces. They turned in his direction. He saw their eyes grow round. They had seen him or at least his eye in the hole in the door.

"There will be government troops here in a few days," Tom whispered. "I've been listening to you talk. Could I open this door and you slip in here with me without anyone seeing you?"

"The only thing that's kept us from doing that long ago," Ralph said, "is the fact that there's no way to open it from this side."

Tom waited for no more. He twisted the wheel. The door swung open. Ralph and Mick slipped through. There was wonder and hope in their eves.

in their eyes.

"You aren't a Russian, at any rate," Ralph said.

"I'm Tom Farmer," Tom said, deciding not to carry on his masquerade as Frank Bond.

"I've heard of you," the man named Mick said, nodding, "You're the one experimenting with immortality? You should be interested in these amazons. They claim to be immortal themselves."

"I surmised as much," Tom said.
"But there's time for that later. Do
you know anything about the layout
of things here?"

"Do we?" Ralph said. "Listen, Dr. Farmer. For years we've had it all planned. A long time ago we killed a guard and one of us took his clothes, and managed to roam all over the place before he was discovered. They shoved him back in with us because they need every slave they've got. After they flogged him senseless. But every one of us knows where the am-

munition dumps are, the food storerooms, everything. We have it planned down to the last detail how we'd do it—if we ever found an open door. They make us live down here in the ice cavern, throwing in food for us."

"O.K.," Tom cut in. "Now's our chance."

"Not now," Mick said. "Tonight. They shut off the lights for eight hours every twenty-four. When they do that we can slip out."

"We'd better go back now," Ralph said. "We can pass the word around so everyone's ready. Just be here with the door open. That's all."

TOM WATCHED through the peephole as the hours wore on. His

eyes noted Mick and Ralph as they passed from one group of workers to another, whispering their message. As each man learned it he looked in Tom's direction furtively.

But work continued unabated, so that the Russian guards Tom could just make out on a platform half way up the open shaft elevator would not become suspicious.

He studied those guards, wondering how they could be so blind to what was going on. Perhaps they weren't. It worried him.

The elevator, Tom surmised, had been designed for the express purpose of lifting the Mammoths to the surface. This whole setup, he now saw, was built for bringing the Martian invasion army back to life.

It must have been started years ago. Ralph's statement that he had been here five years dated it as having been started before the war that brought about the collapse of the dictatorship. It was no wonder the Russians hadn't used Lecland as a stepping stone. They hadn't wanted to call attention to this secret operation!

How careful they must have been!

Thousands of tons of concrete flown in. Other thousands of tons of steel. Scientists and the cream of the most loyal men, with the number three man of the dictatorship in personal charge...

The wolfe statue of the warrior queen was finally free of the main ice wall. A tent was lowered over it from above, the mechanism that lowered it hidden out of the range of the peephole.

From the other tent the limp form of one of the Martian girls had been carried to the elevator, to be quickly lifted above, the elevator dropping almost immediately, empty again.

Two hours after the tent was lowered over the warrior queen she was carried out. It was that quick; but it would be, since her body temperature was normally one degree below freezing. Tom wondered what the temperature of the ice was at this depth. It must be several degrees below freezing or the Martian women would have recovered consciousness ages ago, imprisoned in solid ice and unable to breathe.

The warrior queen wore the same black fur two piece outfit as the others, but in addition wore a long red cape. She was whisked up in the elevator.

When it came down one of the warrior women was on it. She walked across the ice floor until she passed out of range of the peephole. Half an hour later she came into view again, leading a slowly lumbering Mammoth. When they were on the elevator it rose, creaking under its burden.

Nothing more happened. The men in the cavern continued working, chipping away ice. The chips of ice were loaded into mine cars on a narrow gauge track strung across the uneven floor, leading to the elevator. Although none of the cars were taken there, it was obvious that from time to time the ice chipped away was hauled to the surface and dumped somewhere, perhaps scattered out so that it wouldn't be noticed from the air by any plane passing over.

And finally there were shouted orders from the Russians above. The working men walked away from the elevator until they were out of sight.

Half an hour later the lights went out, leaving a strange, eerie luminescence that, Tom realized, came from the ice itself, brought down from the surface through the many feet of solid glacier.

E PUSHED open the door and waited. The lights in the steel-lined tunnel had gone out at the same time as the others. He waited just inside the door. And shortly the first figure appeared, stealing forward silently.

"It's me, Ralph," came a hoarse whisper. "Everything all right?"

"Yes," Tom replied.

Ralph chipped a piece of ice loose with a pick he held in his hand, and tossed it far out in the cayern. It landed with a noise that could be easily heard.

Soon after, other figures appeared. "Let's move into the tunnel," Ralph whispered. "Our plan is to move forward and make room for the others until the last man is in, then close the door and bolt it. That way we can't be attacked from the rear. Then we move out into the underground system, each man taking his objective as we have drilled it into us. You're just to stay out of the way."

Tom led the way to the upper door with Ralph walking beside him. When he had opened it he stepped aside at Ralph's whispered command.

The silent men crept past him, each armed with a hatchet or icepick. He

counted them. There were sixty-three altogether. He wondered if it would be enough. Certainly the few Russians he had seen at Charlie's hodan weren't all of them. There must be at least several hundred stationed here, and perhaps more if additional dictator faithfuls had fled here when the regime collapsed.

When the last man had crept past him and vanished down the passage into the maize of underground tunnels he stepped back into the passageway leading downward, prepared to close the door and wedge the wheel lock if any Russians should appear.

The silence continued. He thought of the warrior queen. Pity welled up inside him for her and her hosts of female warriors. He knew from his geology that when she had landed here Iceland had been part of the great northern continent stretched across the Atlantic from America to Europe.

The world had been young. Her Mammoths had been armed to fight the reptilian giants. The great ice sheet had made the northern hemisphere a land of promise with its freezing temperatures.

Now, as she took her next breath, with no conscious realization of the passage of the centuries since her last one, she would not know that all there was for her to conquer with her forces was a few hundred square miles of a small island, and that when she tried it she would bring the whole modern world down on her.

Suddenly the air was shattered by the sharp report of a shot a great distance away, followed by a scream. Immediately after, sirens began to scream their alarm.

Tom swallowed nervously. The battle was on. Had he done right? Some of these men who had been slaves would be killed. They were innocent. Wouldn't it have been better to wait until trained armed forces came?

The memory of those anti-tank machine guns rose in his thoughts. Blood had to be spilled in any case, and this way, if the slaves succeeded, every life it cost would save perhaps dozens of soldiers.

The wail of the sirens rose to a deafening scream. Tom saw a man pause at an intersection in the tunnel fifty feet away, raise a gun, with his attention fixed on the passage to the left. A deafening roar sounded above the sirens and the man fell.

Another man appeared, looked Tom's way and waved his arm, then ran on. Tom felt better. The slaves were armed

Suddenly the noise of the sirens did down. It was sudden, indicating a cut line, since the siren that produced the sound broadcast it over a loudspeaker network. The sounds of shots that had been drowned out by the siren could be heard. From their rapidity there must be several pitched battles raging in different directions.

Then, seemingly at a signal, the shooting stopped. Thinking it perhaps only a lull, Tom waited for it to start in again. When it didn't, hope and despair struggled with each other. Had the captive workers been wiped out? Or had they gained the upper hand, the Russians surrendering?

He decided to go at least as far as the first intersecting tunnel and try to find out. When he got to it he looked both ways. He saw a body a few feet away. It was one of the Russians. He went to it and picked up the heavy automatic laying on the metal floor near an outstretched hand.

Straightening, he glanced quickly behind him to make sure no one was in sight. When he looked around again he blinked his eyes in amazement.

Disbelief made him glance down at

his feet. The body had vanished. The tunnel had vanished. He was standing in snow. The heavy gun had simply ceased to exist in his hand.

He lifted his head again, comprehension dawning. He had taken a whiff of the sleep spray—and before him stood the warrior queen complete with her scarlet cape, flanked by a hundred or more of her warrior maids.

And to either side and behind him stood men. The workers from the ice cavern and the Russians. On all their faces was a look of peaceful repose. Only he had recovered

TOM LOOKED around at the ring of Mammoths that surrounded the whole group, facing toward him. On the back of each was a girl gripping a long, spear-like rod of utterly black substance.

Bitterness crept into his thoughts. He had never given the warrior queen a thought. Of course her female soldiers had been marking time, waiting until their queen was thawed out so she could command them.

The revolt had been three sided. The Martian warriors had used some of the sleep spray, probably dropping it in the ventilation system. He had recovered first because he had breathed in less of it than the others.

His eyes returned to the regal figure of the queen. Pity welled up in him again. How quickly her dream of conquering the world would be shattered!

A singing voice uttered a series of dizzily cascaded notes. The eyes of the queen and all the other girls turned on Tom. It had been noticed that he was awake.

The warxior queen uttered a swiftly speeded melody, motioning him forward. He walked toward her, wondering what would happen. Would he be killed? He came to a halt ten feet away from her. He studied her. Her figure was as perfect as that of the other, her face utterly beautiful, but different in various little ways as are all human faces.

She uttered another series of notes, questioningly. Tom shook his head.

"I speak this way," he said firmly, just to show her a sample of the difference.

The warrior queen arched her head, listening in surprise as he spoke. Then she half turned her head and darted a few rapid notes at the girls behind her. They replied. Tom surmised they had told her of the "strange" speech of the native earthlings, but she hadn't believed them.

There seemed to be some distraction among the mounted girls on the opposite side of the circle of Mammoths. They had been twisting around and looking away toward the south. Now they suddenly burst into excited sing-talking.

The object of their interest appeared, coming between two of the Mammoths into the circle. It was one of the warrior girls. She gave the huddled unconscious men a wide berth and approached Tom.

He recognized her as she came closer. It was the Martian girl he had met at Charlie's hodan. She stopped abruptly, recognizing him. Her expression softened. She walked up to him and reached out, touching one cold finger to his forehead gently, then drew back.

Her eyes turned away from him, He followed her gaze and received another surprise. The warrior queen and all her female soldiers were prostrate in an attitude of obeisance!

Tom looked from them back to her, She uttered a singing command. Instantly the amazon girls rose. Only the warrior queen remained prostrate. And as the girl walked with slow grace over to her and touched a finger to her bare shoulder, Tom began to realize that everyone had had it wrong. The supposed Warrior Queen was in reality the equivalent of a general, and the girl who had been in a cage on the back of a mammoth was the queen!

For several minutes the air was filled with the rapid sing-talk, the real warrior queen doing most of it. From the looks the others cast to the south in the direction from which she had come, they were discussing something. Could it be Ken with reinforcements?

Tom stepped forward and tapped the queen on the shoulder.

"Look," he said. "You musn't fight. They'll be friendly." He groaned at their looks of puzzlement. It was impossible for them to understand him.

The queen spoke to her general, who sang out a loud command. Part of the circle of mounted Mammoths turned and started toward the south at a slow but distance-covering gait.

In the gap formed by their departure Tom could see a mass of moving figures several miles away. The figures resolved into moving army tanks. His heart sank. The guns in those tanks could wipe out the Martians easily. It would be slaughter.

Desperately he gripped the queen by the shoulders and shook her. It had been too qutck for any of the others to stop him. When he released her there were gaps of horror rising from all sides.

She stared at him, a strange expresssion on her face. He shook his head, saying "NO!". He pointed toward the Mammoths racing to the south and made a gesture of calling them back.

She continued to stare at him. He remembered how she had come up to him and touched his forehead. It had been a Martian sign of friendship.

He reached out and touched her forehead in the same way, looking into her eyes pleadingly. Then he pointed to the riders to the south again and repeated his gesture of calling them back.

Decision appeared in her eyes. She uttered a sing-speech order. There was a moment of silence, then a loud chorus of voices singing the same notes rose—loud enough to carry for miles.

To Tom's relief the Mammoths and their riders stopped, turned around, and started back.

THERE FOLLOWED days of increasing activity. Tom had gone to meet the army of tanks that had been housed just outside Reykjavik since the war.

He had been recognized. Ken had climbed out of a tank and rushed to him.

"You son of a gun," he exclaimed happily. "All my worry for nothing. You don't have a scratch. Why the devil didn't you tell me that 'Joe sent me' rigamarole would enable me to speak directly to the President himself? Why didn't you tell me you were Dr. Farmer? The telegraph man knew it. Didn't you trust me?"

After that had come a half hour of ticklish sign language that had convinced the Martian girl warriors that they would not be molested.

The Russian renegades were given good doses of the sleep spray and loaded into tanks which sped south to lock them up for deportation to Russia. Some of the workers went too, but many of them elected to remain as teachers to show the coming army of workers how to chip the rest of the Martian army out of the ice and bring them to life.

The lieutenant commanding the

tank corps rapidly took command of the whole setup. Tom, finding himself with nothing to do, soon sought out the Martian queen. When they met they realized they had been looking for each other, and larghed. It was the first he had heard one of the Martians laugh, and it surprised him in its normalcy.

From then on they were together most of the time.

The device he had ordered to enable him to talk the song-language of Mars hadn't shown up yet. He soon found out it was just as well.

He gave the queen the name, Martia, and she quickly learned how to form sounds with her mouth by studying the positions of his tongue and lips. She was delighted when she first learned to pronounce the name he had given her, and also his.

She would say, "Tom," and touch his forehead with a finger.

Ken kept Tom up on developments. The Russians had flown in thousands of tons of lay and stored it in vast vaults in the glacier. That was the source of food for the Mammoths. There were also ammunition dumps and food stores sufficient for an army for many years.

But most of the time Tom and Martia paid little attention to what went on around them. They were developing a system of picture writing by which they were learning more about each other and about the things they each wanted to know.

It was slow, but eventually Tom managed to make her understand the extent of the changes in the Earth since she and her subjects had landed.

It amazed, then depressed her. Then she seemed to draw aloof from him in her mind. Her interest became more intellectual than personal.

Laboring under this strained relationship, Tom painstakingly drew pictures to tell her of his experiment in immortality. She understood the pictures of atoms and molecular formations he drew. Slowly she began to comprehend what he was telling her.

When full realization came, she threw off her reserve, pointing to herself and then him, and nodding vigorously.

Now she began to tell her own story. The Earth had been uninhabited by man so far as the Martians had known. They had gained space travel and scouts had brought back tales of the large inhabitable areas of the planet.

They had come, landing many separate forces. Hers had been one of the last to leave Mars. Colonies were already in existence when she came.

As she portrayed that part of her story her eyes suddenly widened. She took another sheet of paper and hastily drew a series of pictures. Tom translated their meaning in his mind.

She had said that he must be a direct descendant of the original Martian colonizers!

It was true. Tom realized that. The remains of Mammoths in the northern ice, found all over the Arctic, the lack of a missing link in man's ancestry, the existence side by side of fossilized skeletal remains of highly developed modern man beside those of manilke animals still too far removed from modern man to be called an ancestor.

And during this mutual exchange that brought out the whole story of man's past and his origin on Mars, Tom felt himself drawn more and more to Martia. She had sketched the future progress of his experiment in immortality. He knew that in another century he would be as she was, with a body temperature near zero, and that barring accidental death, he

would live many more centuries.

Yet, with all this, something he couldn't understand was troubling him.

More and more. Martia noticed this finally.

"Tom." she said.

He looked up at her. Her face showed tender affection. She reached

out and touched his forehead.

As her finger touched him he realized what was troubling him.

He reached up and took her face between his hands and pulled it toward him. She was unresisting, curious.

Then delighted . . .

A KING PASSES... + By L. A. BURT +

THE CONFRATERNITY of science-fiction is figuratively wearing the black arm-band of mourning. The recent death of Edgar Rice Burroughs has cast a dark pall over activities of the fratern-ity—and yet there is not the sadness that one might think.

For Edgar Rice Burroughs created a world which will never die. Yes, we've heard the praises of his "Tarzan" sung to high heaven and we admit they are

But to the genuine science-fictionist, it was another world of Burroughs' creation was another world of betroughs election which was the dominant one. In fact, two other worlds. First the immortal "Barsoom" or Martian stories. Secondly, the "Pellucidar" or center-of-the-Earth stories.

These two imaginative worlds were as read to the fans of Burroughs anything that the fans of Burroughs anything hard to see. The Martian stories with their nersonal identification of Burroughs with John Carter, were almost autobiographies rather than works of fiction. What reader dight' find Barsoom, Helium, Tars Tarkas, the jeddaks—more believable than the Napoleonie Wars?

The mythical Martian kingdoms of Burroughs, the primitive imaginative islands of Earth (The Land That Time Forgot) -all, were fact, not fancy. Burroughs in translating the dream world of his mind on paper, gave readers a breadth of insight into imagination, which has been approached by no other.

been approacned up no other.

It is the custom for some ones to sniff disdainfully at Burroughs' efforts, to decry them as not being "literature." If any juigment was ever false, this was it. They say that the test of great fictional They say that the test of great fictional leaves behind. Robinson Crause. Skingy Garden. Physe are cited as examples. If Carton-these are cited as examples. If this is so, Burroughs wins the literary test hands down. Tarzan, John Carter, David Innes—these are immortal charac-ters who will never die.

The king of science fiction is dead-but not the memory of the king!...

A MATTER OF SIZE * By JON BARRY *

ARS, JUPITER, Saturn..." the words flash so glibly from the science-fiction fan these days, that they almost do not carry any conviction. We talk about the Solar System as if it was as clear in our mind's eye as a lighted match. Actually this is far from the case, match. Actually this is far from the case, and if you asked any friend to give you a scale model of the Solar System, the chances are a thousand to one that he would not be able to. He's taken too many interstellar voyages to think about it!

It's refreshing therefore, to go back, occasionally to fundamental considerations. Actually what would the Solar System look like in a scale model? The astronomer, Sir John Herschell's model is as good as any. Take a look at it—and really get

impressed!

We start with the Sun—make it a ball two feet in diameter. Mercury would be a mustard seed one hundred and sixty-four feet away, Venus a pea two hundred and eighty-four feet away and the Earth and eighty-four feet away and the Easturalso a pea four hundred and thirty feet away. Mars would only be a pin-head six hundred and firty-four feet away from the two foot ball. The asteroids would be grains of dust between a thousand and two thousand feet away while Jupiter of a mile away. Satura would be a small orange at two-fifths of a mile. It was a small plum and three-guarters and the same of Uranus a small plum and three-quarters of a mile, and Neptune a larger plum at a mile and a quarter. And lonesome Pluto would come into the picture at three and a quarter miles!

This little sketch gives some idea of the fantastic vastness of the Solar System, It takes one's breath away to think about it. When you next read a science-fiction story and it's interplanetary, just stop and think of this Herschellian picture of the Universe. If you're just the least bit bored or your mental appetite is even slightly or your mental appetite is even signify jaded, you'll have to sit up and marvel once more. Imagine picturing Earth as a pea four hundred and fifty feet away from a two foot ball, the Sun!



The pain of the torture only made his determination stronger—he would not confess!



The State was going to make him sign a confession, and he knew in advance that he would sign it—but with their blood...

HERE WAS a short thermal hum, and then the force screen barred the entrance—and the exit—to Unor's cell again.

He sat down, sighing just a little, on the iron cot. He couldn't help thinking that cell cots hadn't changed much through the centuries; he remembered pictures of jails of the ancient American republic, and the cots had looked much like this.

He rested his forearms on his knees, folded his hands carefully, frowned, and concentrated. "Hello, hello," he thought. "Calling Loyops. Any Loyops, think in. Think in, please..."

Upor didn't look much like one of the underground rebels who called themselves Loval Oppositionists-Lovons for short He didn't have a bristling heard and a wild eye which was how the political sculptoonists always pictured Lovops over the threedim receivers. No, Unor was rather a plain little man, thin and somewhat longnosed and altogether he gave the impression of being gray. He was in his middle thirties. Until vesterday he had been the most faceless of citizens in a faceless State, a mere attendant and messenger in the Criminal Court Citadel. But since then they'd discovered -or at least had begun to suspecthis underground importance,

"Loyops," he mentaled. "Any Loyops, think in..."

He closed his eyes tightly, squinched his forehead and went into that state of dissociation which is the basic trick of mentaling. With the upper part of his mind he could think along an entirely different channel. He could reflect on how he'd come here...partly his own foolishness, partly bad luck

his own foonsness, partly bad fluck.

Ihis job had been to snuggle in the last leaf for the last relay of the bomb planted under the Central Citadels; he'd done that part all right, but he'd forgotten to check out sick for an hour and Roeick, the prosecutor, had picked that particular time to need Unor's services...

"Contact. Contact, please. Loyops-"

The Belts had conducted the questioning, and it had been routine at first—until one incriminating thing began to lead to another. In the search for instance, they'd found the secret flap of skin a Loyop surgeon had made on the inner part of his thigh. They'd searched his quarters ...neighbors peached on him, saying they'd noticed long absences, furtive comings and goings...they'd nosed through the offices and corridors where he spent his sixteen hour working day and under the clay in the washroom pipe joint they'd found his tiny transident—whose private signal would identify Unor to any other Loyon, with the proper code.

That was why he mentaled now. He had to get word of his arrest out, so his transident signal would be canceled. A Belt operative with that device could get into the hidden councils of the Loyops...could discover and perhaps prevent The Bomb.

"Hello, Loyop," came a sudden answer in his brain. "Who calls?"

He took a deep breath. "Unor, of Capitol City Group. Don't identify yourself or give location—there may be thought monitors."

THE STATE had only a few men and women who could mental They were genuine telepaths, born that way, and the method of teaching telepathy to anyone was, so far, a Loyop secret. It was mainly the discovery of Dr. Tzad, who had been arrested last year and who, at his trial, had publicly and willingly confessed to treason on twelve counts. There had been some fear that Dr. Tzad, under pressure, would give away the secret of mentaling, until it was remembered that by his principles the memory could be controlled-a fact could be deliberately forgotten during interrogation and the worst torture couldn't bring it back. After the trial and confession Dr. Tzad had been taken to the sonic chamber, driven mad, and then shipped off to work in the mid-continent atomic piles.

That was what usually happened. "Are you still receiving?" Unor

asked his new contact.

"Yes, I'm still here. Please go on." Unor smiled a little. "It's possible you may be a thought monitor, and I have no transident to check-but I have to take that chance. If you're Loyop, you must pass the word I've been arrested. I finished my job, and I've been arrested-and I must know if plans are now changed for the next iob."

"What next job?"

Unor stiffened. It wouldn't be like a Loyop to ask a direct question of that sort. It was possible-but not likely. He felt a finger of fear twisting his intestines, "That's all," he mentaled, "I'm thinking-off, now, No more."

"Very well," answered the other. "No more."

Unor came quickly back to his surroundings. He got up, stretched, then paced and looked around at the cell. The usual small compartment of stabilium metal, it was; the usual force screen at the threshold. More privileged prisoners got an opacity screen sometimes, giving them a little more privacy. Unor didn't think he'd be that favored. He had a pretty good idea of what would happen to him in the near future-he'd seen scores come and go in his job as attendant at the Criminal Courts Citadel, First they'd torture him for information. The Belts in their green uniforms and broad leather waistbands would do that. Fearful as it would be he felt he could stand the torture; he could at least turn his memory off while it lasted. The Conditioning was what he dreaded. The Conditioning would change him completely, of course, and when it was done he would walk into the courtroom deeply and sincerely and truly repentant, and he would stand

there and make his public confession. He heard heavy footsteps down the

corridor, and somehow he knew it was for him. He rose, faced the doorway...

"Praise The One!" came a clipped, harsh voice echoing down the cell bloc. That would be the attendant at the outer force screen saluting the newcomers. The salute had sounded snappy and respectful-they would be important newcomers. It was funny about that salute: for the whole twenty-five years of its existence the State had been trying to popularize that phrase, "Praise The One!"-and plain people still tended to say instead hello or goodbye. Nevertheless it must have had its effect. It contributed surely to the awe and veneration constantly built about The One-the Director of Affairs who ran, and who was the father of The State.

"Praise the One!"

Two Belts had come into sight, leftfaced smartly, and stood before his cell. Young, rather good-looking men, quite tall, quite solid through the chests and shoulders.

Unor didn't answer their greeting. He waited quietly, the force screen hummed while it opened again, and then he walked out of the cell and took his place between them. He marched off, the clop of their boots and his own sad shuffle thick in his ears.

THE INFORMATION Room, as it was called, was at least thirty feet square, low ceilinged, gray, and very bare of furniture. A desk was at one end, and Roeick himself sat behind it. Unor was rather surprised to see someone as high-placed as the prosecutor here. Roeick was a tall. professorial-looking man of about fifty with a rumply manner. Re looked kindly, except for his eyes which had

a largely unmoving stare—probably this was the effect of extra-thick contact lenses.

He looked up as Unor was shoved before the desk, and, a little wearily, Unor thought, he said, "Praise The One."

Unor didn't answer.

Roeick glanced into the film reader on the desk before him—almost certainly it contained Unor's record. Then he looked up again. His voice was dry and somewhat monotonous. "What we require to know, first, Unor," he said, "is what job did you just finish—and what is the next job whose plans you thought might be changed?"

Unor, in spite of his determination to stay impassive, raised his eyebrows. He had been mentaling to a monitor, and not another Loyop, then. Now he had best drive out the memory of his underground activities as quickly as possible. He frowned, trembled, concentrated painfully, and in his mind's eye saw the images and the ideas fade away. . . .

"Quickly!" said Roeick, gesturing to the several Belts about the room.

The Belts grabbed Unor. They started in cuffing him with rubber truncheons. They struck and kicked himbut that was merely for their own pleasure, and not nearly as painful as the truncheon blows. They went easily at first, keeping him completely conscious. As he was shoved back and forth Unor caught glimpses of Roeick sitting there, expressionless, absent-minded, looking even a little uncomfortably at the whole thing.

The torture seemed to last the whole day. He screamed, and begged for mercy several times, as he had known he would. But he couldn't tell them what they wanted to know. He couldn't tell them what they wanted to know. He couldn't remember what they wanted to know. He tried to bring it back—anything to stop this agony: during the short session in the sonic chamber with the vibrations splitting his ears and shaking his very soul he screamed that he would get it back...he would find a way to get it back, if only they would stop... stop...stop...

But it was no use; he couldn't recall, and he knew that he wouldn't be able to recall until his cycle of awareness came to a peak again.

He said he would let them know, then. He said when he remembered he would tell them anything if they'd please, please not torture him please—

There was no disgrace in this; no man could act otherwise under torture like that, and no Loyop expected a captured comrade to act otherwise.

The next day he was tortured again. And the day after that. And in between torturings he was fed a bare minimum of slop and the opacity screen was put on the cell and the illuminating charge taken from the stabilium walls so that he was always in darkness. There was a continuous, soft high hum sent into the cell, a note like the tearing of a fingernail or a back tooth bored to the nerve. He screamed at this, too. He beat his forehead against the walls until he split the scalp, and when they noticed that they set up a force screen around the walls, too.

Days, days, days of torture. Days.

Roeick's dry, droning voice:

"We know you plan a blow against. The State. We know you mean to kill. Who would you kill? Me? The One? The One, himself? What were you instructed to do? Who are your colleagues? Where are they—these men who are with you? What was the job you managed to finish? Answer, answer, answer!" A second of unholy

quiet, then: "More of the sonic chamber, now."

THEN THERE came the day in the gray Information Room when Roeick smiled, told him to sit down, and offered him a cigarette—and Unor knew the next phase had begun.

"Now you realize there's nothing personal in this treatment we've given you," said Roeick, mildly and pleasantly. "It's merely that regulations call for it. I would have been inclined to omit it, knowing how you Loyops can turn off your memories. But it had to be done. Our next task is to prepare your confession. You can make this one a lot easier—"

Unor shook his head. "I'll not do it willingly."

Roeick kept smiling, and clucked his tongue. "Come now, Unor, you're not a sentimentalist. You're a man of intelligence. Ability, too, I should think, since you hold such a high position in the Lovops. Oh, yes-we know that. We've ferreted out quite a bit since we captured you." He leaned back, dropped his palms to the desk, drummed gently with his long fingers. "Use reason, Unor. The end of all this remains the same, no matter what you do. We will break you down, you will confess at the trial, and you will be punished. Probably sonicked, and sent to the piles. We can't, of course, simply allow you to sign the confession and then get up to read it at the trial. You wouldn't be sincere. When you're through with the Conditioning you will actually be sincere and repentant in your own mind. But you can still avoid a good deal of anguish by being cooperative."

Unor looked around him, at the gray room, rather wistfully. "I haven't got very much left to me," he said, "no physical possessions...not much

more self-respect. I think the one thing that is mine and that I can hang on to in this moment is my stubbornness."

"All right," sighed Roeick. "Very well."

The Conditioning began.

All sorts of devices were employed, but the basic principle remained the same, and very simple. Unor was given, alternating, rhythmic torture and kindness. An hour with the silent screaming of the sonic chamber... then an hour resting on a soft couch with Roeick passing him coffee and cigarettes, smiling, droning softly and repeating over and over again the tenets of The State. The State is All: the State is Mighty; It loves you and you are the child of the State-but you must give, give, give yourself . . . surrender ... Praise The One! An hour of the Belts and their truncheons in the gray room. And then an hour at a well-laden table with Roeick...a roast, brandy, and cigars, and the droning voice: The State may kill you for good reason, or no reason at all, but in your willingness to accept this lies your joy, your only real fulfillment in life. The One has shown us this, Praise The One!

And the day when Unor frowned thoughtfully and murmured: "Perhaps I have been wrong in some ways..."

"Good!" said Roeick, that day. "Good lad. We're getting there. Let's try one more session in the sonic chamber, now."

"No, no, no, no, please! I repent! I confess! I love the State!" screamed Unor.

Roeick clapped him on the back and said jovially, "Not quite sincere enough yet—not quite."

Three days after that, Unor was ready for his confession at last. It was done in the gray room. They brought him the closely-typed sheets and they spent the day reading them, discussing each point carefully.

"Yes, that's true," Unor would say as he heard one of the charges, "I did plan to poison the entire water reservoir for Power City—wipe out everyone living there and weaken the State."

"But," said Roeick, "you are also accused of assassinating one Yelnot, the Manager of the Mountainville Aircraft Factory at the same time. How could you be in two places at once?"

"A detail like that," said Unor calmly, "is merely to make obscure the thinking of disloyal fools. All things can be explained by the State and in this case it is below the dignity of the State even to bother to explain."

"Fine, fine," said Roeick, smiling and nodding. "I must say, Unor, you've come through the conditioning very well!"

"Thank you," said Unor. "And thanks to the State for setting my thinking right in my last days of service to it."

Roeick beamed triumphantly to the Belts in the room. He was proud of his handlwork

JOW THE days became long and idle. He spent them in the same cell, hemmed in by the same force screen and stabilium walls, but the edge of imprisonment was softened for him. He was given a threedim receiver and watched the little solid images on the platform by the hour as they performed in plays, operas, games and re-enactments of current history. Meals were brought to him and they were good meals, real food with a minimum of synthetics and concentrates. He was reminded constantly how the State was doing this for him...he was, even though condemned, a child of the State, after all. "I love the State," he would say to himself, nodding dully, sometimes with a foolish grin across his plain, gray face. "I love the State." And he

In this dim state of constant comfort he waited for the trial to come scarcely ever really thinking about it; scarcely ever really thinking about

"But you must remember, Unor.

Von must remember—"

These words came sharply and out of nowhere into his brain one day. They startled him. He looked around the cell, wondering if one of the speakers had spoken them.

"You must try hard, Unor. You must try as you have never tried before. Do you hear, Unor? Think to us. Unor, think!"

Vaguely, mushily, he began to realize what was happening. Someone
was mentaling to him. More than
just someone—it sounded like a chorus of thoughts. Loopes—yes, that was
who it would be. Loopes. Something
stirred within him, and then he fought
that stirring and closed his eyes tightly and said aloud, "No, no. They
would destroy the State! They are
cancer in its body!" Yes. That was
what he must think. The One had
used those very words only the other
day in a threedim speech.

"Come in, Unor—think with us remember how proud you once were, Unor; remember the deep, inner happiness of that pride—"

Unor turned the speaker of the threedim up as loudly as possible to drive the sounds from his head. And he d'd blank them out that day, but in the night they came again, gnawing at his sleep, and he felt them penetrating more and more the barrier to his mind. "Remember, Unor, Remember!" He didn't think to report the voices. Somehow the Conditioning had left him without the ability to think clearly about things. He could only

make his thoughts orderly when he was repeating to himself the precepts of The State, or the words of The One.

"Remember, Unor, Remember!" One day, almost without willing it, he did sit down quietly, dissociate his mind and sent out an answer. "This is Unor."

There was a feeling of breathless triumph in the chorus of thoughts, then. "Good, Unor. We thought we could get to you if we tried long enough. We have our strongest senders gathered here, mentaling together. These words are projected on a screen as they are typed, and we all read them and think them together. We have a contact among the State's telepaths, now, and we know when they are not monitoring, Now, Unor, you must remember. Your cycle will hit its peak at any time now, but we can't be sure it will come before the trial, before you are sonicked. You must remember, Unor-"

I INOR, frowning, clamping his eyes shut, wringing his hands, thought, "What is it I must remem-

And then he did remember. It all came back to him. As it came, the obedient daze left by the Conditioning went away.

Once more-but with a strange, new light in his eyes---Unor quietly await-

ed the day of the trial.

Criminal Court A, in the midst of all the citadels of Central City, was a huge light, airy room with a ceiling forty feet high. It was paneled and furnished in carefully finished blond wood. The seven judges of the State sat on a dais at the head of the room and looked across their long, common desk into a well which contained the prisoner, his attorneys, and the prosecution staff. The spectators sat beyond the well in a kind of amphitheater. A tremendous portrait of The One overlooked all of it.

Recorders whirred and threedim cameras, their invisible beams scanning the molecular structure of their subjects, spun away.

The central judge of the seven was fat and bald, had a cheery blue eye, and had seemed all during the trial to be paying little attention to the goings-on. Now he glanced at the clock, looked for a second around the courtroom, then stared directly at Unor in the prisoner's well. Unor was standing. "Do you, Unor, Citizen number eight-six-one-one-zero-four, series two thousand and twelve, deny or confess to the charges?"

This was the moment. The courtroom stirred. In a quiet voice Unor answered properly, "I confess."

"Have you a statement of confession?"

"I have."

"The court will hear it."

The threedim cameras swung toward Unor, some focusing for a closeup of his face. He smiled a little dryly into the nearest lens. Then he faced the judges again. He picked up a manuscript of long, closely-typed sheets-his prepared confession. He congratulated himself on remembering to do that, so that they wouldn't stop him right away.

And then, in a quiet, gentle voice he began to speak-pretending to read.

"As a member of the underground, anti-State group which calls itself the Loyal Opposition, I have been guilty of many crimes-both of intent and actual commission-against the State. I will begin with the most heinous of these. To me was assigned the important task of blowing all Central City and its citadels into nothingness by means of an atomic bomb-"

"Wait!" Roeick had sprung to his feet, "This isn't his confession! This is something else!"

The fat, cheery-eyed judge smiled at Roeick. "Something else quite as good, perhaps. I think we will hear it anyway, Citizen Prosecutor. Proceed, Unor."

Now, throughout the court, eyebrows rose, heads and shoulders were straightened. Some of the judges leaned forward. Everyone stared at Unor.

He smiled again and went on, dropping the prepared statement this time.

"I now confess," he said, "the facts I was unable to confess during my interrogation, since I had then eliminated them from my memory. During the hour's absence which first brought suspicion upon me I went deep into the cellars of the citadels and placed the final part-a relay leaf-in an atomic bomb and firing mechanism concealed there. It has taken five years of careful underground activity to build the bomb there, completed. It was not discovered-first, because the underground rooms and corridors are so vast-cities in themselves-and second, because it was-and is-so artfully concealed."

"See here, is this bomb under the city right now?" interrupted the fat judge.

"It is," said Unor. A shuffling sound went through the court. People traded frowns with their neighbors. Unor cleared his throat. "The destruction of Central City, of course, would so thoroughly weaken the State that the Loyops could launch an uprising. That is the purpose of this bomb. But it has a rather ingenious trigger mechanism so that when the time comes one certain man can set it off at a practically illimitable distance."

Roeick popped up again. "Your Honors, this man needs more interrogation! I demand that—"

THE JUDGE waved his chubby fingers. "Later. Later you can have him, Roeick. We want to hear this story of his."

Unor continued. "All of you must have seen at one time the toys in which a dog, or something similar, is made to jump from a little house at the sounding of a certain word. This trigger mechanism is much like that. But it is more complicated—in effect a pattern of photo-electric cells is trained upon an oscilloscopic register so that only the pattern made by a certain individual voice pronouncing certain pre-arranged words will activate the cells, and start the electric inpulse which triggers the bomb."

They were terribly quiet, now; they

stared.

"The microphonic pickup," continued Unor, broadening his smile a bit, "is not much different in principle from the listening ears employed by the State to hear conversations at great distances and through walls. In fact everything being said in this courtroom today is being modulated on that very oscilloscopic register near the bomb."

The fat judge made a quick, sweeping gesture. "Order the Belts to search the entire underground city immediately—every corner—every clos-

"That won't be necessary, Your Honor," said Unor. "I will tell you

where the bomb is."
"Then do it quickly." The judge slapped the desk with his chubby

slapped the desk with his chubby palm. He had lost his smile. "It is almost directly beneath the

Citadel of the Director," said Unor.
"But of course its blast would destroy
the city and suburbs, too. The interesting thing is that the one man
whose voice is preset on the photoelectric cells can set it off instantly
simply by saying the chosen words.
He can do it before you reach the

bomb "

"Who's the man?" snapped the judge. "And the words, what are-" In that moment the judge guessed it. or began to guess it, and his fat face started to fall anart-

"The man chosen to trigger the bomb," said Unor, "is myself," His smile was as broad as it could be now, and there was a great sweeping sense of peace and fulfillment within him. He saw great puddles of horror spread out on all the faces before him He heard someone scream "No! No!" and it sounded very much like Roeick's voice "And the words that will sound the end of the State," said Unor "are those I've never said but now say proudly...."

There was a rush for the exits. Several Belts, standing guard about the courtroom reached for their pistols-

And Unor squared his shoulders. and in a loud, firm voice said "Praise The Onell's

The rumble of the explosion had already started before the echo of his phrase died from the big courtroom...

THE END

VEE G-STRING

+ By A. MORRIS +

CO-AXIAL CABLE, the principle carcasting station to the next, has some limita-tions. It is incapable of carrying more than a limited number of programs at a time, usually but one or two, and the band-width or range of frequencies it will handle is also limited.

handle is also immed.

A scientist by the name of Goubou, one
of the Germans imported by the Army
after the war, has invented at Fort Monmouth a new form of high-frequency
wave-carrier which the technicians have
automatically named the "G-string" after

its inventor.

This device is merely a cylinder of wire coated with a special lacquer. It is called a surface wave transmission line and has a surrace wave transmission line and has the unique property of carrying the TV impulses on its surface just like a conven-tional electric wire carries a current. While details haven't been given out, it is evident that the enamel has a good deal to do with its operation.

radio-Ordinary wire won't carry radio-frequencies because they radiate right away from the surface. Coaxial cable carries the waves within a tube which prevents radiation. This new Gestring therefore seems to violate the laws of electricity. What makes it really amazing however is the fact that it can carry an Ordinary wire won't carry enormous band-width of very high frequencies; as many as a hundred different TV programs are theoretically its load!

TV programs are unorectedly use local in practice, the scientist says that about fitteen will be logical. What this means to the TV audience is that they will certainly have more variety—but in addition, those areas to which TV hasn't yet come, will have an opportunity to get programs without the present enormous such as the programs of the property of the property of the programs. expense involved in laving a coaxial cable.

CALIFORNIUM NO. 98

+ By J. R. MARKS +

THE PERIODIC TABLE was once a nice stable affair. You knew that there were ninety-two elements and that's all. But nowadays new elements are being created faster than they can be named. The last few years have seen the addition of six new elements to the Periodic Table, all of them originating in the fiery womb of the cyclotron or the atomic reaction chamber.

The most recent on the scene is "cali-

fornium." element number ninety-eight. It was made by subjecting a small amount was made by subjecting a small amount of the new element curium with alpha particles which are the nuclei of helium atoms. It has a half-life of forty-five minutes, compared with radium's half-life of seventeen hundred years.

These synthetic elements coming out of the alchemical wizardry of the modern rethe alchemical wazardy or the modern re-searchers have as yet no practical uses. So far they are merely names and num-bers, though a study of their properties is contributing considerably to chemistry and physics. Also, the periodic table is being examined and studied with more understanding now. It is evident—at least on latest theory—that we can expect to "create" about five more synthetic elements before this actinium series is finished.

So far the new elements along with other So far the new elements along with other radioactive matters have been used in such study as "tracers" in biology where they can be fed into the blood streams of plant and animal life and easily detected. plant and animal life and easily detected. As for their future uses, one can only guess, but it must be kept in mind that these new-born babies may have unsus-pected value. Remember the answer Davy gave the industrialist who wanted to know of what use the electric current was-"of what use is a new-born baby?" was the answer...

The SHIP SAILS at MIDNIGHT



The night was heavy with sadness as the ship rose swiftly into the star-flecked sky.



By Fritz Leiber

They had tried to find out something about her background . . . unsuccessfully. But you don't probe a goddess about her past . . .

HIS IS the story of a beautiful woman. And of a monster.

It is also the story of four silly, selfish, culture-bound inhabitants of the planet Earth. Es, who was something of an artist. Gene, who studied atoms-and fought the world and himself. Louis, who philosophized. And Larry-that's my name-who tried to write books.

It was an eerie, stifling August when we met Helen. The date is fixed in my mind because our little city had just had its mid-western sluggishness ruffled by a series of those scares that either give rise to oddity items in the newspapers, or else are caused by them-it's sometimes hard to tell which, People had seen flying discs and heard noises in the sky-someone from the college geology department tried unsuccessfully to track down a meteorite. A farmer this side of the old coal pits got all excited about something "big and shapeless" that disturbed his poultry and frightened his wife, and for a couple of days men tracked around fruitlessly with shotguns-just another of those "rural monster" scares.

Even the townfolk hadn't been left out. For their imaginative enrichment they had a "Hypnotism Burglar," an apparently mild enough chap who blinked soft lights in people's faces and droned some siren-song outside their houses at night. For a week high-school girls squealed twice as loud after dark, men squared their shoulders adventurously at strangers, and women peered uneasily out of their bedroom windows after turning out the lights.

Louis and Es and I had picked up Gene at the college library and wanted a bite to eat before we turned in. Although by now they had almost petered out, we were talking about our local scares—a chilly hint of the supernatural makes good conversational fare in a month too hot for any real thinking. We slouched into the one decent open-all-night restaurant our dismal burg possesses (it wouldn't have that if it weren't for the "wild" college folk) and found that Benny had a new waitress. She was really very beautiful, much too exotically beautiful for Benny's. Masses of pale gold ringlets piled high on her head. An aristocratic bony structure (from Es's greedy look I could tell she was instantly thinking sculpture). And a pair of the dreamiest, calmest eyes in the world.

She came over to our table and silently waited for our orders. Probably because her beauty flustered us, we put on an elaborate version of our act of "intellectuals precisely and patiently explaining their desires to a pig-headed member of the proletariat." She listened, nodded, and presently returned with our orders.

Louis had asked for just a cup of

black coffee.

She brought him a half cantaloup also.

He sat looking at it for a moment. Then he chuckled incredulously. "You know, I actually wanted that," he said. "But I didn't know I wanted it. You must have read my subconscious mind."

"What's that?" she asked in a low, lovely voice with intonations rather like Benny's.

Digging into his cantaloup, Louis sketched an explanation suitable for fifth-graders.

She disregarded the explanation. "What do you use it for?" she asked. Louis, who is something of a wit, said, "I don't use it. It uses me."

"That the way it should be?" she commented.

NONE OF us knew the answer to that one, so since I was the Gang's specialist in dealing with the lower orders, I remarked brilliantly,

"What's your name?"
"Helen," she told me.

"How long have you been here?"

"Couple days," she said, starting back toward the counter.

"Where did you come from?"

She spread her hands. "Oh-

Whereupon Gene, whose humor inclines toward the fantastic, asked, "Did you arrive on a flying disc?"

She glanced back at him and said, "Wise guy."

But all the same she hung around our table, filling sugar basins and what not. We made our conversation especially erudite, each of us merrily spinning his favorite web of half-understood intellectual jargon and half-baked private opinion. We were conscious of her presence, all right.

Just as we were leaving, the thing happened. At the doorway something made us all look back. Helen was behind the counter. She was looking at us. Her eyes weren't dreamy at all, but focussed, intent, radiant. She was smiling.

My elbow was touching Es's naked arm—we were rather crowded in the doorway—and I felt her shiver. Then she gave a tiny jerk and I sensed that Gene, who was holding her other arm (they were more or less sweethearts), had tightened his grip on it.

For perhaps three seconds it stayed just like that, the four of us looking at the one of her. Then Helen shyly dropped her gaze and began to mop the counter with a rag.

We were all very quiet going home. Next night we went back to Benny's again, rather earlier. Helen was still there, and quite as beautiful as we remembered her. We exchanged with her a few more of those brief, teasing remarks—her voice no longer sounded so much like Benny's—and staged some more intellectual pyrotechnics for her benefit. Just before we left, Es went up to her at the counter and talked to her privately for perhaps a minute, at the end of which Helen nodded.

"Ask her to pose for you?" I asked Es when we got outside. She nodded. "That girl has the most magnificent figure in the world," she proclaimed fervently.

"Or out of it," Gene confirmed grudgingly.

"And an incredibly exciting skull," Es finished.

It was characteristic of us that Es should have been the one to really break the ice with Helsa. Like most intellectuals, we were rather timid, always setting up barriers against other people. We clung to adolescence and the college, although all of us but Gene had been graduated from it. Instead of getting out into the real world, we lived by sponging off our parents and doing academic odd-jobs for the professors (Es had a few private students.) Here in our home city we had status, you see. We were looked upon as being frightfully clever and sophisticated, the local "bohemian set" (though Lord knows we were anything but that). Whereas out in the real world we'd have been greenhorns.

W/E WERE scared of the world, vou see. Scared that it would find out that all our vaunted abilities and projects didn't amount to muchand that as for solid achievements, there just hadn't been any. Es was only a mediocre artist; she was afraid to learn from the great, especially the living great, for fear her own affected little individuality would be engulfed. Louis was no philosopher; he merely cultivated a series of intellectual enthusiasms, living in a state of feverish private-and fruitless-excitement over the thoughts of other men. My own defense against reality consisted of knowingness and a cynical attitude; I had a remarkable packrat accumulation of information: I had a line on everything-and also always knew why it wasn't worth bothering with. As for Gene, he was the best of us and also the worst. A bit younger, he still applied himself to his studies, and showed promise in nuclear physics and math. But something, perhaps his small size and puritanical farm background, had made him moody and contrary, and given him an inclination toward physical violence that threatened some day to get him into real trouble. As it was, he'd had his license taken away for reckless driving. And several times we'd had to intervene—once unsuccessfully—to keep him from getting beaten up in bars.

We talked a great deal about our "work." Actually we spent much more time reading magazines and detective stories, lazing around, getting drunk, and conducting our endless intellec-

tual palavers.

If we had one real virtue, it was our loyalty to each other, though it wouldn't take a cynic to point out that we desperately needed each other for an audience. Still, there was some genuine feeling there.

In short, like many people on a planet where mind is wakening and has barely become aware of the conold fetters and blindfolds oppressing it, and has had just the faintest glimpse of its tremendous possible future destiny, we were badly cowed—frightened, frustrated, self-centered, slothful, vain, pretentious.

Considering how set we were getting in those attitudes, it is all the more amazing that Helen had the tremendous effect on us that she did. For within a month of meeting her, our attitude toward the whole world had sweetened, we had become genuinely interested in people instead of being frightened of them, and we were beginning to do real creative work. An astonishing achievement for an unknown little waitress!

It wasn't that she took us in hand or set us an example, or anything like that. Quite the opposite. I don't think that Helen was responsible for a half dozen positive statements (and only one really impulsive act) during the whole time we knew her. Rather, she was like a Great Books discussion leader, who never voices an opinion of his own, but only leads other people to voice theirs—as an intellectual midwife.

Louis and Gene and I would drop over to Es's, say, and find Helen getting dressed behind the screen or taking a cup of tea after a session of posing. We'd start a discussion and for a while Helen would listen dreamilv. just another shadow in the high old shadowy room. But then those startling little questions of hers would begin to come, each one opening a new vista of thought. By the time the discussion was finished-which might be at the Blue Moon bar or under the campus maples or watching the water ripple in the old coal pits-we'd have got somewhere. Instead of ending in weary shoulder-shrugging or cynical grousing at the world or getting drunk out of sheer frustration. we'd finish up with a plan-some facts to check, something to write or shape to try.

And then, people! How would we ever have got close to people without Helen? Without Helen, Old Gus would have staved an ancient and bleary-eved dishwater at Benny's. But with Helen, Gus became for us what he really was-a figure of romance who had sailed the Seven Seas, who had hunted for gold on the Orinoco with twenty female Indians for porters (because the males were too lazy and proud to hire out to do anything) and who had marched at the head of his Amazon band carrying a newborn baby of one of the women in his generous arms (because the women assured him that a man-child was the only burden a man might carry without dishonor.)

EVEN GENE was softened in his attitudes. I remember once when two handsome truckdrivers picked up Helen at the Blue Moon, Instantly Gene's jaw muscles bulged and his eves went blank and he began to wag his right shoulder-and I got ready for a scene. But Helen said a word here and there, threw in a soft laugh, and began to ask the truckdrivers her questions. In ten minutes we were all at ease and the four of us found out things we'd never dreamed about dark highways and diesels and their proud. dark-souled pilots (so like Gene in their temperaments.)

But it was on us as individuals that Helen's influence showed up the biggest. Es's sculptures acquired an altogether new scope. She dropped her pet mannerisms without a tear and began to take into her work whatever was sound and good. She rapidly developed a style that was classical and yet had in it something that was wholly of the future. Es is getting recognition now and her work is still good, but there was a magic about her "Helenic Period" which she can't recapture. The magic still lives in the pieces she did at that time-particularly in a nude of Helen that has all the serenity and purpose of the best ancient Egyptian work, and something much more. As we watched that piece take form, as we watched the clay grow into Helen under Es's hands, we dimly sensed that in some indescribable way Helen was growing into Es at the same time, and Es into Helen. It was such a beautiful, subtle relationship that even Gene couldn't be jealous.

At the same time Louis gave over his fickle philosophical flirtations and found the field of inquiry for which he'd always been looking—a blend of semantics and introspective psychology designed to chart the chaotic inner world of human experience. Although his present intellectual tactics lack the brilliance they had when Helen was nudging his mind, he still keeps doggedly at the project, which promises to add a whole new range of words to the vocabulary of psychology and perhaps of the English language.

Gene wasn't ripe for creative work, but from being a merely promising student he became a brilliant and very industrious one, rather to the surprise of his professors. Even with the cloud that now overhangs his life and darkens his reputation, he has managed to find worthwhile employment on one of the big nuclear projects.

As for myself, I really began to write. Enough said.

We sometimes used to speculate as to the secret of Helen's effect on us. though we didn't by any means give her all the credit in those days. We had some sort of theory that Helen was a completely "natural" person, a "noble savage" (from the kitchen), a bridge to the world of proletarian reality. Es once said that Helen couldn't have had a Freudian childhood whatever she meant by that Louis spoke of Helen's unthinking social courage and Gene of the catalytic effect of beauty. And sometimes we attributed Helen's influence merely to some difference between her life pattern and ours.

Oddly, in these discussions we never referred to that strange, electric experience we'd all had when we first met Helen—that tearing moment when we'd looked back from the doorway. We were always strangely reticent there. And none of us ever voiced the conviction that I'm sure all of us had at times: that our social and psychoanalytic theories weren't worth a hoot when it came to explain-

ing Helen, that she possessed powers of feeling and mind (mostly concealed) that set her utterly apart from every other inhabitant of the planet Earth, that she was like a being from another, far saner and lovelier world.

That conviction isn't unusual, come to think of it. It's the one every man has about the girl he loves. Which brings me to my own secret explanation of Helen's effect on me (though not on the others.)

It was simply this. I loved Helen and I knew Helen loved me. And that was quite enough.

It happened scarcely a month after we'd met. We were staging a little party at Es's. Since I was the one with the car, I was assigned to pick up Helen at Benny's when she got through. On the short drive I passed a house that held unpleasant memories for me. A girl had lived there whom I'd been crazy about and who had turned me down. (No, let's be honest, I turned her down, though I very much wanted her, because of some tragic cowardice, the memory of which always sears me like a hot iron.)

Helen must have guessed something from my expression, for she said softly, "What's the matter, Larry?" and then, when I ignored the question, "Something about a girl?"

SHE WAS so sympathetic about it the whole story, sitting in the parked and lightless car in front of Es's. I let myself go and lived through the whole thing again, with all its biting shame. When I was finished I looked up from the steering wheel. The streetlight made a pale aureole around Helen's head and a paler one where the white angora sweater covered her shoulders. The upper part of her face was in darkness, but a bit of light touched her full lips and narrow, al-

most fennec-or fox-like chin.

"You poor kid," she said softly, and the next moment we were kissing each other, and a feeling of utter relief and courage and power was budding deep inside me.

A bit here she said to me come.

A bit later she said to me something that even at the time I realized

was very wise.

"Let's keep this between you and me, Larry," she said. "Let's not mention it to the others. Let's not even hint." She paused, and then added, a trifle unhappily, "I'm afraid they wouldn't appreciate it. Sometime, I

hope-but not quite yet."

I knew what she meant. That Gene and Louis and even Es were only human—that is, irrational—in their jealousies, and that the knowledge that Helen was my girl would have put a damper on the exciting but almost childlike relationship of the five of us (as the fact of Es's and Gene's love would never have done. Es was a rather cold, awkward girl, and Louis and I seldom grudged poor, angry Gene her affection.)

So when Helen and I dashed in and found the others berating Benny for making Helen work overtime, we agreed that he was an unshaven and heartless louse, and in a little while the party was going strong and we were laughing and talking unconstrainedly. No one could possibly have guessed that a new and very lovely factor had been added to the situation.

After that evening everything was different for me. I had a girl. Helen was (why not say the trite things, they're true) my goddess, my worshipper, my slave, my ruler, my inspiration, my comfort, my refuge—oh, I could write books about what she meant to me

I guess all my life I will be writing books about that.

I could write pages describing just

us.

one of the beautiful moments we had together. I could drown myself in the bitter ghosts of sensations. Rush of sunlight through her hair. Click of her heels on a brick sidewalk. Light of her presence brightening a mean room. Chase of unearthly expressions across her sleeping face.

Yet it was on my mind that Helen's love had the greatest effect. It unfettered my thoughts, gave them passage into a far vaster cosmos.

One minute I'd be beside Helen, our hands touching lightly in the dark. a shaft of moonlight from the dusty window silvering her hair. The next, my mind would be a billion miles up, hovering like an iridescent insect over the nillion bright worlds of existence.

Or I'd be surmounting walls inside my mind—craggy, dire ramparts that have been there since the days of the cave man.

Or the universe would become a miraculous web, with Time the spider. I couldn't see all of it—no creature could see a trillionth of it in all eternity—but I would have a sense of it all.

Sometimes the 'icy beauty of those moments would become too great, and I'd feel a sudden chill of terror. Then the scene around me would become a nightmare and I'd half expect Helen's eyes to show a catilike gleam and slit, or her hair to come rustlingly alive, or her arms to writhe bonelessly, or her splendid skin to slough away, revealing some black and antlike form of dread.

Then the moment would pass and everything would be sheer loveliness again, richer for the fleeting terror.

My mind is hobbled once more now, but I still know the taste of the inward freedom that Helen's love brought. YOU MIGHT think from this that Helen and I had a lot of times alone together. We hadn't—we couldn't have, with the Gang. But we had enough. Helen was clever at arranging things. They never suspected

Lord knows there were times I yearned to let the Gang in on our secret. But then I would remember Helen's warning and see the truth of it.

Let's face it. We're all of us a pretty vain and possessive people. As individuals, we cry for attention. We jockey for admiration. We swim or sink according to whether we feel we're being worshipped or merely liked. We demand too much of the person we love. We want them to be a never-failing prop to our ego.

And then if we're lonely and happen to see someone else loved, the greedy child wakes, the savage stirs, the frustrated Puritan clenches his teeth. We seethe, we resent, we hate.

No, I saw that I couldn't tell the others about Helen and myself. Not Louis. Not even Es. And as for Gene, I'm afraid that with his narrow-minded upbringing, he'd have been deeply shocked by what he'd have deduced about our relationship. We were supposed, you know, to be "wild" young people, "bohemians." Actually we were quite straight-laced—Gene especially, the rest of us almost as much.

I knew how I would have felt if Helen had happened to become Louis's or Gene's girl. That says it.

To tell the truth, I felt a great deal of admiration for the Gang, because they could do alone what I was only doing with Helen's love. They were enlarging their minds, becoming creative, working and playing hard—and doing it without my reward. Frankly, I don't know how I could have managed it myself without Helen's love.

My admiration for Louis, Es, and Gene was touched with a kind of awe.

And we really were getting places. We had created a new mind-spot on the world, a sprouting-place for thought that wasn't vain or self-conscious, but concerned wholly with its work and its delights. The Gang was forming itself into a kind of lens for viewing the world, outside and in.

Any group of people can make themselves into that sort of lens, if they really want to. But somehow they seldom get started. They don't have the right inspiration.

We had Helen.

Always, but mostly in unspoken thoughts, we'd come back to the mystery of how she had managed it. She was mysterious, all right. We'd known her some six months now, and we were as much in the dark about her background as when we first met her. She wouldn't tell anything even to me. She'd come from "places." She was a d'drifter. 'She liked "people." She told us all sorts of fascinating incidents, but whether she'd been mixed up in them herself or just heard them at Benny's (she could have made a Trappist iabber) was uncertain.

We sometimes tried to get her to talk about her past. But she dodged our questions easily and we didn't

like to press them.

You don't cross-examine Beauty. You don't demand that a Great

Books discussion leader state his convictions.

You don't probe a goddess about her past.

Yet this vagueness about Helen's past caused us a certain uneasiness. She'd drifted to us. She might drift away.

If we hadn't been so involved in our thought-sprouting, we'd have been worried. And if I hadn't been so happy, and everything so smoothly perfect, I'd have done more than occasionally ask Helen to marry me and hear her answer, "Not now, Larry."

Yes, she was mysterious. And she had her eccentricities.

For one thing, she insisted on working at Benny's although she could have had a dozen better jobs. Benny's was her window on the main street of life, she said.

For another, she'd go off on long hikes in the country, even in the snowiest weather. I met her coming back from one and was worried, tried to be angry. But she only smiled.

Yet, when spring came round again and burgeoned into summer, she would never go swimming with us in

our favorite coal pit.

The coal pits are a place where they once strip-mined for the stuff where it came to the surface. Long ago the huge holes were left to fill with water and their edges to grow green with grass and trees. They're swell for swimming.

BUT HELEN would never go to our favorite, which was one of the biggest and yet the least visited—and this year the water was unusually high. We changed to suit her, of course, but because the one she didn't like happened to be near the farmhouse of last August's "rural monster" scare, Louis joshed her.

"Maybe a monster haunts the pool," he said. "Maybe it's a being come from another world on a flying

disk."

He happened to say that on a lazy afternoon when we'd been swimming at the new coal pit and were drying on the edge, having cigarettes. Louis' remark started us speculating about creatures from another world coming secretly to visit Earth—their problems, especially how they'd disguise themselves.

"Maybe they'd watch from a dis-

tance," Gene said. "Television, su-

"Or clairvoyance, clairaudience," Es chimed, being rather keen on para-

psychology.

"But to really mingle with people..." Helen murmured. She was stretched on her back in white bra and trunks, looking deep into the ranks of marching clouds. Her olive skin tanned to an odd hue that went bewitchingly with her hair. With a sudden and frightening poignancy I was aware of the catilike perfection of her slim body.

"The creature might have some sort of elaborate plastic disguise,"

Gene began doubtfully.

"It might have a human form to begin with," I ventured. "You know, the idea that Earth folk are decayed interstellar colonists."

"It might take possession of some person here," Louis cut in. "Insinuate its mind or even itself into the human being."

"Or it might grow itself a new body." Helen murmured sleepily.

That was one of the half dozen

Then we got to talking about the motives of such an alien being. Whether it would try to destroy men, or look on us as cattle, or study us, or amuse itself with us, or what not.

Here Helen joined in again, distanteyed but smiling. "I know you've all laughed at the comic-book idea of some Martian monster lusting after beautiful white women. But has it ever occurred to you that a creature from outside might simply and honestby fall in love with you?"

That was another of Helen's rare positive statements.

The idea was engaging and we tried to get Helen to expand it, but she wouldn't. In fact, she was rather silent the rest of that day.

As the summer began to mount to-

ward its crests of heat and growth, the mystery of Helen began to possess us more often—that, and a certain anyiety about her

There was a feeling in the air, the sort of uneasiness that cats and dogs get when they are about to lose their owner.

Without exactly knowing it, without a definite word being said, we were afraid we might lose Helen.

Partly it was Helen's own behavior. For once she showed a kind of rest-lessness, or rather preoccupation. At Benny's she no longer took such an interest in "people."

She seemed to be trying to solve some difficult personal problem, nerve herself to make some big decision.

Once she looked at us and said, "You know, I like you kids terribly." Said it the way a person says it when he knows he may have to lose what he likes.

And then there was the business of the Stranger.

Helen had been talking quite a bit with a strange man, not at Benny's, but walking in the streets, which was unusual. We didn't know who the Stranger was. We hadn't actually seen him face to face. Just heard about him from Benny and glimpsed him once or twice. Yet he worried us.

Understand, our happiness went on, yet faintly veiling it was this new and ominous mist.

THEN ONE night the mist took definite shape. It happened on an occasion of celebration. After a few days during which we'd sensed they'd been quarreling, Es and Gene had suddenly announced that they were getting married. On an immediate impulse we'd all gone to the Blue Moon.

We were having the third round of drinks, and kidding Es because she didn't seem very enthusiastic, almost a bit grumpy—when he came in.

Even before he looked our way, betore he drifted up to our table, we knew that this was the Stranger.

He was a rather slender man, fair haired like Helen. Otherwise he didn't look like her, yet there was a sense of kinship. Perhaps it lay in his poise, his wholly casual manner.

As he came up, I could feel myself and the others getting tense, like dogs at the approach of the unknown.

The Stranger stopped by our table and stood looking at Helen as if he knew her. The four of us realized more than ever that we wanted Helen to be ours alone (and especially mine), that we hated to think of her having close ties with anyone else.

What got especially under my skin was the suggestion that there was some kinship between the Stranger and Helen, that behind his proud, remote-eyed face, he was talking to her with his mind.

Gene apparently took the Stranger for one of those unpleasant fellows who strut around bars looking for trouble—and proceeded to act as if he were one of those same fellows himself. He screwed his delicate features into a cheap frown and stood up as tall as he could, which wasn't much. Such tough-guy behavior, always a sympaculinity, had been foreign to Gene for some months. I felt a pulse of sadness—and almost winced when Gene opened the side of his mouth and began, "Now look here, Joe—"

But Helen laid her hand on his arm. She looked calmly at the Stranger for a few more moments and then she said, "I won't talk to you that way. You must speak English."

If the Stranger was surprised, he didn't show it. He smiled and said softly, with a faint foreign accent, "The ship sails at midnight, Helen."

I got a queer feeling, for our city is two hundred miles from anything you'd call navigable waters.

For a moment I felt what you might call supernatural fear. The bar so tawdry and dim, the line of hunched neurotic shoulders, the plump dice-girl at one end and the tiny writhing tele-vision screen at the other. And against that background, Helen and the Stranger, light-haired, olive-skinned, with proud feline features, facing each other like duelists, on guard, opposed, yet sharing some secret knowledge. Like two aristocrats come to a dive to settle a quarrel—like that, and something more. As I say, it frightened me.

"Are you coming, Helen?" the Stranger asked.

And now I was really frightened. It was as if I'd realized for the first time just how terribly much Helen meant to all of us, and to me especially. Not just the loss of her, but the loss of things in me that only she could call into being. I could see the same fear in the faces of the others. A lost look in Gene's eyes behind the fake gangster frown. Louis' fingers relaxing from his glass and his chunky head turning toward the stranger, slowly, with empty gaze, like the turret-guns of a battleship. Es starting to stub out her cigarette and then hesitating, her eves on Helen-although in Es's case I felt there was another emotion besides fear.

"Coming?" Helen echoed, like someone in a dream.

THE STRANGER waited. Helen's reply had twisted the tension tighter. Now Es did stub out her cigarette with awkward haste, then quickly drew back her hand. I felt suddenly that this had been bound to happen, that Helen must have had her life, her real life, before we had known her, and that the Stranger was part of it; that she had come to us mysteriously and now would leave us as

mysteriously. Yes, I felt all of that, although in view of what had happened between Helen and me, I knew I shouldn't have.

"Have you considered everything?" the Stranger asked finally.

"Yes," Helen replied.

"You know that after tonight there'll be no going back," he continued as softly as ever. "You know that you'll be marooned here forever, that you'll have to spend the rest of your life among..." (he looked around at us as if searching for a word) "...among barbarians,"

Again Helen laid her hand on Gene's arm, although her glance never left the Stranger's face.

"What is the attraction, Helen?" the Stranger went on. "Have you really tried to analyze it? I know it might be fun for a month, or a year, or even five years. A kind of game, a renewal of youth. But when it's over and you're tired of the game, when you realize that you're alone, completely alone, and that there's no going back ever— Have you thought of that?"

"Yes, I have thought of all that." Helen said, as quietly as the Stranger, but with a tremendous finality. "I won't try to explain it to you, because with all your wisdom and cleverness I don't think you'd quite understand. And I know I'm breaking promises—and more than promises. But I'm not going back. I'm here with my friends, my true and equal friends, and I'm not going back."

And then it came, and I could tell it us—a great big lift, like a surge of silent music or a glow of invisible light. Helen had at last declared herself. After the faint equivocations and reservations of the spring and summer, she had put herself squarely on our side. We each of us knew that what she had said she meant wholly and forever. She was

ours, ours more completely than ever before. Our quasi-goddess, our inspiration, our key to a widening future; the one who always understood, who could open doors in our imaginations and feelings that would otherwise have remained forever shut. She was our Helen now, ours and (as my mind persisted in adding exultingly) especially mine.

And we? We were the Gang again, happy, poised, wise as Heaven and clever as Hell, out to celebrate, having fun with whatever came along.

The whole scene had changed. The frightening aura around the Stranger had vanished completely. He was just another of those hundreds of odd people whom we met when we were with Helen.

He acted almost as if he were conscious of it. He smiled and said quickly, "Very well. I had a feeling you'd decide this way." He started to move off. Then, "Oh, by the way, Helen—" "Ves?"

"The others wanted me to say good-

by to you for them."
"Tell them the same and the best

of luck."

The Stranger nodded and again

started to turn away, when Helen added, "And you?"

The Stranger looked back.

"I'll be seeing you once more before midnight," he said lightly, and almost the next moment, it seemed, was out the door.

We all chuckled. I don't know why. Partly from relief, I suppose, and partly—God help us!—in triumph over the Stranger. One thing I'm sure of: three (and maybe even four) of us felt for a moment happier and more secure in our relationship to Helen than we ever had before. It was the peak. We were together. The Stranger had been vanquished, and all the queer unspoken threats he had brought with him. Helen had declared

herself. The future stood open before us, full of creation and achievement, with Helen ready to lead us into it. For a moment everything was perfect. We were mankind, vibrantly alive, triumphantly progressing.

It was, as I say, perfect.

And only human beings know how to wreck perfection.

Only human beings are so vain, so greedy, each wanting everything for himself alone.

It was Gene who did it. Gene who couldn't stand so much happiness and who had to destroy it, from what self-fear, what Puritanical self-torment, what death-wish I don't know.

It was Gene, but it might have been any of us.

HIS FACE was flushed. He was smiling, grinning rather, in what I now realize was an oafish and overbearing complacency. He put his hand on Helen's arm in a way none of us had ever touched Helen before, and said, "That was great, dear."

It wasn't so much what he said as the naked possessiveness of the gesture. It was surely that gesture of ownership that made Es explode, that started her talking in a voice terribly bitter, but so low it was some moments before the rest of us realized what she was getting at.

When we did we were thunderstruck.

She was accusing Helen of having stolen Gene's love.

It's hard to make anyone understand the shock we felt. As if someone had accused a goddess of abominations

Es lit another cigarette with shaking fingers, and finished up.

"I don't want your pity, Helen. I don't want Gene married off to me for the sake of appearances, like some half-discarded mistress. I like you, Helen, but not enough to let you take Gene away from me and then toss him back—or half toss him back. No, I draw the line at that"

And she stopped as if her emotions

As I said, the rest of us were thunderstruck. But not Gene. His face got redder still. He slugged down the rest of his drink and looked around at us, obviously getting ready to explode in turn.

Helen had listened to Es with a half smile and an unhappy half frown, shaking her head from time to time. Now she shot Gene a warning, imploring glance, but he disregarded it.

"No, Helen," he said, "Es is right. I'm glad she spoke. It was a mistake for us ever to hide our feelings. It would have been a ten times worse mistake if I'd kept that crazy promise I made you to marry Es. You go too much by pity, Helen, and pity's no use in managing an affair like this. I don't want to hurt Es, but she'd better know right now that it's another marriage we're announcing tonight."

I sat there speechless. I just couldn't realize that that drunken, redfaced poppinjay was claiming that Helen was his girl, his wife to be.

Es didn't look at him. "You cheap little beast," she whispered.

Gene went white at that, but he kept on smiling.

"Es may not forgive me for this," he said harshly, 'but I don't think it's me she's jealous of. What gets under her skin is not so much losing me to Helen as losing Helen to me."

Then I could find words.
But Louis was ahead of me.

He put his hand firmly on Gene's shoulder.

"You're drunk, Gene," he said, "and you're talking like a drunken fool. Helen's my girl."

They started up, both of them, Louis's hand still on Gene's shoulder.

Then, instead of hitting each other,

they looked at me.

Because I had risen too.

"But . . . " I began, and faltered. Without my saying it, they knew.

Louis's hand dropped away from Gene.

All of us looked at Helen. A cold.

terribly hurt, horribly disgusted look. Helen blushed and looked down.

Only much later did I realize it was related to the look she'd given the four of us that first night at Benny's. "...but I fell in love with all of

you," she said softly.

Then we did speak, or rather Gene spoke for us. I hate to admit it, but at the time I felt a hot throb of pleasure at all the unforgivable things he called Helen. I wanted to see the lash laid on, the stones thud.

Finally he called her some names

that were a little worse.

Then Helen did the only impulsive

thing I ever knew her to do She slapped Gene's face. Once. Hard.

THERE ARE only two courses a

person can take when he's been rebuked by a goddess, even a fallen goddess. He can grovel and beg forgiveness. Or he can turn apostate and devil-worshipper.

Gene did the latter.

He walked out of the Blue Moon, blundering like a blind drunk.

That broke up the party, and Gus and the other bartender, who'd been about to interfere, returned relievedly to their jobs.

Louis went off to the bar. Es followed him. I went to the far end myself, under the writhing television screen, and ordered a double scotch.

Beyond the dozen intervening pairs of shoulders, I could see that Es was trying to act shameless. She was whispering things to Louis. At the same time, and even more awkwardly, she was flirting with one of the other

men. Every once in a while she would

laugh shrilly, mirthlessly,

Helen didn't move. She just sat at the table, looking down, the half smile fixed on her lips. Once Gus approached her, but she shook her head.

I ordered another double scotch. Suddenly my mind began to work

furiously on three levels.

On the first I was loathing Helen. I was seeing that all she'd done for us. all the mind-spot, all the house of creativity we'd raised together, had been based on a lie. Helen was unutterably cheap, common.

Mostly, on that level, I was grieving for the terrible wrong I felt she'd The second level was entirely dif-

done me.

ferent. There an icy spider had entered my mind from realms undreamt. There sheer supernatural terror reigned. For there I was adding up all the little hints of strangeness we'd had about Helen. The Stranger's words had touched it off and now a thousand details began to drop into place: the coincidence of her arrival with the flying disc, rural monster, and hypnotism scare: her interest in people, like that of a student from a far land: the impression she gave of possessing concealed powers; her pains never to say anything definite, as if she were on guard against · imparting some forbidden knowledge; her long hikes into the country; her aversion for the big and vet seldom-visited coal pit (big and deep enough to float a liner or hide a submarine); above all, that impression of unearthliness she'd at times given us all, even when we were most under her spell.

And now this matter of a ship sailing at midnight. From the Great Plains.

What sort of ship?

On that level my mind shrank from facing the obvious result of its labor. It was too frighteningly incredible, too far from the world of the Blue Moon and Benny's and cheap little waitresses.

The third level was far misticr, but it was there. At least I tell myself it was there. On this third level I was beginning to see Helen in a better light and the rest of us in a worse. I was beginning to see the lovelessness behind our idea of love—and the faithfulness, to the best in us, behind Helen's faithlessness. I was beginning to see how hateful, how like spoiled children, we'd been acting.

Of course, maybe there wasn't any third level in my mind at all. Maybe that only came afterwards. Maybe I'm just trying to flatter myself that I was a little more discerning, a little "bizger" than the others.

Yet I like to think that I turned away from the bar and took a couple of steps toward Helen, that it was only those "second level" fears that slowed me so that I'd only taken those two faltering steps (if I took them) before—

Before Gene walked in.

I remember the clock said eleven thirty.

Gene's face was dead white, and knobby with tension.

His hand was in his pocket.

He never looked at anyone but Helen, They might have been alone. He wavered—or trembled. Then a terrible spasm of energy stiffened him. He started toward the table.

Helen got up and walked toward him, her arms outstretched. In her half smile were all the compassion and fatalism—and love—I can imagine there being in the universe.

Gene pulled a gun out of his pocket and shot Helen six times. Four times in the body, twice in the head.

She hung for a moment, then pitched forward into the blue smoke. It puffed away from her to either side and we saw her lying on her face, one of her outstretched hands touching Gene's shoe.

THEN, BEFORE a woman could scream, before Gus and the other chap could jump the bar, the outside door of the Blue Moon opened and the Stranger came in. After that none of us could have moved or spoken. We cringed from his eyes like guilty dors.

It wasn't that he looked anger at us, or hate, or even contempt. That would have been much easier to bear.

No, even as the Stranger passed Gene—Gene, pistol dangling from two fingers, looking down in dumb horror, edging his toe back by terrified inches from Helen's dead hand—even as the Stranger sent Gene a glance, it was the glance a man might give a bull that has gored a child, a pet ape that has torn up his mistress in some inscrutable and pettish animal rage.

And as, without a word, the Stranger picked Helen up in his arms, and carried her silently through the thinning blue smoke into the street, his face bore that same look of tragic regret, of serene acceptance.

That's almost all there is to my story. Gene was arrested, of course, but you can't convict a man for the murder of a woman without real identity, when there is no body to

prove a murder had been committed.

For Helen's body was never found.

Neither was the Stranger.

Eventually Gene was released and, as I've said, is making a life for himself, despite the cloud over his reputation.

We see him now and then, and try to console him, tell him it might as easily have been Es or Louis or I, that we were all blind, selfish fools together.

And we've each of us got back to our work. The sculptures, the wordstudies, the novels, the nuclear notions are not nearly as brilliant as when Helen was with us. But we keep turning them out. We tell ourselves Helen would like that.

And our minds all work now at the third level-but only by fits and starts, fighting the jungle blindness and selfishness that are closing in again, Still, at our best, we understand Helen and what Helen was trying to do, what she was trying to bring the world even if the world wasn't ready for it. We glimpse that strange passion that made her sacrifice all the stars for four miserable blind-worms.

But mostly we grieve for Helen, together and alone. We know there won't be another Helen for a hundred thousand years, if then. We know that she's gone a lot farther than the dozens or thousands of light-years her body's been taken for burial. We look at Es's statue of Helen, we read one or two of my poems to her. We remember, our minds come half alive and are tortured by the thought of what they might have become if we'd kept Helen. We picture her again sitting in the shadows of Es's studio, or sunning herself on the grassy banks after a swim, or smiling at us at Benny's. And we grieve.

For we know you get only one chance at someone like Helen.

We know that because, half an hour after the Stranger carried Helen's body from the Blue Moon, a great meteor went flaming and roaring across the countryside (some say up from the countryside and out toward the stars) and the next day it was discovered that the waters of the coal pit Helen wouldn't swim in, had been splashed, as if by the downward blow of a giant's fist, across the fields for a thousand yards.

THE END

THE SLOW ADVANCE

* By CARTER T. WAINWRIGHT *

WITH THE advent of radar, the atomic bomb, rocketry and televy atomic bonn, located and television, a person is inclined to get the idea that science—applied science, at least—advances forward in huge leaps and bounds. This is actually far from the case. Progress in applied science is really just as slow as in pure science. The principles of the things mentioned above principles of the things mentioned above are old and well-known. It simply took time before they could come into fruition. Of course their improvement and develop-ment accelerates with time because that mem accelerates with time because that is characteristic of scientific advancement. To see the real method of progress, all you have to do is look around you at the common, homely, every-day things.

common, homely, every-day things. The automobile is a prime example of that. Compare cars made ten or twenty years ago with those of today and the slow evolution is clearly seen. From year to year there are no real revolutionary changes makes a considerable difference. An even better example is the conventional every-day refrigerator. Basically it is still the same cold-creating incompressor arrangement. But there is a world of difference at that. The early

machines had compressors driven by belts, with large bulky cooling condensers taking up half the volume of the machine. As time went on the machine was slowly modified. First came the union of compressor and electric motor into a sealed compact mechanism. Condensers were made even larger but this eliminated the cooling fan. Eventually through skilled design all parts became smaller and more compact, and were located differently, so that now an electric refrigerator of the same physical size as one made twenty years ago has twice or three times the storage space.

You could select hundreds of items and show this sort of analysis. It's going on all the time. The commonplace, homely domestic equipment of the future will be domestic equipment of the future will be similar to that of the present, but it will be so much simpler, compact and useful. The slow trend toward electric cooking is becoming apparent. This will give way to radio or induction cooking. The use of an electric motor for everything closing one's eyelids seems inevitable.

Just as we wonder sometimes at our predecessors' crude gadgets, so will our progeny wonder at our awkward bulky equipment.

The LAST BOUNCE

By William Tenn



Every trip into space was just one more bounce toward a stellar grave. The trick was to avoid taking the last one!

HERE WASN'T much difference between Commissioner Breen's office and the office of any other memorandum baron in Sandstorm, the interstellar head-quarters of the Patrol on Mars. If you've seen one, Vic Carlton decided, you'd seen them all; and, in twelve

years of standing at attention during the wet-with-tradition ceremony known as the Kiss of Death, he had seen them all—every last uncompromising whitewashed cubicle. Rooms as friendly as a surgical table.

A few star maps speckling the glare from the walls; a bookcase filled with



miscellaneous handbooks and manuals of space; one stiff, thin chair behind the stiff, square desk; and, over the desk, the Scout Roll of Honor—names of 553 men who had laid down their lives in the Service. 563 casualties out of a total all-time roster of 1,420.

Yet the Scouts were a volunteer service, and, every year, all over the galaxy, young men broke their backs and burst their brains to get into it.

The speech was pretty much the same as usual. Perhaps even better in one way: Breen was new to the job and slightly—well, embarrassed by this aspect of it. He kept his talk short, made the Kiss of Death almost a peck.

He was tall and straight as they: he had no more than three years on Vic Carlton, the oldest of the three; and his blue uniform differed from theirs only in the badge of office, a gold star instead of a silver rocket, on his chest.

"Lutz and O'Leary, you are under the command of Victor Carlton—one of the very few men on active duty with over ten years experience. Carlton, your two juniors have been certified as psychologically, physically and educationally fit for this mission: no more can be said of any man. I must remind you that the Patrol has been called the glory of space and the Scouts the glory of the Patrol; but I need not remind you how jealously that glory should be guarded. Good scouting, good 'uck. That is all?"

He exhaled a tiny gust of relief before shutting his mouth.

All? Vic Carlton thought, as they saluted and about-faced to the door. This is only the beginning. You know that, Breen. The danger and the horror—death perhaps, agony without death perhaps—start officially when the commissioner's talk is 'finished.

You should know: you decided you had a bellyfull six months ago and resigned from active duty for this sleek office job. When we walk out of your office, it's only the beginning.

Then he thought: Hey, that's dangerous brainspit for a commander. Maybe Kay's right; maybe I'm

getting old.

And then he thought: Breen's only thirty-five; I'm thirty-two. I remember when I thought all commissions were shambling wrecks held together by will-power and a handful of regulations. Why, Breen's only thirty-five! I am getting old!

They were out in the corridor, and a group of scouts being briefed for another set of missions swung down to the elevator with them. They clapped their helmets on, leaving the broad, flaring visors open.

"Attaboy, O'Leary, take it on the

bounce!"

"You don't know how lucky you are, Lutz. Unkillable Carlton is my idea of a commander for a rookie's first mission."

"Look at Carlton, fellows. He's

bored! What a man!"

"The first bounce is the hardest, O'Leary. Gee, I remember mine!"

"Hey, Lutz, what're you looking so green about? According to statistics, you have an even chance of coming back in one hunk!"

"On the bounce, O'Leary. On the bounce."

CARLTON watched his men.
O'Leary was the one to look out
for at this point. Lutz was still riding
the enthusiasm of graduation from
the academy; he might be frightened
at his baptismal mission, but he was
even more exhilarated. He wouldn't
be important until action started; and,
even then, he'd probably have to be
checked from daredevil stunts more
than he would have to be encouraged

to take a chance. But O'Leary was the one to watch.

It was tough making your first bounce. Vic remembered his-was it nine? No, eleven years ago. A commander who'd been so badly off that he'd requested disenrollment in preference to making a bounce, the other junior so psychologically smashed that he'd become a permanent resident of the tiny Patrol Mental Hospital on Ganymede. A kind of carnivorous moss had almost got them: pretty screaming awful. But Vic had been patched up and made his bounce on the very next mission out of Sandstorm, You had to bounce right back or your nerve would go.

Sure enough, O'Leary sounded off. "We drew a creampuff. The planet's only three-tenths of a point off Earth-

type."

The others hooted at that. "And it's out around the Hole in Cygnus! Where they found a nova acting like a third-magnitude star and a meteor stream traveling at the speed of light! The part of the galaxy that never heard of Newton! You can have it!"

"That region hasn't even been adequately mapped, O'Leary. It may be the place where time warped in on itself and exploded, where the universe got started. A creampuff, he calls it! You can have it: I'll be happy with a planet six full points off Earth-type, in a sane area like Virgo or Taurus or something."

"Sure, don't kid yourself, O'Leary. But on the bounce, boy, take it on the bounce!"

"Hey, Lutz, what're you looking so green about?"

Harry Lutz giggled weakly and wiped palm sweat off on his blue jumper. Carlton slapped him on the back, kneaded his shoulder blades. "Don't worry, you have two experienced men behind you. We'll take care of you, won't we, O'Leary?"

O'Leary looked up startled, then nodded seriously. "Sure; we'll show you the ropes, kid."

Good. Get O'Leary's mind off himself, get him to worrying about the rookie instead, and he'd have no time for a funk.

The elevator stopped on the main floor of the Scout Operations Building unimaginatively decorated in azure plastic. Through the open double doors, Vic Carlton could see the mob of civilian personnel who always left their jobs when a mission took off. Death-watch in Sandstorm. the Scouts called it. Oh, well, he shrugged, it must be exciting for civilians. Man's empire extends another couple of light-years into space-that was probably exciting to some people.

Someone started the song-

"Bell-bottom helmet, suit of SP blue.

He'll shoot the ether like his daddy used to do"

THE THREE had linked arms when they began singing. Their feet beating the rhythm, they marched down to the slender little ship with the long blue stripe that lay waiting for them at the end of Sagittarius Runway, Behind them, their honor guard of Scouts bawled the chorus at the pink Martian sky. On either side, people cheered. Evidently, Vic reflected, this was something to cheer about.

"What about you," Kay had asked last night, after he had hummed the song, lying with his head on her lap and watching the two moons of Mars coruscating overhead. They'd walked in the Rosenbloom Desert for two hours, and when she'd sat down in the coarse red sand, he'd put his head on her lap and hummed the song because he felt so strangely tranquil. "What about you-don't you want a son? Don't you want him to-to shoot the ether like his daddy used to do?"

"Kay, please. Of course I want a son. As soon as we can get married—"

"But you can't. Not while you're on active duty with the Scouts. You can't have a son. The only children that active. Scouts have are orphans. That's different, Vic. Orphans who never have seen their daddies."

He grimaced at her brown eyes, certain and serene under the perfect piles of blonde colifure. "Look, I want to marry you, girl. I'm going to marry you. And I agree with you that we can't build a home-life around Scout missions."

"Yes, Vic."

"You're right about my being no good to you—or any woman—until I decide on my own that one planet is good enough for me. You don't want me counting jet-trails wistfully; and you don't want me with all the fire gone out—you said so yourself. I've got to want to build a family as much as I want to seout."

"Yes, Vic."

He made an impatient gesture and cut it short as he watched her draw five parallel trails in the sand with her fingers. "So? So it's just a matter of patience on your part, just a matter of waiting until I'm ready to chuck the whole thing. After all, I've been a Scout for twelve years; the odds against that length of service are pretty high-most men who survive five years of it are ready to quit. You'll have me soon, Kay-and not as a shoulder-shrugging has-been, but a guy who's adventured enough in space and is ready to roost. I'm still young by ordinary standards-only thirty-two. Trip after next, three or four missions from now maybe, I'll be ready. Soon."

A pause. Then— "Yes, Vic." Her voice was low, agreeable.

Somehow, in retrospect, it seemed like the most final of quarrels.

Vic found himself looking for Kay past O'Leary's huge head. She worked in Administration; she'd be in the bunch near the great white dome. He wished he could kiss her before they took off; but tradition demanded that farewells be said the night before and nothing interrupt the march to the ship.

He caught sight of her just as they reached the part of the song that always made her wince. Vic grinned in anticipation.

"If it's a girl, dress her up in lace;
If it's a boy, send the off to space!"

She winced so hard, screwing her eyes down and pulling her shoulders up, that they had marched past her and into the ship before she looked around again.

The two regular Patrolmen who were on duty saluted and said, "Ship in good order, Commander. Luck." They left.

The other Scouts gave them one more round of handshakes before climbing silently through the open locks.

Vic pressed the green hexagonal button that shut the air-locks, and, leaping to the portholes, they all took a last quick glimpse of Sandstorm's concrete buildings rising like so many bandaged thumbs out of the rosy Martian plain.

"Jets in good order, Commander," the voice of the ground-crew chief announced. "Awaiting take-off."

"Mission crew ready," Vic told him in the communaphone, as Lutz and O'Leary went to their stations. "Taking off."

His eyes swept around the pilotroom, focused on his juniors for a double-check, came to rest on the clicking gauges.

"Jets away," he said and cut the

communaphone connection.

He counted to fifteen slowly, thinking of the immemorial cry of "Jets away! Jets away away, jets away!" that was being sung out on the ground below as the crowd scattered.

"Fifteen," he said, and O'Leary pulled the red switch the requisite two notches, while Lutz swung the tiny wheels of the balance-control. They jerked slightly in the seats, then, as Vic adjusted acceleration helix, they relaxed comfortably. Mission begun.

MISSION 1572 on the schedule of the Scouting Patrol; Number 29 in Vic's personal Service Record back in Sandstorm, the last page of which was headed "Circumstances of Death -Posthumous Citations-Provision for Dependents." Not many Service Records could count that high. When a man passed his twertieth mission, they began calling him "Lightning" Ching Lung or "Safety-First" Feuerbach or "Two-Blast" Bonislavski, You had to hang some such nickname on a man who, mission in, mission out, came back with three-fourths of his skin missing or some weird virus that made the medics dither and dream up whole new pathologies-but a man who always came back. Until, of course, there was that one time-

They called Vic "Unkillable" Carlton, and there were only two Scouts now shooting the ether who had longer active service. One of his very few ambitions was to be the Senior Scout of Space and wear the gold uniform that went with the rating. It meant that you never paid for anything anywhere, that you walked through Patrol cordons, that you were practically a one-man parade wherever you went. That would be nice, Vic thought; it was childish and

garish, but it gave a man some sort of goal at this stage of his life. It meant that even in the Scouts who were the chosen of the Patrol, in turn the chosen of the galaxy's male population, you were still unique. It also meant that one day you might cut your throat while shaving with a safety razor.

Cute idea, the Scouts. Economical. Instead of losing thirty or a hundred highly-trained scientists at a clip, civilization, at most, would lose three men. True, the three would be rather unusual men with remarkable qualifications; but in a galaxy swarming with youths thirsty for a nice suicidal-type job in adventurous surroundings with a little glory, fair pay and plenty of room for advancement, the three would be replaced. And Honor-Rolled.

A Patrol cruiser happens to run across a previously uncharted star which is the one-in-a-thousand with a family of planets. Spectroscopic observations are made; and, if the cruiser has the time, robotiets are sent out to circle one or two of the more likely-looking worlds and make automatic observations on their atmospheres, ground conditions, evidences of intelligent life and the like. If there are no signs of an indigenous civilization anywhere, the cruiser goes on about its business and reports its findings to Sandstorm HQ at the earliest opportunity.

Sandstorm files the information along with a mass of deductions by physicists, chemists and biologists. Five years later, say, it becomes necessary to make a more detailed examination of one of the planets. Maybe the surface promises interesting mineral deposits; maybe it's a good spot for a fueling station or Patrol outpost or a colony; maybe it's just that someone important is curious.

Three available Scouts-one A, one B and one C Scout-are alerted. They are briefed for a month on all data handy, given the best ship and equipment that can be built, wished lots and lots of luck and sent off. If they aren't back in ninety days, terran time, a heavy cruiser crowded to the stern jets with fancy weapons and brilliant minds goes after them to find out how they were knocked off. If any or all of them return in the prescribed time, their reports are examined and, on the basis of their experiences, an expedition is organized to do whatever job is necessary, from mapping the site of a colony to laying the foundations of an astronomical observatory.

The Scouts are sitting ducks. Oh, sure, their motto is "Take No Chances" and Scout Regulations 47 to 106 deal with safety measures to be observed. They are supposed to wander about the new planet with recording instruments, getting first-hand, on-the-spot data. That's all the books say they're supposed to do. And

back in the academy-

"Back in the academy," Lutz confided to O'Leary as, outside the orbit of Pluto, they prepared to switch to the interstellar jets that would sweep them to their destination at several times the speed of light, "back in the academy, they told us three-fourths of all Scout casualties are caused by carelessness or disregard of the safety regulations. The commissioners said that as discipline improves and more men adhere closely to regulations, casualties will inevitably go down."

"They will, huh?" O'Leary glanced round at Carlton and sucked in his lower lip. "The right glad to hear that. It's nice to know that casualties are going down. I'll take a commissioner's word against nasty statistics any old time, *Down*, huh?"

HARRY LUTZ completed his sight and handed the instrument to O'Leary for checking, "Sure. We function simply as an advance-information crew. At the first hint of danger we're supposed to clear out. 'Better lose your binus than lose your life.'"

"And outside that fat bonus for a full scouting period on a planet, what other compensations are there to this wacky job?" O'Leary nodded at Carlton. "Objective lined up, Vic. We can shoot. You try coming back from a mission with a scarey story, boy; you'll find yourself demoted to watchdog duty in the Patrol before you can say Aldebaran Betelgeuse Capricorn. Or take that last mission I was on. Nothing dangerous on the planetnothing, that is, that wanted to do us harm. But there was a bird thing with funny wings which generated a highfrequency sound wave as it flew. Pure biological accident, but it happened to be on exactly the same frequency as our supersonic pistols. Yeah."

He breathed heavily and stared through the control levers. The other two men watched him closely. "First time we saw it was the day Jake Bertrand was making a geological survey outside the ship. It flew down and lit on a rock-it was curious. I guess-and Jake dropped dead, Hap MacPherson, the commander, ambled out to see why Jake had fainted. The bird thing got scared and flew away, so Hap dropped dead, too. I was inside the ship and noticed where the sound meters were pointing; I figured it out. After I had me a good round look at the horizon and made sure there was nothing flying anywhere, I dragged the two brain-curdled corpses in and went back to Base. I don't know whether they decided to wipe out the bird things, send a colony down with a new kind of head-shield

or what. But they gave me my bonus."

Silence. Harry Lutz started to speak, looked at his companions and stopped. He wet his lips and leaned back in his seat. "Gee," he said at last in a small, wondering voice.

"All right, O'Leary," Vic rapped out. "If you're through with your Horror Stories for Young Recruits we can move. Stations for interstellar

"Station B manned," O'Leary said, grinning so that his teeth showed and the corners of his mouth didn't turn up.

Harry Lutz gulped and straightened his shoulders inside the blue jumper. "Sta-" he started and had to begin again. "Station A manned. Interstellar j-jets away."

Nope, you can't fool the Scouts. They know they're sitting ducks. All the same, Vic decided, Lutz and O'Leary were good for each other. When you made a bounce after a trip where Death had dug a humorous forefinger in your ribs and slapped your shivering back—about the best thing you could find on such a bounce was a younger man who knew less than you did, who needed guiding, whose fear was actually greater than yours because it was latent and had, as yet, hit nothing tangible to set it off.

O'Leary was coming out of himself, thinking less of his own problems and more of the younger man's. And Lutz wasn't being harmed either: if some stories could frighten him enough to make him an unreliable companion, the real thing was no place to discover it. Better find it out now, here, where steps could be taken to protect the other two. In twelve years of Scouting, Vic Carlton had concluded that the only man who didn't scare at what the missions encountered was either too phlegmatic to be useful or else a true lunatic: the normal man was afraid, but tried to handle the source of his fear. Let Lutz find out what they were likely to be up against: his survival chances would be the better for it.

"Oh it's not such a had life at that." Steve O'Leary admitted as, the interstellar shoot under way, they were relaxing in the spherical space which served as combination pilot house living quarters and recreation room, "A month for briefing, two months-at maximum-for the round trip, a month on the planet of mission. If you're lucky, the whole duty period takes no more than four months, after which you get a full thirty days' leave-over and above any hospital time. Pay's good and the glamorstruck women are plentiful: what more can a man ask?"

"Besides," Jutz hunched forward eagerly, transparently glad of his colleague's change of mood. "Besides, there's the real glory—being the first humans to set foot on the soil of the planet, the first men to find out what each world is like, the first—"

"That part they can have," O'Leary told him curtly. "The first humans on each world—hah! The first funerals!"

VIC CARLTON leaned back in his plastic chair and chuckled.
"What's the matter, Steve—did the commissioner flog you into the ship? You didn't have to make the bounce; you could have disenrolled."

"When I'm only five months away from A Scout rating, double pay and retirement privileges? Not that I'll ever have sense enough to retire: the first O'Leary was a romantic bonehead and the male line has bred true. There was an O'Leary who got himself blown apart in the stratosphere back in the days when they were trying to ride to the moon on liquid oxygen; an O'Leary was navigation officer on the Second Venusian Ex-

pedition one hundred and fifty years ago—the expedition that fell into the sun. Science may come and Invention may go, but the O'Leary's will go on sticking their heads into nooses forever. Amen."

They all laughed at his lugubrious nods, and Lutz said: "I only hope all missions will be as dangerous as this one! The star is a yellow type G, just like our sun, and the planet—"

"The planet's only three-tenths of a point off Earth-type!" the B Scout broke in, his mood shifting again, "I know That's what I told those jokers back in Sandstorm. But listen, boy, that planet and that star are around the Hole in Cygnus-do you know what that means? There hasn't been a single planet scouted in that area. let alone colonized. All anybody knows about the Hole in Cygnus are somebody else's theories. Ask any scientist why there are so few suns in the area. why matter behaves the way it does out there, what might have happened to that cartographic unit that got itself losted five or six years ago, and he'll tell you to go excavate your head. One consolation, though: if we don't come back, there'll doubtless be a full-dress investigating expedition. Makes you feel good, doesn't it Vic?"

Carlton shrugged, turned back to his book. He couldn't decide which was worse—Lutz with his callowness, his fumbling inexperience, or the older man whose wry humor flowered so easily into bitterness stemming from obvious fear. For such a mission, he thought, the Scouts might have reversed an ancient rule and allowed him, as commander, to choose his own men.

Although, on his own initiative, whom would he have chosen? A nice dependable B Scout like Barney Liverwright who had been knocked off around Virgo six months ago? An upand-coming C Scout, full of blood and guts, like Hoagy Stanton who was even now dying on Ganymede in a room which the pathologist dared not enter for fear of a virus which might seep through any immunization procedure, any protective clothing?

No, you took what you got, what there was available—what there was still alive. Even on the mission to the Hole in Cygnus, the commander took the men assigned to him, and, Vic thought, watching them as the ship's chronometer told the passage of days and weeks which only it record out here in black space, he didn't have such a had crew at that.

A tight comradeship developed that he had known before. The three men came closer and, despite their cramped quarters and the natural irritations arising from their log-book routine, felt the blood of friendship quicken.

LUTZ IN particular became more sure of himself as he was openly accepted by the other two. Vic watched him, his small dark head like a planet beside O'Leary's huge red sunburst as the two men beat out the measures of a sloppily sentimental ballad currently popular among the Scouts. He grinned at Harry Lutz's tearful tenor winding its melancholy around Steve O'Leary's stanchion-shaking bass.

"No more to the stars will I go, No more a smooth jet will I know; Through spendthrift days, a maiden's praise

Will hold me in thrall

I'll go my ways, and end my days
On some mould'ring ball.
No more to the stars will I go—
O lads!
No more to the stars will I eo."

It hardly applied to Kay, Vic decided. "A maiden's praise—" That

Kay was critical: Kay was strength seeking strength, not a limp flag of a female searching for a strong male staff. With her, for the first time, he had begun to examine the internal forces which had driven him into one of the most dangerous and least re-warding services ever organized by humanity.

That night when he'd come tardily to their date outside Sandstorm's swankiest restaurant and said casually, belligerently, "Just signed papers for Mission 1572. Adventure done got be-

tween us again, girl."

"There's nothing wrong with adventure," Kay had commented slowly, after turning away from him long enough to do something rapid to her face. "Every young man must measure himself against obstacles too big for his fellows. That's how the race advances, that's how new governments are created. It gets to be a perpetual-ed adolescence when it leads to nothing fundamentally constructive; when it's pursued for its own sake."

"The Scouts don't pursue adventure for adventure's own sweet sake," Vic had growled. "The Scouts have initiated every colony in the galaxy they've been responsible for every

outpost in the stars."

She laughed. "The Scouts! Vic, you're talking of a service; I'm discussing the individuals in it. When a man of your age has nothing more to show for his life but a few scars and a dozen tarnished medals— I only know that as a woman, I want a strong, steady and reliable man. I don't want to marry a boy of thirty-two."

"You're saying," Vic went on doggedly, "that pioneers, revolutionaries and adventurers are not mature men. In essence, you feel that the race advances because of its cases of arrested development. Right, Kay? Isn't that what you really think, that adolescence is the period of experiment and excitement—and maturity, the period of settled stodgy dullness where you cultivate your ulcers instead of your mind?"

He remembered the way she had stared at him, then dropped her eves as if caught in a fib. "I-I don't know how to answer that Vic It seems to me that you're talking like a little boy who wants to be a fireman and is secretly very much ashamed of his Dad who works for a fire insurance company, but I could be wrong. I know that with your ten years plus in the Scouts, you could get a commissioner's appointment by asking for it. and that it would be just as exciting to plan missions and prepare younger men for their dangers as rocketing out on them yourself. But I don't want you to give up active duty for me, or even for our possible family, if you haven't grown up enough to want it vourself."

"You mean grown old enough,

She gestured impatiently and turned to examine her hair in the mirror. "Let it go," she said, winding an intricate curl with complete concentration. "I never can see what there is about this discussion that upsets you so. Either you want to settle down and have a family—or you don't. When you decide, "Il be very much interested in hearing from you. Now let's see if Emile's Oasis has that band in from Earth yet."

HE HELD THE door open for her, irritably trying to decide why these conversations always left him with the feeling that he had committed some unpardonable social blunder

which she had been gracious enough

Looking back now, he found he still could not be critical—He found himself wondering what he was doing out here, sharing living space with two strangers named Harry Lutz and Steve O'Learv.

What was mission 1572, what was the first scouting expedition to the Hole, as compared to Kay's soft presence and a youngster in whom they would both appear again? The urge that filled him—the hunger to found a family—was incredibly ancient, and every cell in his body had evolved to respond to it. Sitting watchful in the deep control chair, he writhed inside his stiff blue uniform.

And then a light in front of him

flashed redly.

"Scouts to stations," Vic bawled.
"On the double, there—on the double! Star of mission on the point! Stations for switch to planetary jets." He was calm again, and sure of himself: a mission chief

"Station B manned," O'Leary rapped out, jolting into his seat and pulling a long bank of switches open.
"Station C manned." Lutz's voice

was indistinct through the remains of a quiet supper he'd been enjoying in the galley. "Planetary jets away!"

Vic's eyes raked across them, considered the stellar map spread in front of him, noted the gauge needle palpitating in its circular prison, and checked the relay near his right hand for maximum gap.

And double check.

"Planetary jets away," he called.
"Planetary jets away, away. Jets
away!"

They came into a system of eleven planets whose sun's spectroscopic reading was remarkably similar to that of Sol. Between the second and third planets there was one asteroid belt; between the eighth and ninth, there was another. Three of the planets were ringed—one both horizontally and vertically like a gyroscope—and only one world, the fifth from the sun, supported life.

"Could swear it was Earth if I didn't know better," Harry Lutz marveled as he looked up from an examination of the mission-planet.

O'Leary nodded. "Three-tenths of a point off Earth-type is pretty close. Slightly smaller diameter, oxygen and nitrogen balanced almost on the dot, only two degrees difference in the average equatorial temperatures. And still the exploring ship couldn't find any evidences of intelligent life. Hey Vic—according to Cockburn's Theory of Corresponding Environmental Evolution, shouldn't there be a creature down there who, at the least, innates paleolithic man?"

The A Scout, wearily watching the transvisor click off the remaining million miles, moved his shoulders up expressively.

"I could give you a guess anywhere but in this gap in the wide open spaces. Sure, the biology of a planet that close to Earth physically should have produced an intelligent biped with the beginnings of a machine civilization—but who knows about the Hole in Cygnus? Take those white horrors out there."

THEY FOLLOWED the direction of his arm pointing up at the planet-studded telescanner. Here and there in this system, between planets and upon them, floating free in empty space and clustered about the yellow primary, were seemingly tiny networks of white, dead-pale filaments extending for what were actually hundreds and thousands of miles. Like the broken webs of immense and

ugly spiders they looked, uninterested in gravitation and resembling nothing in a logical cosmos.

"Don't try, Harry," Vic warned Lutz, who was feverishly leafing through an immense volume on the control desk, "You won't find them listed in Rosmarin's Types of Celestial Bodies. All that we know about those things is that they are thereeverywhere in the Hole-and they're too dangerous for the best stuff we've been able to make up to now. Any ship that gets too snoopily close to them, goes out-pouf! It just isn't around any more. Our orders are: MAKE NO ATTEMPT REPEAT IN CAPITALS UNDERLINED MAKE NO ATTEMPT TO EX-PLORE WHITE CLUSTERS AND ANY OTHER PHYSICAL MANI-FESTATIONS PECULIAR TO HOLE IN CYGNUS,"

O'Leary snorted. "That's just this trip. After we get back (if we do) someone at Base will scratch his head and wonder what those white clusters can possibly be made of. So they'll shake our hands, give us a couple of box lunches and a new ship, and say 'Would you mind looking into this matter and seeing if it is really as dangerous as rumored—taking no unnecessary chances of course? And it would be sort of nice if one of you could make it back in time for the Solarian Convention of Astro-Physicists in January!"

They guffawed, Lutz on a slightly higher note than the other two. "Seel" O'Leary slapped his back. "I told you Once we get close to the planet of mission, stop manicuring your nails!"

The planet was enough like Earth to bring on a severe case of home-sickness. True, there were only four continents, and true, there was no dainty moon reigning over the warm nights; but the seas were sapphire

enough for a man to lie on their white beaches with a bottle of whiskey and get drunk without opening the bottle, and the clouds pushed their curling bellies across a subtly tinted sky unaware of the glorious things poets could do with them. Here and there, a perfect island poised above the noiseless indigo waters, waiting for a painter to whom to give itself.

Tall trees boiled up the sides of mountains, lush grass waved on the uncombed prairies. Deserts sweltered their immense length of golden moistureless sand; and, in the North, a huge ice floe precipitated Spring by plunging into the Polar Sea with a wild shriek of freedom.

But on all the land, and in all the seas, they saw no living thing move. "Like the Garden of Eden," Harry Lutz breathed, "after the Fall."

O'Leary looked at him, bit his lip. "Or Hell, before it."

After they landed, Vic assigned investigative watches. Much easier than the nerve-wracking space watch, the investigative watch was, at this stage of their mission, much more crucial. Both Scout Regulations and their appreciation of safety-first measures demanded that the most painstaking examination possible be made of the planet while they were still inside the ship. Not only did the ground have to be checked for such topographic capers as earthquakes, floods and volcanoes, not only did the possibility of dangerous sub-microscopic life require careful consideration on so Earth-like a planet; but also-especially here in the Holethey must be on the lookout for the completely alien, the peculiar deadliness without precedent-up to now.

Not until all these precautions had been taken and the log-book carried to the moment of landing did Vic realize he hadn't thought of Kay for ten—or was it fifteen?—hours. Kay Summersby was just one more blonde adventure that hadn't quite worked out, another backdrop in his memory —a little more important, a little more protracted than the rest. His responsibilities—the mission—his men—

"Hey, Vic," Steve O'Leary frowned up from the telescanner. "Do you know there's a white tentacle thing on the other side of the planet?"

THE MISSION commander grunted, moved to the side of the B Scout and scratched his chin at the instrument.

"Black Space!" he growled. "What would you call it? Doesn't seem to be alive, doesn't move, doesn't have any visible connection with the ground: just hangs there, butting the eyes. Makes me think of an unhappy hour someone ripped up and threw away."

O'Leary pulled at his fingers.

"Yeah I don't like it, and I don't want to see it. According to regulations, we're supposed to stay at least a full jet-trail length from these babies—and here this thing is a stinking 7500 miles off in a straight line through the planet."

"That's just our own bad luck,"
Carlton told him. "It's on the planet
of mission, and our mission orders always move ahead of Scout Regulations. Just remember to keep your
distance on exploratory trips. Hear
that. Lutz"

The C Scout nodded. "When do we start the trips, Vic? If there's anything dangerous on this unearthly paradise, I'll eat my helmet from the antenna down. I'd like to feel some ground slapping at the soles of my feet."

His superior shook his head.

"Take it easy, boy, take it slow

and easy. On a strange planet, all you get for hurrying is a sooner grave than your neighbor. And if there's anything dangerous on this world that you don't know about when you step out of the lock, why, you won't have to eat your helmet. Because it will eat you, helmet, radio phones and all. Now relax and get back to that telescanner. There must be something alive here besides trees, grass and potatoes."

But there wasn't. At least they couldn't find anything though they spelled each other at the telescanners, nudged the beam back and forth over the four continents and peered at the screens until their eves writhed with fatigue. They found minute one-celled forms in the specimens of air, soil and water the ship's automatic dredges picked up; O'Leary's shout brought the other two tumbling out of their bunks the day he thought he saw a bird (it turned out to be only a leaf tortured by the wind); and a few large green balls they noticed scudding about excited their interest until the scouts decided from their aimlessness and lack of sensory apparatus that they were over-large spores of some plant.

They saw no herbivores cropping the rich vegetation, no carnivores slinking behind them for a spring. The seas held no fish, the woods no termites, the very earth itself no earthworms.

"I don't get its," Vic growled. "The botany of this planet is sufficiently close to Earth's to indicate a terrestrial zoology. Where is it? There's no creature out there large enough to have eaten all the others. So-o-o-"

"So?" Steve O'Leary prompted, watching his chief closely.

"Maybe it's something small enough to have done the job. A virus, say. A complex molecule halfway between the animal and mineral kingdom, something not quite alive but a million times more dangerous than anything that is."

"But Vic, wouldn't I have hit it with the electron microscope?" Harry Lutz spread his hands nervously. "And whatever I muffed—well, the robot eye is still classifying five thousand specimens a minute. If a virus did for the birds and beasts here, we'd have come across at least one culture by now."

"Would we? If it were a virus that couldn't adapt to plant life, it might not be very active—or very numerous —at the moment. Then again if we did turn up a specimen, how would we know?"

"The robot eve-"

TIC CARLTON grimaced. "The robot eve! One way, Lutz, not to grow old in this service is to believe everything the manuals tell you about the equipment. Sure, the robot eve attached to the electron microscope makes a fine pathologist. But all the robot eve has behind it is a robot memory-a file of every microscopic and sub-microscopic form of life which, in the parts of the galaxy explored up this date, have been found inimical to man. If it sees something enough like one of the items in the file to close a ten-decimal relay, we're warned. And it's warned us of a dozen or so species on this planet which it turns out our stuff can handle. But there's never vet been anything like a robot imagination. Your little machine. Harry, can't scratch its mounting and say 'Now, I don't like the looks of that baby there, harmless though it may seem.' Whenever a robot eye hits something completely out of memory file, you know what happens."

"Yeah." O'Leary chuckled and swung himself up to his bunk. "Three corpses in Scout uniforms and, after the investigative expedition, maybe another item for the eye's robot memory. That's the way we learn, Lutz, old soak: trial and error. Only, me brave young C Scout, we're the trials and—ever so often—we're the errors too." He lay back on the bunk, and, as his huge red head disappeared from view, they could hear his deep voice caroling, "Oh, I'm the bosun tight and the midshipmitte—"

Lutz looked unhappy as the other man slid into his morbid humor. The enforced seclusion aboard the little ship, from which he could see the gloriously free miles of acreage which surrounded them, had not done Steve O'Leary any particular good. He was too long in the service to question discipline, especially as regarded safety measures; but his subconscious could whisper irritably, and rumors of fear leaped irresistibly upwards in his mind.

More than ever, Vic felt himself drawn to the younger man. At least Lutz wasn't riding a recent scare: he had no idea, as yet, how cold his back could get.

"Look," the mission commander said kindly. "I'm not saying that there is a bug out there waiting to knock us off. I don't know. Maybe out here in the Hole, there's some radiation effect which inhibits the evolution of complex animal forms. Maybe. I'm just saying that we keep looking and keep guessing until we feel we've exhausted every possibility of danger. Then, when we finally take a stroll outside the ship, we wear space-suits with both Grojen shielding and Mannheim baffles."

O'Leary's head came up out of his bunk again. "Hey!" he said disappointedly. "That much weight and we'll have to use electrical medullas to walk. I was looking forward to a hop, skip and jump under my own power. A little run across the ground would feel awful good." HE SHUT up and lay down under Vic's thoughtful glare. And it was the thought behind the glare that made Vic tell him the day they were ready to begin exploring the surface:

"I'm taking Lutz with me. We want the man in the ship to know what to do in case something pops. So you're

elected. Steve."

The redhead watched them struggle into cumbersome, equipment-laden space-suits. He kneaded huge hands into his hips. "That's not customary, Vic, and you know it. Man on a bounce is the first one through the lock."

"If the commander sees 't that way," he was told curtly. "I don't. You'll get your exercise later. Meanwhile, I want you to sit over those jets like a runner in a hundred-yard dash. If we get into trouble and you can help us, fine; but if it looks at all tight or too unusual, remember the primary purpose of the mission is to gather information about the Hole. So you cut and run."

O'Leary turned his back and began working the air-lock. "Thanks, pal," he muttered. "I can see myself back in Sandstorm swearing to the boys that you gave me exactly those orders. I can see myself."

They climbed down the ladder and started across the surface. Vic, in the lead, was being very cautious; behind him, Harry Lutz sweated, stumbled and cursed in the huge suit with which even a year's training had not thoroughly familiarized him.

The commander stopped in what looked like a grove of chest-high elm trees. "Take it easy, Lutz," he suggested. "You're carrying a lot of weight and you can't possibly move it all correctly. The trick in using an electrical medulla is not to let your right hand know what your left is doing. I know you had enough workouts in those things back at the academy to

use the right fingers on the right buttons. It'll be second nature if you give it a chance. Just relax and take in the scenery: concentrate on what you want to do, where you want to gonot how you want to do it. And once you stop thinking about them, your fingers will take care of the medulaswitches for you. They've been educated to do the job."

He heard the C Scott take a deep breath through the radio phones. Then, as Lutz looked about him and relaxed visibly, his pace became more regular, the movements of the suit—weighted down as it was with Grojen shielding, Mannheim bafles and intricate operating apparatus—even and controlled. Lutz had managed to shift his thoughts from the motor to the conscious level; once that was done, he could be of maximum assistance while his fingers played over the proper switches inside their enormous metal mitters.

Good kid, Vic smiled to himself. Lots of rookies flopped about for days after they had occasion to use electrical medullas on actual mission work. Lutz had enough control to overcome the inevitable panic resulting from walking on a strange world for the first time in a garment that was essentially a robot. He caught on fast. He tried hard.

That's the way I'd like my son to— Vic shut the thought off. There was work to do. And a younger, more inexperienced man to watch. Still—

They picked their way through the miniature trees, Lutz now striding along easily, and up a slight rise in the ground. They stood at the top of the small hill finally and looked around while luxurious branches waved in the direction of their stomachs.

From the stern mountains in the distance to the stream dodging shrilly about rusty old rocks nearby, the

land on which they stood yawned under a summer sun. Pink and blue grasses stretched and waved at each other. Mist rolled out of the huge lake a mile or so away.

LUTZ CHUCKLED inside his helmet. "Always did want to see what a vacation paradise looked like before the real estate boys moved in!"

"If they ever do. See anything moving here right now?"

moving here right now:

"Well, that—and these." Harry Lutz indicated the towering bramble forest to their right and the dwarf trees around them.

"Plants. Trees and bushes bending with the wind, waving with the breeze. Nothing like a rabbit, say, breaking cover as we step over his burrow, or a bee skimming along and looking for an appetizing flower. No creatures like bugs working the soil, no birds flying overhead and considering the possibilities of bug-dinners."

"But we knew that already-from the telescanner."

"I know," the mission commander scraped a metallic mitten along his helmet. "But why? The plants aren't carnivorous: with minor alterations in chemistry and morphology, you might expect to find them on Earth. I tell you I don't like it, Lutz. Why shouldn't this planet have a zoology?"

"Maybe all the animals went into the Hole," Lutz suggested brightly.

Carlton stared at him. "You know," he began, "you may really have something there. Of course, the Hole in Cygnus is an astronomical term," he went on hurriedly. "But there's a lot out here they never heard of on Mount Palomar or Sahara University either. "Maybe all the animals went into the Hole." What about that—"

"Hey, Vic!" O'Leary's voice from the ship. "Green ball—one of those spore-things—rolling straight for us."

"From where?"

"You should be able to see it in a moment. Due north of that mountain range. There! See that speck coming through those twin peaks?"

The two Scouts outside the ship unsheathed supersonics and crouched as the speck grew into a dot and then into a ball of green hurtling at an almost unbelievable speed.

"Better go back?" Lutz asked ner-

vously.

"We'd never make it—not with that baby traveling as fast as it is. Just keep still and keep down: I've an idea that the solution—"

"More of 'em," Steve O'Leary's voice cut in excitedly. "Two bowling up in a line from the southwest. I don't think they're spores at all; I think: they're intelligent and mighty like animules. And they all— Hey-y-y! I just located the mother-lode with the telescanner. Guess where?"

"Let's play games another day,"

Vic told him.

"From that mess of white tentacles touching the planet on the opposite side. A whole flock of green balls just boiled out. Could those tentacles be alive, have sense-organs? Doesn't seem logical, though, when you consider a couple of them are floating in empty space—"

"Forget the tentacles, O'Leary, and concentrate on the green blobs for a while. I believe we started all this excitement—Lutz and I—by walking out of the ship. Stand by the jets for a scram—with or without us."

"Not on your rating. That's final, Vic! Either you boys fight your way back in or I come out to join you."

Carlton bit his lip. The green ball was almost overhead now, its smooth, completely featureless surface flickering most oddly. That was always the trouble with a man making a bounce. He fluctuated between abysmal fright and mountainous bravado, both nothing else than a simple fear of being

afraid—and both always coming up at the wrong times. Right now, he wanted a subordinate who could understand the supreme importance of the first mission to the Hole, who could appreciate a situation where information might be a thousand times more important than the lives or opinions of others—and who would be rock-steady in an emergency instead of skittering about with a private neurosis.

"All right, O'Leary. Secondary attack precautions. Get into a spacesuit and man the bow gun. Robots on the others. Switch to full visiplate hook-up. But keep those jets ready

to blast!"

"Uh—commander," Lutz broke in.
"Three of those balls overhead. More coming. But they're ignoring us: they just bang around the ship."

VIC CARLTON stared upward.
He'd never seen anything quite
like these spheres. Their color might
argue for chlorophyl, but they were
far too animate, too purposeful, to
have botanical origins. Vehicles in
which sat sentient organisms? That
might account for the lack of such
things as eyes and locomotive appendages. But, then, where was the jettrail or any other evidence of a propulsive device? And surely the way
they expanded and contracted seemed
to point to an intrinsic life of their
own. That was really odd, now—

"Could they be breathing?" the C

Scout wondered aloud.

"No. Too irregular for respiration, I'd say, Just keep still Lutz and wait it out. This is the hardest part of a mission, boy, but patience has saved more lives than all the Grojen shielding ever made."

They waited, inside their great suits, while the number of balls increased to twelve, all shooting about the ship in straight, determined lines. Evidently. Vic reflected, while they sat still, they

went unnoticed.

Suddenly, one of the spheres paused outside the air-lock.

"Seems to know its way around," O'Leary commented from the ship. He laughed twice, the second time after a few moments pause. "I'm getting jumpy, Vic."

"Don't," he was advised. "They may be smart enough to know how we enter and leave the ship, but they can't have seen many space-ships if they get this close to a fully armed one. Sit on your nerves, Steve: once they thin out and we can get back, we might try communicating with them. Although they don't seem to be responsive. You're wearing side-arms, I hone?"

"Supersonics. And a heavy blaster across my lap. Blow a hole through the hull if I use it, but if I have to—Say! Is that baby doing what I see

through the visiplate?"

It was. The ball had withdrawn a little distance from the ship and came rushing towards it rapidly. It bounced gently, soundlessly, off the hull, retired and repeated the process. The horizontal lines in which it moved and the insistent nature of its repetitious approach reminded the three Scouts of a fist knocking at a door.

Then-it disappeared!

They shook their heads and grimaced at the spot where it had last been in the midst of another rush at the airlock. It was gone, with no faintest emerald trace left behind on the lazy air. Around the ship, eleven balls shot back and forth, back and forth, in absolutely straight lines. But there had been twelve a moment ago!

"C-Commander, wh-what do you

think h-happened?"

"Don't know, Lutz. But I definitely don't like it."

"Neither do I," O'Leary whispered in their radio phones. "This is one of those moments in a B Scout's life when he wonders what he ever saw in an A Scout rating to make him leave home and mama. I'd like to be back in— No! Vic, it's impossible! It couldn't—It—"

"What happened? Steve! What's

going on?"

"The damn ball materialized inside the ship—just as I was reaching over to the—not five feet from me—made a rush at my head—almost got.—" Steve O'Leary's voice came over in jerky snatches as if he were spitting out each fragment between jumps. "Chasing me all over the Control Room—no, you don't—caroming off the bulkheads like a billiard—wait, I think I have a sight—"

A TREMENDOUS roar. O'Leary had used the blaster. Echo after echo piled crazily upon their eardrums and a jagged hole flapped open near the nose of the ship as if it had been punched out.

"Missed! Could've sworn I had a clear sight—blast went practically head-on—don't know how I missed—now, maybe with a supersonic—well, what would you call that? Vic! It's disappeared again! Clean gone! I'm getting out of here!"

"Careful, Steve!" Carlton yelled.

"You're panicky!"

There was no reply. Instead, the air-lock swung open, and Steve O'Cleary, space-suited to almost twice his normal size, leaped out. He carried a supersonic in his left hand and a blaster in his right and he came out shooting. Eleven green balls converged on him, riding imperturbably through his blasts.

The two Scouts on the bill had leaped to their feet. They shot bolt after bolt of high frequency sound, sound which could dissolve any conceivable organic structure into its component chemicals. They might have been using water-pistols for all the

effect they had.

A twelfth ball appeared directly in O'Leary's path. It began the size of an apple, and, almost before their eyes could register the change, had coruscated glaucously to the diameter of a life boat. A little in advance of its fellows, it shot at the B Scout.

It touched him.

And he screamed.

His scream seemed to have begun years ago and continue into the unguessable future. And then, the entire space-suit seemed to fly open and-not O'Leary, but his insides came out. Where a metallic figure had been running, covered with a Grojen shield and lightly draped with Mannheim baffles, there was now only stomach spleen, liver and intestine. stretched fantastically, unbelievably, into the shape of Steve O'Leary. The figure took another step, and the scream ululated out of human recognition. Then it stopped.

O'Leary was gone. And the green

ball was gone.

The other balls had passed over the spot where Steve O'Leary had disappeared. Two of them disappeared in turn. Nine returned to the ship and continued their determined, whipping investigation.

Lutz was being violently sick inside his space-suit. Vic fought for self-control. Had he or had he not seen the emerald ball change to a deep olive and then to the color of powing blood just before it went out?

"Listen, kid," he said rapidly.
"Keep still, keep absolutely, perfectly
still—no matter what happens. Don't
even roll your eyes. I think I know
what those things are, and I don't
think anything we have can stop
them. Our only hope is to avoid attracting attention. So don't move until
I give you the word. Got that?"

He heard Lutz's breathing become more regular. "Y-yes, commander. But don't they remember us shooting at them? And can't they see us standing here in plain sight?"

"Not if they're what I suspect. Relax, kid, relax as far back as you can. Remember, not a movement of any kind you can control. And no conversation for a while. Nothing, Just watch and wait."

They waited. They watched. They waited for hours, half-reclining in their immobile suits, while the green balls tore back and forth, appeared and disappeared silently, steadily, with unwavering purpose. They watched the blue line running the length of their precious ship-the line that proclaimed it a Scout vessel and able to outrun anything in space-. they watched the blue line dissolve into the grav metal around it under the thick suds of twilight. And they made no movement, no, not even when a bloated sphere of green expanded in front of them suddenly and seemed to consider them under invisible optic organs before losing interest and scudding away.

That was the hardest part, after all, Vic decided: not moving even though the feeling that they were under surveillance increased with every second; not jerking suddenly, though most ancient instincts shouted that it was time to run, that this very moment they would be attacked by the unseeable.

HE CAME to appreciate his companion's qualities in the course of the awful vigil: not many men could maintain that necessary exterior calm on the very knife-edge of extinction. One good kid.

They waited; they watched; they didn't move. And they thought about Steve O'Leary....

Finally, two of the balls rose and flew off to the north. An hour later, two more followed. The remaining five came to rest above the ship, forming the points of a rough pentagon.

"All right, Luta," the A Scout murmured. "We can unbend—just a little! Six hours of daylight. We'll sleep two hours apiece, you first, one watching while the other takes a nap. That'll give us some rest before we make our play; and maybe in that time the five tumblebugs will decide to go home."

"What are they, commander? What in the name of intergalactic space can

they be?"

"What are they? A leak in the Hole in Cygnus. They're where all the animals went."

"I-I don't understand."

Carlton almost gestured impatiently, stopped himself just in time. "There's much that's peculiar about the Hole. Not merely the absence of ordinary celestial phenomena, the rarity of stars and such-like, but loopholes in natural law which you find nowhere else. A majority of modern theories consider this general area the starting-place of our particular universe; whether they begin with space warping in on itself because it got tired of standing around in time, or with one version or another of the explosion of a primordial atom-whatever they begin with these days, they work in the Hole in Cygnus somehow as the place where it all occurred."

"Yes. Ever since Boker came out here two hundred years ago and discovered the sectors of chronological gap."

"Right, kid. Now I don't claim to know how the universe started. But I'm willing to bet my next meal in Sandstorm against the dust on your right boot that this was where it did. And from the looks of things, the area around Cygnus never recovered. It remained a hole in space where all kinds of stuff that shouldn't be, is—and vice versa. That moment or mil-and vice versa. That moment or mil-

lennium of creation tore it up plenty. And among the tears, among the cuts that were never healed, I classify those white tentacle thingumabobs all over this system."

"And the green balls came through the one on this planet from—from—" "From someplace outside. From an-

"From someplace outside. From another universe which we can't reach or even imagine"

Lutz thought about that for a moment. "On another plane, you mean, commander?"

"On another dimension. The fourth, to be specific."

"But 'way back in the twentieth century they proved that the fourth dimension was time and we move through it!"

"I mean a fourth spatial dimension, Lutz. A universe where there's length, breadth, height—and, well, one more direction, besides. Time, too, but even a conceivable two-dimensional creature must have duration in order to exist. And that's the way to understand those babies: what they can do, what those babies: what they can do, what they can't, what happened to O'Leary and what hope we have of covering those sixty yards to the ship and taking off. Analogy. Think of a twodimensional man."

"You mean width and length, but no height? Gee—I don't know. I guess we'd see his skin as a thin line around his skeleton and internal organs. And—wait a minute—he'd be able to move and see only on an absolutely flat surface!"

Carlton silently thanked the academy officials for entrance examination that weeded out the least imaginative. "You're doing fine. Now suppose we stuck a finger into this two-dimensional world. The man in it would see the finger as a circle—just as we see these creatures as spheres. When the tip had gone through his world and the finger proper was visible, he would feel the circle had

grown larger; when we pulled the finger out, he'd say it had disappeared. If we wanted to eat him, say, we could hover above him while he ran from the place where he'd last seen us. Then pounce down in front of him, and he'd think we'd suddenly materialized out of thin air. And, if we wanted to lift him into our world, our space—"

"We'd pick him up by the skin and his insides would momentarily be the only part of him visible in his world." Lutz shivered involuntarily. "Ugh. Then those balls are sections of fourth-dimensional fingers—or pseudonods?"

"I don't know. I suspect, though, these creatures are fourth-dimensional equivalents of our very simple forms-anything from bacteria to worms-but still dangerous as death itself. I don't think they're very complicated animals on their world because they seem to have pretty elementary sense-perceptions. They don't hear us, smell us or feel us; and they only chase us when we move. That all adds up to a fairly primitive organism, even in four dimensions. It would explain why there's no animal life on this planet, but plants of almost every kind: animals are motile. so they were chased and eaten; plants generally grow in one spot, so they were ignored."

"But, Vic, we have to move to get back in the ship!"

"We have to move, but not in straight lines. Not the way those balls move back and forth, not the way O'Leary moved. We'll run a purposely erratic course to the air-lock, we'll stop unexpectedly, we'll zigzag, we'll turn around and double on our tracks. It'll take up extra time, but I'm betting that our green chums haven't the sensory or mental equipment to solve a random movement fast enough." "Poor O'Leary! It'll seem all wrong going back without that big loud redhead."

"We aren't going, kid, until we get inside that ship and flush those jets behind us. Now grab some sleep before we run out of night."

AS THE C Scout closed his eyes obediently, Carlton risked a glance at him. Tired, scared as hell, but still swallowing orders with alacrity, still willing to take chances. One good kid, he repeated to himself. Wonder if he's started shaving yet. Nope—with that jet-black hair and creamy complexion a beard would be very obvious, even a couple of hours growth.

Wonder who he has waiting for him back home. Probably only his mother; doesn't act like the kind of kid who's played around much with girls. Probably only the girl, the one he took to the graduation ball at the

academy.

Wonder what Kay would think of Lutz—would she understand him? Wonder who's waiting for

O'Leary....

The green spheres above the ship were perfectly still, their smooth bodies ignoring even the stern night wind that roared down from the mountains. Asleep, in their own peculiar way? Or waiting?

Lutz and O'Leary: two good guys, Kay. Adolescents? Spacewash!

Vic let Lutz sleep for almost three hours before awakening him. It would take two to do this job right, and he wanted the younger man's nerves to settle as much as possible.

"I lost track of my nerves about five years ago off Sirius," he explained.

"All the same, Vic, all the same, you can't punish yourself like that! Why you won't even have a full hour yourself."

"It'll do me fine. Now just stand guard and whistle once—loudly—if anything is on the verge of popping. And whistle at the end of the hour."

He fell asleep instantly and dreamlessly with the ease of the experienced Scout who has used his space-suit as a flophouse many times. He woke a moment before the hour was up, when the alarm clock buried in his subconscious went off.

Lutz was singing under his breath to keep himself company. Almost without sound, just enough of the words came through over the radio phones to make the song clear. Carlton listened to Lutz sing with all the loneliness, the longing, of the last man alive:

"...and end my days
On some mould'ring ball.

No more to the stars will I go-

O lads!

No more to the stars will I go!"

"First," the commander broke in cheerfully, "you need a maiden's praise, kid. To hold you in thrall. But you wouldn't understand that part."

"Sorry I woke you, Vic. I was just going to whistle. And when it comes to a maiden's praise, I do as well as the next guy. Had a tough time getting away for this mission, let me tell you!"

"Who—your sister? Or the girl next door?" This light banter would develop just the right mood for what they had to do.

"My sister?" Lutz laughed boyishly. "Hell, no. My wife."

Carlton was amazed. "Are you-are you married?"

"Married? I sincerely hope for the sake of my children that I am!"

"Well, I'll be- How many do you have?"

"Two. Two girls. The youngest, Jeanette, is only three months old. She's a blonde, like her mother."

"Yes," Vic mused. "Kay's a blonde. Her daughter would probably-"

"Kay? Your wife, commander?"

"No. My fiancee," Vic told him stiffly. "Well, one good thing about marriage, Lutz; your dependents are well taken care of. The Scout finance department doesn't recognize engagement rings. I guess that's a comfort to a husband and father if he's knocked off somewhere in emptiness."

The C Scout looked down at the ship. "All five of them still there, commander. I'm ready to go any time

you give the word."

There was a pause. "Look, Lutz," Carlton began awkwardly. "I'm sorry if--if--"

"No offense taken if none's given, Vic. Only thing, 'way back in my second year at the academy I decided that I wanted to get married, I wanted to have a family-and I wanted to be a Scout, All three. So you figure it out. Me, I find it hurts my head."

"All right, then; let's concentrate on what we have to do. When I vell, we leap sideways and come down upon the ship in two converging arcs. Using medulla-switches, we can run twice as fast as a horse. We don't run more than two steps in a straight line if we can remember it-and we've got to remember it! First man in kicks the jets over. If the other man isn't in by the time the ship takes off, he's left behind. No second chance, no waiting a moment longer, no looking back. I think if we do this right, we can confuse them enough to get away together, but if we don't-remember that we can't help each other and that our records and interpretation must make it to Sandstorm, Check?"

"Check. And good luck, Vic."

"Good luck, Harry, And good running."

THE A SCOUT looked around one last time to judge the ground he would have to travel. His fingers crept over the switches in the mittens. ready to galvanize the suit into a breakneck speed. "Now!" he roared, leaping off to the left. "Play ball!"

As he pounded down the slope, his speed and weight uprooting the tiny trees in his twisting path, he could see Lutz, far off to his right, zigzagging with him. They might make it. They might-

They got to twenty yards of the ship before the green balls noticed them. And streaked straight for them without hesitation.

Carlton stopped, leaped backward, sideward and came around the stern of the ship in a great curve. Lutz was coming down the other side, his course resembling a drunk with rocket attachment. The air-lock gaped open between them. Immense balls sped by hungrily, almost touching, almost- Only eleven yards. Double back and leap forward again. Nine yards. Jump away from the ship and cut in at a sharp angle. Seven.

"Look, commander, I'm in-I made it!" Only six yards from the air-lock -only eighteen feet!-Harry Lutz lost his head. He came up in a tremendous broad-jump powered by the motor of the heavy suit. He aimed at the open door of the air-lock, evidently intending to catch it in mid-air and pull himself inside. But it was he who was caught in mid-air.

A green sphere materialized twelve feet from the lock and Lutz, unable to check himself, smashed into it. Almost before he began screaming, almost before he began to turn inside out, the remaining four balls had shot to the other side of the lock to observe or partake of the prey.

The way was clear for Carlton. He leaped inside, almost brushing the crimsoning ball-wondering whether he could have done it if they hadn't caught Harry Lutz.

"Poor little Jeanette," he wept as Lutz's scream bit and clawed at his ear-drums, "poor kid, she's only three months old!" he cried as he pulled the red switch on the control panel and jumped away for a moment just in case. "Poor little blonde Jeanette, she's only a baby! She can't remember anything," he screamed in sympathy to Lutz's continuing scream as he swung balance-control, adjusted accelerationhelix, felt the ship whip up and outward with him-and continued to zigzag about the control room because you never knew, you just never knew about those green balls.

But when he had switched to interstellar shoot, and found Lutz's scream still in his ears, still rising in insane volume, when he found himself unable to stop leaping backward, forward, sideward, about the control room—he attached the main oxygen tanks to his helmet and turned on the automatic alarm.

A PATROL ship got to him three days later. There was no air in the little vessel because, while the lock had closed automatically upon take-off, the hole in the nose had never been repaired. But Vic Carlton, completely exhausted and with eyes like diseased tomatoes, was alive in a space-suit designed to keep a man alive under the most incredible conditions. He had disconnected his helmet phones and, when they hauled him out of his ship, he kept beating both mittened hands against heis head in the region of his ears.

They gave him an anaesthetic in the patrol ship hospital and set a fast course for Sol.

"Poor little Jeanette Lutz," he whispered painfully just before he fell asleep. "She's only three months old."

"Are you sure you can pull him through?" a perspiring commissioner asked in the hospital on Ganymede, "Because if there's any danger that you can't, let's use a hypnotic probe. The information he's carrying is worth the risk of permanent damage to his mind."

"We'll pull him through," the doctor said, making unhappy early-morning grimaces as he washed his mouth with his tongue. "We'll pull him through all right. According to his charts, he's survived concentrated therapy before. No point in blowing out his brains with a probe when he'll be able to tell you everything you want to know in a week or two."

"I told them everything," Vic informed Kay three weeks later when he met her on the main floor of the Scout Operations Building. "I told them off, too. How can you expect a man to take a bounce, I said, when the Service itself won't? That's what the Patrol big-brains decided—that the Hole is still too dangerous for anything mankind has. They're going to wait a while before sending another exploring party there. Well, I said—"

He stopped as the elevator doors slid open and the crowd of Scouts surrounding the three helmeted ones in the center moved toward the double doors chattering and chaffing.

"Look at Spinelli, fellows! He's

dead already!"

"Poor Spinelli, his first command! Hey, Spin, this is the bounce Carlton wouldn't take! He musta known something!"

"Hey, Tronck! What're you looking so green about!"

"Steady there, Spinelli. You're a commander now!"

Vic's hand crept to his chest as the men passed. He fingered the gold star which glowed from the spot where, an hour before, a silver rocket had poised.

Kay touched the star, too. Her back was to the men marching to the ship, but her eyes shone into Vic's. "Commissioner Carlton! It sounds as if it was always meant to be just that. Alliterative, too! Oh, Vic, this is the way we said it would be—this is the way we both wanted it. You, with the fire still in you, knowing that you're a grown man, knowing what you want—"

From the distance, they could hear the song:

"If it's a girl, dress her up in lace;
If it's a boy, send the———off
to space!"

"Darling," she whispered, pressing his hand against her cheek. "We'll have lots of lace and lots of space. We'll have everything." Vic didn't answer. He stood, ignoring her completely, as the three men sang themselves into the slender little ship with the long blue stripe. When the ground crew scattered with warning yells of "Jets away!" Jets away away, jets away!" he took one resolute step forward, stopped—and put his hands in his pockets.

Then the sudden scream and clatter of flame, dying almost before it had been felt; then the silver pencil up in the sky that left a thin line of brightest scarlet behind it. The ship was gone, and a cloud waddled over its trail, but still Vic stared upward. Kay

said nothing.

When, at last, he turned back to her, his eyes were full of middle age.

THE END

FLYING EGGBEATER

IT'S A SORT of habit to classify any—thing with a propellor today as a "flying eggbeater." Once contemptuous pilots of vast jets applied this only to the helicoptor. But now, the jets seem to be the important thing.

nelicoptor, rue now, the plea second to the batter of the form of the batter of the form abandoning the propeller-driven plane. This is especially true in the light of some recent new developments. Till now, the decline of the propeller has come from the fact that prop is turning around the speed of sound, shock waves of air are set up along its length and it can vibrate and shatter itself into little pieces.

Scientists have started to look into the matter. A lot of math and many experimental propellers later they've come up with some revolutionary ideas—among them, the idea that the prop can work at some speeds—if it's designed for the job. By alto-tening the prop and narrowing the prop and narrowing the prop and narrowing the prop and the proper can now be used at the incredible velocities we're accustomed to! The propeller is by no means dead!

Jets are bad, inefficient and wasteful at slow take-off speeds. But that's where a prop works best. By combining the jet with the prop we're likely to have the best machine suited for the purpose. Billitary planes may sick to the jets—but for transport work of the immediate future look to the jet-popl

POWER TUBE

T'S A FAR cry from the little radio tubes in your television and radio sets to the monsters used in transmitting and in industry—but the fact is that they both work exactly the same.

work exactly the same, to particularly astonishing to learn that the world's largest to the same of the same of the same of the largest of handling apower output of five hundred kilowatts—five hundred thousand watts. An ordinary radio tube consumes from a fraction of a watt to a few watts.

Startling as is the apparent difference in power here it takes the same basic electrons to the job in the same basic electrons to the job in the same basic way. The filament pours out electrons and the plate catches them with a wire grid doing the controlling. Air does the cooling in the small tube; but water is pumped through the elements of the bigger one.

The development of such large tubes is necessary not only for broadcasting but for industrial use which is taking hold of radio more and more. Induction heating ranging from eooking hot-dogs in a vending mechine to fabricating aircraft bodies finds ready need for powerful radio tubes. It is also possible that these tubes much the form of the first possible that these tubes much the first possible that these tubes much the first possible that these tubes much first possible that the firs

It is also possible that these tubes may make a long-standing dream come true—the radio transmission of power! Already a surprising amount of success has been had with tight-beam short wave communication. Its extension to the power transmission field is not at all unlikely.



By Lester del Rey

As a movie idol his face was his fortune and he didn't mind a fan taking his picture —but this particular camera stole it as well!



As the shutter of the camera clicked, an aura-like ray swept over his face-and he felt strangely light-headed

T'S TRUE that the television industry has been making offers of a billion or so to lease rights to Claudius the Cat, but you'll still be a fool to rush out for that big-screen set. The movie boys still remember the days before Valentine August lost his face, when they were worrying about TV putting them out of business. And now that the tax

on reserved-in-advance admissions to Claudius the Cat films has paid off the national debt ... well, what's a billion or two?

It just goes to show that the beer in Brooklyn is worth a little loss of face. Any sailor will tell you lots of things get lost after beer in Brooklyn. But this time it was different; it happened to Valentine August, whose face was Colossal's fortune; and Valentine lost his face—not to mention his head—before the beer

Naturally, Valentine August wasn't thinking of that-since he didn't know what was coming, mercifully-as the stratoliner drew in toward New York. He was thinking of the thirty-eight New York Valentine August Fan Clubs: mostly he was thinking of No. 32 where on his last visit the vicepresident had kissed him-with loose bridgework that slipped and bit him. Valentine sighed. He was not fond of New York and definitely doubtful of the dental skill of the technicians patronized by the members. He hated all premieres, even the gala one scheduled for his latest, Compose Yourself, Arthur. And then there was that nut, Professor Coma, who kept sending him threatening letters from some place in Brooklyn.

If Lorelei Lee hadn't gone east for the premiere, he'd have stayed home and gone on a binge. But as the writer of the opus, she was already in New York. And in addition to being the best script-writer for Colossal, she was so lovely that after one look at her, Valentine found it difficult to reconcile himself to kissing Lana Turner, Hedy Lamarr and the other cookies he ran across in his movie-making.

He sighed, and reached for his handkerchief, just as something dropped out of nowhere into his hand. There was writing on it, short and not too sweet:

"Valentine August, you are a ham and the bane of all lovers of cinematic art. If I were not a tenderhearted man, I should eliminate you. (Signed) Prof. Graham Coma."

Valentine made short sounds, loud enough to wake up his producer in the next seat. Joe Epic looked up, snorted, and made the nasty sort of noise only a producer can make. "You still mooning over Lorelei Lee?"

Valentine forgot the note at her name. All his troubles came trooping back While he'd stared at her golden hair tiny tin-tilted nose and wide upslanting eyes, barely resisting the temptation to howl like a wolf, she'd made comments. She'd claimed she'd vote the Academy Award to any alley cat in preference to him. She'd indicated he was half of America's favorite breakfast, the other half being eggs: and that he'd caused the rebirth of vaudeville She mentioned that his strangely dry, learned voice was a fine thing to hear, but as romantic as cold ravioli on soggy toast. She'd given him the name of a school that taught nlumbing

"No, Joe," Valentine answered. 'T'm not mooning over her. Just wondering when we arrive... Did I tell you she went out and picked up an alley cat—the meanest, biggest tomcat she could get? And named it July, because that always comes before August?"

Joe Epic grunted. "Tell me about it sometime. Trouble with you, Valentine, is you let her walk on you. What you should do, see, is grab her, hold her, and kiss her young head off. And take that paper outs your hair."

Joe went back to sleep as Valentine felt his head and pulled out the note, absent-mindedly. Valentine the gentleman...or August, the cave-man? Lorelei had never seen the savage, prinitive August.—but she was going to.

HIS EYE found the writing on the note: "P. S. I am not a tender-hearted man, (Signed) Coma."

Now how did that get there?

The paper in his hand gave a wiggle and vanished, to be replaced by another message, still shorter.

"Teleportation, you dope. Coma." Valentine August, caveman, hesitated in front of Lorelei's door. Maybe the hotel clerk had pocketed his money and announced him, anyway: maybe she wouldn't answer: maybe she'd gone out He brought up a savage, primitive fist, hesitated, and tapped his fingernails against the wood. Then the door opened.

Lorelei stood there, wearing something blue and clinging, and staring at the floor, before she brought her eves up with the light fading out of them. Valentine was suddenly breathless and strangely hot and cold, like someone who had just swallowed an acetylene torch and an ice cube.

He gulned "Lorelei" he mewled. "I-ah-mmm..." The acetylene

torch was winning.

Lorelei's shoulders drooped, "Oh, it's you. I thought it was July-he's been missing two days. I was hoping.... But I should have known you'd be here for the premiere. Wellcome in, I suppose,"

She made a point of selecting a chair that barely held her, and he slumped on the couch nearby. There

was a short silence. Valentine broke it finally, "I didn't come for the premiere, Lorelei."

"Didn't vou?"

"You know I didn't," said Valentine. "I hate premieres." He looked at her, "I came to New York because you were here."

"Oh?" said Lorelei.

"You don't have to get nasty about it," Valentine said, detecting a curious note in her voice. There was a picture of a huge tiger-striped tomcat on the wall beside her, and that, he felt, was bad enough. There was no reason to add insult to injury.

"I wasn't getting nastv. I just said 'Oh?'."

"That's just it-just 'Oh?'," Valentine said. "If Juliet had treated Romeo that way, he'd have set fire to the balcony. Why, your attitude toward me is so well known that even though we've talked together on the set three times, not a single columnist has announced we're secretly married."

"I-know." Lorelei said "I guess

I've been a little rude"

"Rude isn't the word," said Valentine, pushing his point and wondering if the caveman line was working already "You're calling the atombomb a firecracker. You should be ashamed of vourself"

Lorelei stared at the floor, "I know Since somebody stole July, I've been thinking of him-and you. It's not as though I really disliked you..."

"What!" Valentine's heart develoned a sudden return to enthusiasm for its work, "What did you say?" he asked, stifling a few hymns.

Lorelei's voice was small and meek.

"I don't really dislike you," Sharp, succinct Anglo-Saxon tetra-

literals were on the tip of Valentine's tongue, struggling to get ahead of the hymns, but he stifled these, too, He leaped to his feet, lifted Lorelei from her chair savagely and held her before him, digging primitive fingers into her slim shoulders

"You monstrous young horror! The nerve of you-treating me like a leper for weeks, and then telling me cool as a snub-nosed cucumber that you don't really dislike me." He lifted her into the air, placed her on the couch, and settled beside her, "All right, start talking. I want to know all, and unless you're angling for the spanking you deserve, it had better be good,"

Lorelei looked up at him, her sweet, beautiful face troubled. "It's-I guess

it's-vour face," she said.

"My face!" Valentine groaned. "Everything else, and now you come to that. For Pete's sake, you told me last time my face was all that kept me in pictures-without it, I'd have less fan appeal than Karloff's socks."

"That's just it," Lorelei explained. "It's a good face-too good. The kind of face sculptors try to put on statues of Greek gods.... Stop smirking!"

"That," said Valentine, "wasn't a smirk. It was a tender smile. And what's wrong with a face like that?"

"It keeps you in pictures!" She leaned forward earnestly, so close her lips were almost on his, and only a mighty effort and his curiosity kept him from giving in to impulse. But she was speaking again. "Don't you see? I gave up writing fiction and turned to films because I've always felt that motion pictures had an unlimited future. I wanted to write good stories, help fine actors further the motion picture art, bring it to maturity. And then—then they assign me to writing scripts for you!"

Valentine couldn't see anything wrong with that, but he was still dazzled by the nearness of her, so he nodded and made no comment.

She went on. "What advances the art? Great acting and the appreciation of great acting. And just when the moviegoers begin thinking about performances instead of looks, you come along—with no ability, nothing but a —a face! And people forget all about acting and begin to trample each other after your pictures."

"You know," said Valentine suspiciously, "you sound exactly like Professor Coma. He says I've set motion pictures back ten years."

"He's conservative. Why, you've made it unfashionable to be a good actor. Why Rodney Royce and Martin Martin—both good actors, too, or they were—spend all their time in beauty parlors, and they're turning into hams. And Monroe Muck had to retire when the surgeon told him it would take a magician instead of a plastic surgeon. Can't you see why I feel the way I do?"

Valentine got to his feet. "No," he said. "I'll be damned if I can."

Joe Epic had been right. He should have acted. "Motion pictures are fine, Lorelei. But emotion fixtures are more important—and mine are plenty fixed. I'm tired of this—darned tired."

HE GRINNED down at her, and then with a sudden movement, August the caveman swept her to her feet and drew her close to him.

"Wait," she said a little breathlessly. "Don't—please don't. What I've said may not mean anything to you but it means a lot to me...."

Valentine was too far gone for arbitration. "Nuts!" he said, quietly. He kissed her, hard, long, fiercely. It was the grandfather of all kisses—a kiss he had saved up for a long time. He was floating on cloud seven....

Then her hands were on his chest, pushing him away. Her eyes were filled with cold fury. "Get out!"

He blinked. "But, listen, I-"

"Get out!"

He stood there uncertainly for a moment, not knowing what to say or do—dull pain within him at the old familiar expression on her face, and a good portion of self-disgust. Then he went out to find a brick wall, so that he could beat his head against it.

Valentine August never did know what happened during the next four hours, though he had a vague idea of dropping dimes in turn-stiles, changing trains at the end of the line, crossing platforms, and other mechanical operations. He didn't know why he'd gone into the subway in the first place; he hated the clatter and stuffiness. All he could remember clearly was the furry on Lorelei Lee's face, and that was what he wanted to forget.

Finally, though, something made him look down at his hands, to see another note. It vanished as he looked at it, but he'd had time to make out the words: "So you're a ham in private life, too. That was an abominable performance, wasn't it? Coma."

He threw a glance around, but the nearest seat was occupied by a sailor sleeping off a jag, and the only other person in the car was an old woman reading a paper and disagreeing violently at the top of her voice with what she read. Valentine felt the train slowing, took another breath of the foul air, and made for the door.

He came out on loneliness and desolation, and his reverie took him deeper into the unknown, where the sidewalks turned to dirt roads, and the street lights grew fewer and fewer. This was the Flatbush section of Brooklyn, where visitors carry canteens and K rations. They used to send out search parties to rescue travelers there, but they've given that up—too many search parties were lost and never heard of again. But that didn't bother Valentine and his gloom:

It was only after he'd gone fifteen minutes without seeing a street light that he awoke to the fact he had no idea of how to get back. He lit a match, but there were no street signs, and it went out quickly in the smog. Another did no better.

"Damn," said Valentine to himself.
"Wish there was a light."

Something huge and dazzling, like a dragon's eye, swished into his face, and he leaped three feet into the air. "Well!" a male voice said quietly.

"Mr. Valentine August!"

"Very nearly the late Valentine August," said Valentine, settling to earth. "Do you always scare people out of ten years' growth?"

"You did ask for a light," the voice pointed out. "I was merely acceding to your request."

Valentine stared over the rays of the flashlight, but he could see nothing. "But I said that to myself...."

"I read your mind, of course," the

man said. He laughed, a thin, braying snicker that ran up and down Valentine's back like a platoon of icides. The flashlight flicked upwards to reveal a face that was almost all nose. "Naturally. I'm Coma—Alexander Graham Coma. Twenty seven degrees, but you wouldn't know what they meant."

"Coma! Then you're the man...."
"Precisely," said Coma. "I'm the
man who brought you here."

man who brought you here."

"Brought me?" Valentine asked. "I
wandered here purely by accident."

"Tch, tuch, tch." Coma's nose wagged emphatically from side to side. "Simple long distance hypnotism. I do not permit chance events to enter my schemes!"

Valentine looked into the rays of the light, regretting that Coma was not dressed in a jacket featuring sleeves tied in back. This was rapidly turning into a hard day. He sighed. "As you say. Professor. And now—what next?"

"I shall take your picture," Coma told him thoughtfully. He studied Valentine carefully, and shook his head. "I must, you know. I made up my mind last week....As I mentioned in my first letters, I've always been sure of the brilliant future of movies, certain that even the behavior of certain performers could never vitiate the talents of the great screen actors."

"Very true," Valentine agreed. "But

"Last week I saw a double feature. The Bad Sky with Paul Muni and something with you-Relax, Max, I think. I suffered through your film, then gloried through the brilliant work of Muni, with tears of pure pleasure coursing down these sunken cheeks."

"They're not sunken," Valentine said. "It's just your nose...."

"Don't interrupt," Coma said crossly. "After the show, I listened to the conversation in the lobby. Did they

rave over my hero? No! All they discussed was your face! The only time Muni was mentioned was when one fool said that Looney—the ignominy of it!—resembled a barber he'd known as a boy in Irkutsk! It was too much. Your face—or Muni's genius? I went home, set to work—and invented this?

He turned the rays of his flashlight on something that looked like a folding camera. Valentine leaned forward and realized that it was the kind of camera a surrealist might paint when very drunk, or Salvatore Dali when cold soher.

SUDDENLY Coma raised it, pointed it at Valentine, and whirled a knob on it. There was a flash ofsomething—and Valentine was yanked forward violently. His head was on fire and he couldn't see. He felt as though a mule with phosphorescent howes had kicked him in the face.

The calm voice of Coma drifted through the mist. "I've just taken your face, August. Where an ordinary camera takes a negative image of film my camera takes the positive subject itself. I've taken it by electromagnetically negative light, transducing the positively electromagnetic mass stantaneously onto the colloidal microplenar cube which I've compressed along one dimension into a film. Naturally, the matter has been replaced electromagnetically negative mass, which behaves exactly opposite within the spectrum from positive mass-transmits light perfectly, instead of reflecting it. You understand, of course?"

He waited, and received no answer. Valentine was making gulping motions. Coma went on. "It needn't be permanent, but you've lost your face—and head—to all intents and purposes. You can still eat, chew, drink, and so on. But until this film is developed, you have no face. Then, of course, the

positive mass dissolves and will automatically seek out and replace the negative mass, bringing you back to normal.... You have one month, August. Succeed in that time without your face, and I'll return it to you. Fail, and I destroy the film. One month!"

Abruptly the flashlight clicked off,

Valentine began to walk forward, like a baby taking his first steps. The mist was beginning to clear before him, leaving the night's crisp blackness, but pain like hot lava still flowed through his head. Then, after a time, that vanished.

The long-nosed escapee from a Karloff film had done something to him, no doubt about that. His talk had been padded-cell matter, but something had happened. Maybe the camera had soraved acid....

Valentine began running. Somewhere, street lights appeared, and a little butcher store. Valentine lit a match with shaking fingers and looked at his reflection in the store-window.

His beautifully cut blue suit was there, with the dark blue coat over it. His light-blue shirt was there, and his dark blue tie. His shoes were there, and his socks. Everything was there, with one exception.

He had no head.

As anyone who has tried it can tell you, a man who suddenly finds himself minus head is in a spot. He cannot proceed to his home or hotel to think about it, because that involves passing people; and people, generally, react unfavorably to headless men. Ho cannot stay where he is, because people will pass sooner or later, no matter where he is.

Valentine staggered along, not quite sure where he was headed—or unheaded. He staggered on until the lights of an all-night drug-store loomed up before him. Cautiously, he peered inside. The place was empty, except for one clerk, who sat at the back of the store happily reading a book by Philip St. John. There was a string of telephone booths just inside the doorway.

Valentine jerked open the door and leaped into a booth. The clerk looked up, saw the booth door close, and went back to his book. It was one of those books

Valentine dialed Lorelei's hotel and swore at the clerk. Then there was a pause, and Lorelei's voice said, "Hello?"

"Don't hang up," Valentine said quickly, "This is Valentine. Remember you objected to my face—well, could you—ah—care for me, if.... Lorelei, I don't have a face. And I'm in a jam. Does my voice sound hollow?"

There was a short silence. "No." Lorelei said finally, and it sounded like an answer to both questions. "Why should your voice sound hollow—except that it comes from your head?"

"I just thought it might," Valentine said morosely. "You see, uh—I mean —Lorelei, I'm not talking through a mouth."

There was another pause. "You're drunk," Lorelei said.

Valentine gripped the phone tighter. "I'm not drunk, I swear I'm not. I was just walking in Brooklyn and some long-nosed guy took a picture, and my face disappeared, and..."

"Valentine!"

"Listen, you've got to believe me. I've got to see you, talk to you. How'm I going to get along without a head?"

"Try using your feet," Lorelei said, her voice fading into something about "Drunk as Bacchus." There was a sharp click at her end of the line.

"Wait!" Valentine cried. "Wait! You've got to...." His voice trailed off, and he hung up. What was he going to do now?

He saw a shadow on the booth door and turned to see the clerk approaching, an unlighted cigarette in his hand—obviously about to ask for a match. Valentine tried to shrink into the shadows, but it was no good. The clerk peered through the glass and saw him.

"Goooool" The clerk stood there paralyzed, and his knees began to buckle. Then they straightened. "Gooo-oo-ooool" The clerk whirled and streaked through the door. He did not bother to open it.

Valentine shrugged, started out, and then turned to the back of the store. He found bandages on the shelves, opened them, and began to mummify the section of air which would normally house his face. The bandages wrapped around the air in the exact form his head would have had. He cut two circular chunks away for his eyes, appropriated some dark glasses, shoved the earpieces between the bandages, into position, and surveyed the results in a mirror.

It wasn't bad. He looked like a man who had worn an orange tie at a St. Patrick's day clambake, but he might have been human.

There was no point in lingering. The clerk was probably out looking for moral support to return, and someone might happen along at any moment. Valentine walked to the frame of the front door and jerked it open. There was a startled, muffled "Goo!", and he heard footsteps running. Valentine ran in the other direction. After a while he reached a subway and approached the agent for information on getting back. The agent looked at his bandaged head with a bored eye and told him.

Only a local was running at that hour, and it seemed to stop at every station, backtrack, and stop at several a second time, but it finally got him home. He hesitated, then. His original idea had been to sleep over it, but there was no point in wasting time. He headed for Joe Epic's room.

Epic held his contract and made money from his pictures. It was up to him to protect his investment.

Epic opened the door, did a doubletake, and there were dollar signs being erased in his eyes. "Help!"

"Control yourself, Joe," Valentine said. "Let's go inside and I'll tell you all about it."

They sat down opposite each other, Epic still staring at Valentine's bandages and groaning. "Well, what happened? What did you do to yourself?"

"I didn't do anything," Valentine said. "Joe, can you take it?"

Epic groaned again. "After seeing you like that, I can stand anything."

Valentine began to unravel the bandages. He kept the glasses in front of the eye-holes until the last moment, then pulled the disguise away in one sweep. Epic stared at him, his eyes bulging in terror. Then he leaped gracefully over a nearby couch and crouched, shivering, behind it.

"For heaven's sake! Joe!" Valentine said disgustedly. He walked be-

hind the couch.

Epic began to shuffle away on his hands and knees, not looking out. "Go away, dead man," he said. "I never harmed anyone. Maybe a few widows and orphans and rival producers once in a while, but nothing serious. Please go away—please."

Valentine grunted disgustedly. "I'm as alive as you are—more, the way you look now. Some man took a picture of me with a new camera, and it made my face invisible."

Trick camera effects was Epic's language. He got slowly to his feet, ran a hand shakily across his forehead, and said, "Let's hear."

Valentine told the story, including Coma's month in which to test him.

When he finished, Epic was grinning again.

"Nothing to it," Epic said. "We'll announce you've been in an automobile accident and had a head injury, but you'll go on working in bandages. It'll be good publicity for a while—you'll be a success, and the inventor will give your face back. How's that?"

"That," said Valentine, "stinks. Coma's crazy, not dumb. He'll see through it. And we can't set up some executive job with a friend's firm, either; he'd find it was a fraud. Somehow, I've got to be a success legitimately—and without a head!"

They sat in silence. Valentine went through three cigarettes—they still tasted the same—and Epic went through his fingernails and started on his knuckles.

FINALLY Valentine said cheerfully,

"Well, Joe, we'll have to use your plan, I guess, even if my face is gone for good. My contract runs three years, and I'll just have to earn my keep."

Epic's voice was suddenly as cheerful. "Valentine," he said, "Can you take it? Because I'm tossing you over."

"Are you crazy?"

"Nope, just sane. Remember Go Slow, Joe? Big scene, thousands of extras at \$7.50 a day, cameras taking you riding your horse, money right and left—and you smiled into the cameras and said, 'Wish they'd give me a softer horse.' And what did I do—bad the scene made over, and called it high spirits.

"Or Take a Break, Jake? Olga Stalingrad, all the way from Russia, highest salary, expensive build-up. So she was temperamental, and we warned you. Comes the big love scene, you bend down to kiss her—then you drop her and say, 'Is that mose real, or are you doubling for a parrot?' She

goes to M. G. M., and we lose a big investment. But I smile like a father and figure you got some sense of humor.

"Or Keep Cool-a, Caligula. Big expensive chariot race scene, you supposed to be clenching your teeth and muttering. So thirty lip readers write in, claiming you spoil the illusion by saying, 'I'll take a Chevvy.' And now no lip-readers go to Colossal-Epic theatres. So I shrug my shoulders, lose some money, and figure you deserve a good time.

"All that I forgive, Valentine. But a dozen times I begged you should let me insure your face for a million, and you figure it's just a gag and turn thumbs down. Losing a million, that I can't forgive! You're through,

August!"

Valentine got to his feet slowly. "Aren't you forgetting our contract?"

"You're forgetting it, Valentine," Epic said, a hard smile on his face. "Some sense of humor you got. When we sign you up at 3 G a week, you laughed so much over all the 'face' publicity you had your face put under contract-not you. We're used to screwballs, so we agreed. So-no face, no contract. Tomorrow, I tear it up."

Valentine stood for a moment, wondering. Then he shrugged. It was true enough. He'd had a good time at Epic's expense; now that he was in trouble, he couldn't expect the producer to worry about getting him out of it.

He replaced the bandages and glasses, then turned and went out of the door.

The thing to do was get the film from Coma and develop it. Success without a head-well, people have a prejudice against hiring men without heads.

Valentine took the subway. He'd always had a good memory for odors, and the right station had an unusually sour smell. He got off and/ went out, to see grey streaks beginning in the sky. It would be light soon. He walked rapidly in the direction of the road where he'd met Coma, skirting the all-night drugstore carefully.

He found the spot, all right-footstill showed where he'd marks jumped. There were wide, empty lots for blocks around. Hanging around wouldn't do him any good. He walked

back toward civilization.

A milkman driving a horse and wagon clattered down the street. Valentine waved an arm, and the man stopped. He didn't seem excited about the bandages-but then, this was Brooklyn.

"What's on your mind, Charlie?"

the milkman asked.

"I'm trying to locate a man named Coma-Professor Coma. Man with a

nose like one of your milk bottles." The milkman thought it over. "Beats me," he said. "There ain't no Coma on my route, and I don't remember no schnoz like you tell. You sure he lives around here?"

"No," Valentine admitted. "That's just it. I met him here, but I don't know where he lives. Well, thanks

anyhow."

"Anytime, Charlie," the milkman said. He started off, then stopped the horse. "Say, tell you what you do. Inquire in that grocery down the street. Owner knows everything about everybody around here. He don't open for an hour, though."

"I'll wait," Valentine decided.

"Thanks again."

He started to walk down the block.

"Hey, Charlie," the milkman said. "Yes?"

"This guy Coma. He the guy that walloped up your face like that?"

"No," Valentine said. "It caught between two ferry boats."

The milkman nodded wisely, "Same

thing happened to me once. Well, hope you find him."

Just after six o'clock, a little, sharpfaced man came hurrying up to the store, a set of keys in his hand. He stopped at sight of Valentine and noved back a step.

"No harm meant, friend," Valentine said. "I'm just trying to locate an old friend, and the milkman said you'd know where he is."

"Oh," the little man said, expelling a deep breath, "Oh, This friend of vours-what's his name?"

"Coma," Valentine said. "Professor Alexander Graham Coma, He's a little fellow with a big nose,"

"Coma? Coma? Nope, misterthere's no Coma around here."

"Are you sure of that?"

"Look, mister," the little man said with dignity. "This is the only grocery in the entire neighborhood. Used to be another, but he sold cheap stuff and went outa business. We carry only the best-everything fresh. Well, there's no Coma. If he lives in the neighborhood, he eats-and if he eats, he'd trade here."

"I see," Valentine said. "Much obliged."

That seemed to settle that. Then Valentine shrugged. He went into a little candy store, flipped open the Brooklyn telephone book, and looked under the C's. Coma was listed.

* /ALENTINE asked directions from the man behind the counter, then found the place three blocks away. It was a cottage, separated from a string of identical cottages by a large lot. Valentine knocked. No answer. He knocked again. Still no answer. Finally he tried the knob, and the door swung open.

He entered a long hall and looked around. There was a faint glimmer of light in a room at the back, and he walked toward it. The door was open. Coma stood in front of a table heaped with bottles, glasses, and shallow trays. The shades were drawn.

"Well," said Coma, without looking up. "Come in. Mr. August, come in."

Valentine walked in.

"You were foolish to ask the milkman and the grocer," Coma said. "I gave up eating two years ago. Filthy habit. Get energy right out of the air easier."

Valentine lifted an eyebrow. "I suppose you saw everything from here?"

"Naturally. Telescopic X-Ray vision. Learned that years ago, before I took up serious work."

"Listen, Coma," Valentine began. Then he choked. There was a stack of films in plain view on the table. "Uh, er-I've come here to plead with you. How can I succeed without a head? Who'd hire me? I mean besides vou?"

"I can't say," Coma answered. "That's your trouble. I've made an experiment, and I intend to stick to it."

Valentine stared downward covertly. There was an envelope marked V. August-head lying on top of the ta-

"All right," Valentine said hoarsely. "Forget it. I can see you won't change your mind." He leaned forward and said winningly, "But you can satisfy my curiosity about this invention. That won't hurt your experiment. How do you develop your films, for instance?"

The glint of the inventor appeared in Coma's eyes. "Umm, that shouldn't hurt. And it's so simple. Just pure alcohol. That dissolves the binding colloids, and the positive matter is automatically attracted to the opposite polarity of the same value. Positive is stronger than negative-so you're back to normal. Only it has to be absolutely pure alcohol. Otherwise, you

get freak results—the congruity between that positive matter and its mate in negative form may be seriously imbalanced, and without proper valence, the loose positive matter might go anywhere. Like to see me lo it—I've got some cat films I want to develop."

"Thanks," Valentine said. He lifted his fist and brought it down on the Professor's head, letting Coma sink gently to the floor. Valentine scooped up the envelope, and looked at the film. He couldn't tell. It was just a rather thick oblong piece of black celluloid. Still....

"Meaouw!" Something rubbed against his leg, and Valentine jumped. He looked down, as the rubbing continued, but there was nothing there. His fingers found soft fur, though, and he started to explore. One of the cats Coma had mentioned, probably.

But there was no time for that. He dropped the film into his pocket and left. Now for some pure alcohol.

But where? The drug-store where he'd stolen the bandages was the only one around, and that was out. And it would be torture to wait until he could get back up-town. The suspense would kill him. Then he grinned. There was a bar and grill down the block, with its door open, and a man in a dirty apron was sweeping some dirt into the street.

Bars sell alcoholic beverages; maybe there was some pure alcohol around. It was possible, considering the weird concoctions customers were always asking made up.

The man in the dirty apron looked Valentine over with dull eyes and went on sweeping.

"Up sort of late aren't you?" Valentine asked.

"Live behind the store," the man said, "Place ain't no goldmine. Why —any objections?"

"None at all," Valentine assured

him. "I'm a potential customer. Do you happen to have any pure alcohol to sell?"

The man sighed. "I got ulcers, bum feet, bankruptcy, lousy stock and rheumatism. Now I got fool questions. You get that at a drugstore. Couple blocks down."

"Î can't," Valentine said. "I—I have a phobia—pharmaceutophobia, it's called. Don't you have any pure alcohol around?"

The man shrugged. "Mister, I wouldn't be surprised. I even found a bottle of uncut whiskey yesterday. Go ahead and look around, if you want—but don't go sticking no bottles in your coat; I'm keeping my eve on you from here."

Valentine went behind the bar and began digging at the mountain-high piles of bottles. It was hot work, and heat was beginning to come up the pipes. Valentine peeled off his coat and jacket in five minutes, but it didn't help. Absent-mindedly, he reached up and began to unravel his bandages.

He did it while scanning the piles, and didn't realize they were off until he heard a siren-like howl from the doorway. He turned to see the storeowner staring at him, frozen to the broom.

"No head!" the bartender shrieked.
"No head! He ain't got no head!" He
shrieked once more and took off with
the broom dragging between his legs.
Valentine expected him to soar on
it or fall over it, but he vanished in
a haze of speed. Then Valentine went
back to his digging.

It was still hot, and growing hotter. By the time he reached the bottom—with no pure alcohol in sight—he felt as if his invisible tongue were hanging out. He reached for the last bottle and scowled at it. It was beer, as far from pure alcohol as anything could be. He started to put it down—

and then thought better of it.

He uncapped it expertly, placed it where his lips should be, and drank deeply. It tasted right, somehow. He excavated another beer and gave it the same treatment

He was on his eighth bottle when he heard the door open. He snatched his bottle and crouched behind the counter, but it wasn't the owner. It was a tall, lean, red-headed man wearing evening dress, complete with tails. Valentine was only mildly surprised—he wasn't in a position to feel too critical of another's appearance.

He felt gay and adventurous by then. There was a newspaper on the counter, and he snatched it up into a position to conceal his lack of head. "What's yours, Charlie?" he asked, taking a note from the milkman.

"Open kinda early, aren't you?" asked the red-headed man, speaking with careful distinctness.

"Val's Bar and Grill is always open," Valentine answered, opening

another bottle.

The red-headed man was impressed. "I hear sucking sounds.

What you dinking?"

"Beer. Nice fresh, foamy beer."

"Beer. I'll have some," the man said. "I've tried rye, rum, scotch, anisette, gin, bourbon, absynthe, tequila, and port wine. Give me some beer."

VALENTINE gave him a bottle and they finished in a dead heat. Valentine opened two more, and then two more.

His mood was becoming playful by the fourteenth drink, though. With a quick movement, he dropped the newspaper and waited for his customer to shriek and rush out.

The red-headed man stared owlishly at him. "You haven't got a head," he said casually, finishing his beer. "Another beer."

"I certainly haven't," Valentine

agreed sadly. He resisted a sudden impulse to weep. "What'll my friends back in Hollywood think when they hear about it?"

"You from Hollywood?" asked the red-headed man, pleased. He tried to slap Valentine fraternally on the shoulder, missed twice, and gave up. "I'm from Hollywood, too. Name's Design. Here on a vacation—drink too much in Hollywood. Used to live around here before I became a success."

Valentine disregarded him "I haven't got a head," he said. "No head at all, " There was a song like that, but he couldn't remember it. He took the film from his pocket and placed it carefully on the bar. "You know, Design, my head's right in this film."

The red-headed man peered at the

"Right in it." said Valentine.

"I don't see any head," Design

"You're drunk, that's why," 'Valentine told him. "So drunk you don't even see my head in this film. Well, it's there, all right, and if I had some pure alcohol I'd prove it. Pure alchohol would make my head come right out of that film."

"Aw, forget it," the red-headed ma said. "Probably isn't so hot to look at, anyhow. You've got a nice voice, though." He paused suddenly, his eyes open wide. "Your voice!" he howled thunderously.

Valentine jumped. "What's the matter with you?"

"But, your voice—don't you understand. It's the one I've been hunting over a year—and I didn't realize it until just now!" He didn't sound sober, but at least soberer. "Listen, you've got exactly the dignified, unemotional tone I want. Do you—do you have a job out in Hollywod?"

"Not at the moment," Valentine

answered

"Wonderful!" Design said. "Glorious! I can't believe my luck. Listen, how would you like to go to work—?" He paused suddenly, seeing that Valentine wasn't listening. "What are you doing?"

"I'm going to show you something," Valentine said. He took a cocktail glass filled with beer and handed it to Design. "I'll bet you the price of your drinks you can't balance that on one finger and sing Mammy at the same time."

Design looked annoyed for a moment, and then his sporting instinct got the better of him. "I'll take that bet." he said.

He placed the cocktail glass carefully on his index finger and began to sing. It went well for a while—until he arrived at the final "Ma-a-amy." Then his arms swung out sentimentally and the glass flipped into the air and smashed on the bar. Beer flowed browlny in every direction.

Valentine laughed. "I knew it. Everybody does it. You just can't sing that part without sticking out your arms like Jolson. It happens every time....."

He stopped suddenly and stared at the film, Design looked at it, too.

"I think we wet your film," he said.

Valentine steadied himself on the bar. He felt sick. "Beer. It—it isn't pure alcohol. The film's ruined..."

There was a flat silence. Valentine picked the film up, wiping it off as best he could. But there were two spots that were thoroughly damp. He shoved it glumly back into the envelope and into his pocket.

And the sharp, chilling whine of a bullet cut through his gloom. A sunrayed hole appeared in the mirror behind him! The store-owner stood in the rear, an ancient musket in his hands. "I'm going to shoot you, nightmare," he said, grinning hideously at Valentine. "Maybe I'm nuts from drinking my own stock—but I'm gonna put a bullet through you. Then if you don't go away. I'm crazy."

He fired again, and another hole

appeared in the mirror.

Duck!" Valentine said. He pushed Design to the floor on the other side of the bar. Then carefully he filled a glass with beer and flipped it. Beer splashed into the store-owner's eyes. He dropped his musket and began to claw at his face.

"Let's go!" Valentine shouted, snatching up his disguise. He leaped from behind the bar, straight-armed the store-owner, and went through the door, with Design right behind him.

"No, you idiot!" Valentine shouted. "You go one way, I'll go the other. Scram!"

Design stopped running. "But your voice—how am I going to reach you?"

Valentine didn't answer. He didn't know what the man was talking about, and that didn't matter, anyway. Nothing much mattered when you got right down to it. But he was lucky. He ran almost a block without meeting anybody, then slipped into an alley and replaced his coverings. That done, he headed for the subway.

Lorelei answered the door, and Valentine didn't wait to be invited in. He pushed her inside and walked in after her.

"Look," he said. "In about an hour I'm going to be floating in the East River. But before I jump off a bridge, I've come to say goodbye and hold you in my arms. Go ahead and scream if you want, but now—come here!"

He reached for her. She didn't scream or attempt to slug him. In-

stead, her warmth clung to him.

"You've been hurt," she said. "I was so afraid—when I thought, I knew something would happen to you after you called up. I've been so worried. You sounded so drunk and helpless...."

"Lorelei," Valentine said gently, "I've been hurt, all right—but not after I called. This happened before. That's what I tried to tell you."

"Before you called? But it couldn't—you were so drunk, and...
Oh, darling, I couldn't sleep—I was worrying about you so much. I knew then that I loved you—that I've always loved you."

WALENTINE felt as though a bomb had exploded inside him. spreading a wonderful, happy warmth all through him. She loved him—he'd just heard her say it. "Lorelei," he said, "everything I told you on the phone was true. Fantastic, but true. Stand back, honey."

It didn't take long. A flip, a twist and a twirl, and the bandages were off, freeing his lips. She didn't faint. She swayed a little, and her lovely face turned several delicate shades of pink and red, but she took it. Then she was in his arms, held close, and he was kissing her and thinking that even without a head this was a pretty wonderful world.

"It doesn't matter," Lorelei told him, when he finished his account. "There's nothing we can do about it, so it doesn't matter. You can wear bandages in public, and we'll still be happy together..."

She paused, and he looked at her questioningly. She hesitated, then went on. "Only....only neither of us has a job now, darling. Epic—well, he thinks I'm good only for writing scripts for you; and with you dropped.... And I'll bet you haven't saved, either."

It brought him back to reality, and he shook his head. "No. And getting a job in my condition... umm, some fellow wanted to hire me today, though. Don't know what kind—he was probably just drunk. He kept talking about my voice....how he'd been searching for it for a year. His name was Design."

Lorelei stared at him. "Valentine!"

she said. "Not *Dennis* Design?"

"I don't know. He didn't say. Tall, good-looking fellow with red hair. Is he the man you're talking about?"

"Yes, honey, yes!" She kissed him excitedly. "Valentine, he's the head of Design Productions—the cartoon comedy tycoon. He probably wants you to play the voice of Claudius the Cat."

"Huh?"

"Haven't you heard of Claudius the Cat? They're to be full-length comedies—with a budget for each as big as an A production! Isn't it wonderful? You won't even need a face, darling!"

"Lovely," Valentine admitted doubtfully. "Only I don't know where Design is staying. And a cat—I never tried animal imitations. Maybe I can't meow."

"Then go ahead—try it," she said. Valentine threw back his lack of head, took a deep breath, and tried to think of fish, garbage cans, and female felines. Then he meowed. It was a magnificent volume of sound—but no cat was ever going to recognize it. It was something between a bleat and a bray, with a Harvard accent.

Lorelei's shoulders drooped, and he nodded glumly. Then she shrugged. "Maybe he won't need you to meow. Maybe they can dub it in. Anyhow, we can try. And Winchell will know where Design is."

She called while Valentine put on his bandages. Design, it seemed was in the same hotel, on the second floor. She patted his bandages into better order, braced herself, and they left

lett.

If it worked, it might not be bad. If he was doomed to a headless existence, he might as well make the most of it. Being Claudius the Cat was as pleasant a way of earning a living as any. But those meows—he practiced a few more on the way down, and they were a little better, he fancied. But the elevator man looked on them with faint approval, and Lorelei's face wasn't happyy.

Design answered their knock withutenthusiasm, holding his head. Lorelei introduced Valentine, but Design didn't recognize him. "Been in an accident, Mr. August?" he asked. "Your head looks like mine feels."

"Sort of an accident," Valentine

said. "Hangover?"

"Hangover—and kicking myself," Design said glumly. "For a year I've been hunting a voice. Then I find it—and lose it again. Found him in a bar, but I was to woozy to chase him when he ran, and I can't even remember what he looks like." He shook his head ruefully. "I must have been tight—I keep thinking the guy had no head."

They were safe inside the suite now. "He hasn't," Valentine said, and

removed the bandages.

Design leaped into the air, gasped, and staggered shakily into a chair. "It's harder to take when you're sober," he said.

"Well, you'll have to get used to it if I'm to work for you. My head's gone, along with my contract to Co-

lossal-Epic. I'm all yours."

Design lifted the phone. "My lawyers New York representative will be here with a contract in half an hour —matching your salary at Colossal-Epic." He looked at Valentine again, and shuddered. "But don't explain that-I wouldn't believe it anyway."

Valentine looked toward Lorelei happily—and she stared at him and cried out sharply. "Your face—Valentine, your face—it's coming back...."

Valentine whirled to a mirror on the wall. He could feel himself trembling, as though an electric current were going through him. It was true. He could see his face filling in as he looked, uncannily, like a movie fadein. It went on slowly, but he could already make out the outlines.

He lit a cigarette fumblingly and stared at himself. "I don't get it," he said. "But I'm not questioning it. And I'm still sticking with you, Design. Epic may want to validate my contract again, but—well, maybe I was a ham—and we'll get out of it."

The door opened. "Certainly you'll stick to Mr. Design," Professor Coma said from the doorway. "That's the only reason I just developed your film at my laboratory. You're a success now."

He took something invisible from his arm, and handed it to Lorelet. "And I've brought back your cat, July, Miss Lee. August has its film in his pocket—and here's some pure alcohol to develop it."

"But... You mean that was July's film?" Valentine asked. "But—it's

ruined. See?"

Coma glanced at it. "Beer, eh? Well, you may get some odd results—maybe a little of July won't come through where it should. But he'll live." He smiled. "I should have prevented your taking it, perhaps, but I figured you were young and deserved a little fun. The blow didn't hurt me, you know. I just slipped partly into another dimension." He smiled again, bowed gravely to Lorelei, and prepared to leave.

Valentine caught him. "Wait a minute. If you developed the film back in your laboratory, how did you get here so fast?"

"I flew, naturally," said Coma, and disappeared.

Valentine stood staring, waving the film and bottle of alcohol. Then, shaking his head, he pushed the film into the bottle, leaning over to inspect it. He couldn't see anything, but fumes came up, catching at his throat and sending twinges down to his coccyx. He gasped, swallowed, and watched a striped tiger-cat appear slowly at Lorelei's feet.

And then Valentine yelped, stared again, and made groping gestures toward a spot on his anatomy usually reserved for sitting. July was apparently complete—except for his tail. And Valentine was suddenly more than complete. He stared ruefully at Lorelei, started to sag, and then shrugged it off. After all, if she could put up with a headless man, this shouldn't matter. Then he saw her puzzlement give place to amusement, and he knew it was all right.

"The beer," he told her. "Coma warned me impurities...."

Design's lips moved soundlessly. "Don't tell me. Don't tell me any-thing," he said finally. You've got your head, I've got the voice I need. That's enough—or, wait. There's just one thing more. I haven't heard you meow."

Lorelei's face started to whiten.

but she held herself firmly. "It's
—well, different," she began. "It has
a personality...."

But Valentine knew it was useless to explain. With things as crazy as they were, it might get by, but there was no use explaining. He threw back his head, opened his mouth, and let it slide. It began at his heels, worked all the way up, and came forth with full momentum. It was magnificent—a purring, howling meow; a meow to end all meows.

July looked up, opened his mouth, and gave vent to silence. Then the cat made a beeline under a couch and lay there hating the man who had somehow stolen his vocal cords and his meaw.

Design beamed, Lorelei came into Valentine's arms. Valentine thought about the future happily, reminding himself to bold beer in special favor from now on. Then he couldn't resist the impulse.

He threw back his head and let it go again. It was even better; it had all the cultured development of his own voice with the results of all July's practice down back alleys. It was a superb meow, a meow to end all meows.

Somewhere in the distance, an alley cat joined in, to be followed by others. But their voices were a bit envious, as if they knew there could be only one Claudius the Cat.

THE END

COMING NEXT MONTH:--

THE MASTERS OF SLEEP By L. RON HUBBARD

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October issue on sale: August 18th at your newsstand

TOOTH AND FANG

* By H. R. STANTON *

SCIENTIFIC RESEARCH in biology is beginning to disclose an interesting and completely unsuspected fact—the law of the jungle, the law of "tooth and fang" is not a law! It seems rather that this is a romantic and erroneous impression left by novelists and writers who would like to see it that way. Facts point dif-

ferently however.

Experiments have been made which show that the "lone wolf", the isolated speci-men, is incapable of surviving as well in men, is incapance of surviving as war in a hostile atmosphere, as a group can. The scientists first experimented with worms, exposed to ultra-violet radiation. If one worm lasted a definite time, when numerous worms were placed under the numerous worms were placed under the same exposures, they lasted much longer! Why is not known, but subsequent tests with an infinite vasitely of other animal life ranging from protozoa to cats and dogs showed that substantially the same fact is true. Merely being together with others of its kind helps an animal to survive an ordeal.

This urging and desire for a social life, a gregarious form of living, is prominent in man. It's always been known. But to

find the same thing true in the animal find the same tung true in the animal world is startling and is causing amazing revisions in biological theory. Scientists are daring to suggest that there is a fundamental law in Nature which might be called the "live and let live" principle. This doesn't mean that immediately Darwinian "survival of the fittest" etc. must be thrown out the window. It merely shows thrown out the window, it merely snows that like most things, natural "laws" are more complex than they seem. There is a mutually inclusive principle embracing these two diametrically opposite ideas.

If Nature had not such a principle, it

appears as if Man-and his progenitors in the animal world—would have long since eliminated themselves from the face of the Earth. Brotherly love is evidently not merely a Christian concept but something rooted inherently in all men and all ani-mals even down to the lowly fish in the

Extrapolating a bit, perhaps the inhabitants of other planets even beyond the Solar System may be a part of this principle and an invasion by them might be welcome,-if they came bearing gifts and not atomic bombs!

REDICTION VERIFI

* By WILLIAM KARNEY *

NLY A FEW years back, Amazing Stories made a prediction, though not based on strong analysis of data, which seemed remarkably in keeping with the observations of numerous of its consultants. The prediction was this: the climate of the Earth is slowly changing—and it is slowly getting warmer!

Climatologists and meteorologists have been doing considerable research on the matter—and if recent reports are to be believed, the prediction is true! The funny thing is that, like the pre-diction itself, it appears that the proof isn't coming out of the laboratory directly. isn't coming out of the laboratory directly. Scientists have been analyzing weather and temperature reports of the last one hundred years or so, for and from different portions of the United States. Their conclusions are interesting. First of all, elaborate checking of the records, and allowing for the different types of thermo-meters used in older days, there is a definite rising temperature gradient de-tectable. The instruments of former times were reconstructed and checked so as to make sure that a degree then, meant what we suspected it to mean.

Reference to enormous amounts of

records definitely showed that the climate records definitely showed that the climate is gradually becoming warmer—if only by a few degrees or fractions thereof. This trend in so far as it can be accurately measured is persisting and right now we may say that the temperature—the average mean temperature—the world is rising.

the world is rising.

The cause of course is unknown. The mere record of a hundred years is not enough to correlate this with any other facts we know. But the suspicion has been advanced that it is due to a gradual increase in solar radiation intensity. Astrophysicists are not yet in a position with sensitive enough instruments to detect this. But it is a reasonable hypothesis. Furthermore, while we speak of the sun as gradually cooling off, this does not preclude the possibility that it is cooling off at a greater rate and hence pouring out more energy.

Whether or not this portends a tropic or semi-tropical future for the temperate part of the world, we can't predict, but don't be surprised if your grandchildren start raising oranges in Alaska or go swimming in the Bering Sea!



A strange deserted air hung over the length of the block as he reached the corner...

LORELEI STREET

By Craig Browning

You had to be careful in crossing this street. For if the conditions were right you might walk clear out of this world . . .

LANCY WAS a cop because all men named Clancy seem to automatically become cops. They're forced into it. He was standing on the corner of Fourteenth and Archer because he was married. In other words, his wife didn't give him spending money for idle snacks; the waitresses on his beat wouldn't give him a handout because he wasn't eligible, and his feet hurt too much to do much walking unless he had to. In short, he was standing on the corner because he was married.

His thoughts were on—well, if someone had stopped and asked him what he was thinking about be wouldn't have been able to tell them. Why? Because he never bothered to remember what he thought about. It wasn't important, even to him. He did think. All the time, in spite of constant accusations from his wife Nora and his immediate superior Mike No-

lan that he didn't. But it was like the smooth idling of a motor out of gear. It didn't put miles on the speedometer.

He was standing on the corner of Fourteenth and Archer. The stranger passed by, walking with head down and hands in his pockets. Three steps after he passed Clancy he stopped and came back, as though it had taken that long for his brain to work on his feet.

"Pardon me, officer," he said politely, "but can you tell me where one thirty-six Lorelei Street is?"

"Two blocks down and turn to your right a block and a half, sir," Clancy said, saluting carelessly for no other reason than that the stranger had been very polite of tone.

He watched the man depart, head



down and hands in his pockets. He resumed his idle thinking with a pleased smile left on his lips, forgotten. After awhile it faded slowly, like the back end of a departing bus in a fog. And the expression that took its place reflected an inner state that closely resembled a fog, because it had suddenly occurred to Clancy that there was no street named Lorelei, and even if there were, one thirty-six would be eight blocks to the left instead of a block and a half to the right.

"Why did I tell him that?" he asked blankly to no one. He thought about it for a minute. "I said it just like it was true, too," he added.

Two blocks down would be Church Street, not Lorelei. A block and a half to the right would be nine thirty-six. He knew that as surely as he knew his name was Clancy.

He shrugged mentally. It wasn't likely the fellow would come all the way back to ask him what was the idea of giving him a wrong direction.

But the mental shrug didn't shake it off. He tried to remember a Lorelei Street. If he could remember such a street maybe he could find something to account for his having given such a direction.

In his fourteen years on the force he had walked nearly every beat in the city. Not once had he heard of such a street. In his five years as a cab driver before that he had never heard of a Lorelei Street. In the twenty-one years before that in grade school, highschool, and a few jobs in various parts of town he had never heard the name.

And vet he had said. "Two blocks down and turn to your right a block and a half."

He shook his head sadly. It was a mystery.

Twenty minutes passed. Then he

saw the man coming back. His head was down. But his hands weren't in his pockets. One arm was swinging at each step. The other hung straight down under the weight of a full shopping bag.

He looked up as he came to Clancy, smiled, and said "Thanks."

Clancy turned slowly, watching the stranger's departing back. He took off his uniform hat and scratched his scalp with one finger, perplexed.

Then he sighed and walked the two blocks. When he came to the corner where he had instructed the man to turn right he looked up at the street sign. It said CHURCH ST.. Not Lorelei.

Clancy stared at the sign, a dogged stubbornness growing on his fine honest face. He hunched his heavy shoulders until his neck was nonexistent and turned right, walking the block and a half as he had told the stranger to do.

He found nine thirty-six but no one thirty-six. And it was a beauty shoppe, not a grocery store.

BY THE TIME he relaxed in his favorite chair in the living room and pulled off his size twelve B's that evening, Clancy had completely forgotten the mystery of Lorelei Street. If his wife Nora had asked him if anything had happened at work he might have recollected it. But she had religiously asked for the first ten years of their married life and never received anything but a grunt. She had given up after the time the warehouse had burned down on his beat and he had become a hero by risking his life to save a cat and three kittens living on the third floor in pianos, and had given the usual noncommitant grunt in the evening when she asked him if anything new had happened during the day.

The days passed without event after that Clancy moved through his daily routine of living as unmoved from his accustomed habit pattern as the Earth moves in its orbit about the Sun. Until one evening after supper when he pickted up the paper and saw the picture on the front page.

He never forgot a face. Even if he did occasionally forget one, he would never have forgotten the face staring at him from the upper center of the

front page of the paper

If only John L. Lewis or Truman or even Molotov had said anything that day the picture wouldn't have been in the paper at all. But Truman had a cold and wasn't seeing the reporters lest they start a rumor he was on his last legs, John L. Lewis was half asleep in his Washington office waiting for the mine operators to show up and talk with him about averting the threatened fall strike, and Molotov hadn't been heard from for three weeks. So the story of Mr. Travers rated page one and a picture.

Mr. Travers' face was identical with that of the man who had asked directions to Lorelei Street. Clancy crossed his legs and settled down to see what it said about Mr. Travers

under the picture.

The account was a trifle confused. It said that Mr. Travers had been found near death from starvation in his walk up apartment. He was still conscious when found by a relative. Up to that point there was nothing remarkable. But the kitchen of the apartment contained a garbage can filled with emptied cans which showed that someone had been eating quite regularly. Mr. Travers insisted he hadn't missed a meal for months, and didn't feel hungry.

A quart of plasma had already started him on the upward path, and after several failures the doctors had managed to gt him to keep a small amount of Pablum in his stomach.

But in the face of incontrovertible proof he still insisted he hadn't' missed any meals. Since the empty cans were in the kitchen to lend weight to his assertion, it was somewhat of a mystery.

Clancy leaned closer to the paper as he read the next paragraph. It said that Mr. Travers ate most of his food from cans, and always bought his groceries at a store on Lorelei Street. But since there was no Lorelei Street, it was obvious he was out of his head.

The newspaper account concluded with a final mystery. Although the labels on the cans were those of standard brands, they differed in design from those brands, and the prices marked on the labels were only a tenth of current prices.

Clancy let the paper drop slowly into his lap. He was recalling Mr. Travers coming back, carrying a shopping has leaded with groceries

He debated briefly whether he should go down and tell what he knew. But Mr. Travers was recovering, and his story could be brushed aside as caused by starvation. If he were to say anything it wouldn't solve the mystery, and would more than likely make Mike Nolan suspect him of publicity seeking. Mike had accused him of that when he had saved the cat and her kittens.

Sighing, he turned to the sports page. He promptly forgot about the front page story. He was memorizing the latest baseball news so he would have something to talk about when he stopped at Garibaldi's fruit stand as he always did at ten thirty each morning to eat a free apple or banana to tide him over until lunch time.

IT WAS a week later that Clancy was transferred to another beat. It was one he had had four years previously. He spent the first three days getting acquainted all over again with old friends. One of the cafes had changed ownership, and the new owner promptly invited Clancy to have his lunch on the house every day. The waitresses were young and of that wonderful type that flirts harmlessly with all old married men to brighten their hundrum existence.

On the fourth day he captured a robber in the act of holding up the candy store. He brought the fleeing gunman down with his second shot. A leg wound. It earned him an immediate reputation for marksmanship and bravery on his beat that more than compensated for the bawling out he got from Mike Nolan for his first shot breaking a two hundred dollar plate glass window.

On that fifth day as he stood talking to the short fat man on the corner of Thirty-second and Baker Streets he felt very pleased with himself at the way things were going.

The woman walking hurriedly along the sidewalk toward him was a definite type. Neat, fortyish, with good quality clothes of yesteryear covering her rather thin frame, so that she reminded the casual glancer of a well preserved period chair.

She passed by without pausing, continued on for three or four steps, then stopped abruptly and came back.

"Pardon me, officer," she said with that air of abstraction of a confused shopper, "but could you tell me which way to go to one twenty-four Lorelei Street?"

Clancy opened his mouth, but no speech came out. The short hair on the back of his head was crawling. Into his mind had suddenly come directions; but at the same time he had recalled that other incident.

It was the short fat man who spoke.

"A block down and a half a block to your left," he said. "Be careful in crossing the street, lady. There's some crazy drivers at that corner."

"Thank you," the woman said. She hurried away.

Clancy watched her go with a mixture of feelings that worked against one another, paralyzing his faculties.

With his mouth still open he looked down at the short fat man who returned his gaze with a bright amused smile. Clancy glanced again in the direction the woman had gone. When he turned back to the short fat man to ask him how he knew the directions,

Clancy saw him across the street, walking away with a wobbling gait. He took a step to follow, then closed his mouth and remained where he was.

the fat man wasn't there.

Grimly he stood, slapping his nightstick against his trouser leg, waiting for the woman to come back. And half an hour later she did, carrying a neatly tied suitbox under her arm.

As she passed him she looked up and smiled brightly.

"Thanks officer," she said.

"Wait a minute, lady," Clancy said hastily.

She stopped and turned back, a questioning frown on her characterless but pleasant face.

"How'd they treat you?" Clancy asked, smiling disarmingly. "You get a good bargain?"

"Oh, wonderful," the woman replied. "A brand new two piece business suit. Excellent material. It would cost at least forty dollars any place else, and I got it for six ninety-five. I don't see how they can do it!"

"Uh, that's fine," Clancy said with hearty hesitancy.

He could think of nothing more to say. The woman looked at him expectantly for a moment, then turned and continued on her way.

MR. TRAVERS and his groceries, the woman and her business suit, the short fat man, and Lorelei Street might, by a transposition of logic, be conceived as four mental points determining a mental circle. And such a circle grew in Clancy's mind as the days wore on.

His train of thought went around the fine microgroove encompassing those four points until it became a deep rut from which he could not escape.

His inner thoughts were no longer an idling motor. They were a car in gear with one rear wheel on a jack. The speedometer piled up the miles while the scenery remained maddeningly the same.

None of this showed on his face at any time. Thoughts did not have a habit of registering there. Or if they did on occasion they managed to look like stomach trouble, eye strain, or something equally unrelated to their cause.

And since none of his thoughts showed on his face, no one, not even Nora his wife, suspected that he knew anything about the mysterious Lorelei Street—more especially because they didn't even know there was such a mystery. Not yet.

Nor did Miss Mae Lavender have any inkling that there might be a mystery connected with her smart new business suit as she strolled primly along the sidewalk, window shopping.

Her window shopping generally consisted in examining the latest styles and reassuring herself that what she was wearing was infinitely better. And this particular morning was no exception to that rule. That is, it wasn't until she saw her reflection in the window of Faccy's Style Shoppe.

It was a Tuesday morning, and what caught her eye first was the word Tuesday in embroidered script in reverse.

One of the most intimate secrets of her existence was panties for every day of the week. She studied that reversed Tuesday for a long second, her mind unable to quite adjust itself to facts.

The facts, as she found when she made the mental adjustment necessary to accepting them, were simple. A crowd was gathering around her on the sidewalk. Her wonderful business suit had vanished off her. She was dressed in a brassiere, a garterbelt covered by her Tuesday panties, a pair of nylons, a pair of neat brown slippers, a pair of brown suede gloves, and a brown plastic purse.

It was rather cruel of the newspaper photographer who happened on the scene at the moment to snap her picture. But he couldn't altogether be blamed. Actually, she had a much more photogenic body than her usual attire and her face suggested.

The reporter who wrote up the thing was no more able to account for her having gotten where she was discovered without being noticed by someone than were the police. Nor were they willing to accept her story of having been properly dressed a moment before at face value. Its corollary, that her clothes had simply vanished, was, to say the least, "rather weak," to quote the newspaper account on the front page under the picture.

But to Clancy when he read it after supper it was not weak. It was the only sensible explanation. After all, a suit bought on Lorelei Street would naturally partake of the properties of that evanescent thoroughfare. More especially since groceries bought there had previously done the same thing.

When he finished the account he turned to the sports page more disturbed than he would admit to himself. A feeling had settled over him that sometime, someday, someone was going to ask him the way to Lorelei Street again.

It angered him in a deep way. It

was too much like something was indulging in a sly jest at his expense, though in what way and for what purpose he couldn't guess.

LANCY!" He glanced up guiltily from his minute reexamination of the front page picture of Miss Mae Lavender in her Tuesday panties.

"Yes Nora," he replied as she appeared through the door from the kitchen.

"Do you remember my telling you last week that the radio won't work?" "No," he answered truthfully after

a moment's thought.

"Maybe I forgot to tell you," Nora said. "I was going to have it fixed when I got the time. But now I'm going to trade it in on a new one."

"Why?" Clancy asked. "It might need only a little fixing. It's a good radio."

"I know," Nora admitted, "but a circular came in the mail today. It's too good an opportunity to miss. They allow you the new value of your radio when you bought it as trade-in on one of their television radio-phonograph consoles."

"They probably make so much profit on it they can afford to," Clancy said skeptically.

"I don't see how," Nora said. "I brought out the sales contract on our radio, and for twenty dollars and our old one we can get it."

Clancy suddenly went cold.

"Let me see that circular," he said quietly.

Nora padded back into the kitchen and returned with it, handing it to him.

It was a many times folded sheet that unfolded into a large poster, big as a sheet of the newspaper. Covering two thirds of its surface was a full color picture of the radio, a truly wonderful set.

Its rich walnut doors were open,

revealing the television screen, the AM FM radio, and the phonograph. Underneath the screen was a solid bank of knobs.

Clancy glanced at it approvingly, then searched the print for the name and address of the store. It was CALVA RADIO, and the address was 218 Lorelei Street.

"Two eighteen Lorelei Street," he said slowly, aloud.

He waited for the inevitable question of where that might be. It didn't

"Well," he said, handing the circular back to Nora, "why don't you go look at it tomorrow."

"I intend to," Nora said.

She folded the sheet up and returned it to its envelope, and went back to the kitchen. She had not asked where Lorelei Street was.

Clancy stared at the kitchen door for a long time, making his plans. He knew without troubling to wonder how he knew, that Nora would come to him on his beat tomorrow and ask him where Lorelei Street was, and that he would be able to tell her.

"Yes," he thought to himself, "I'll be able to tell her. And after I tell her, I'm going along with her and see this Lorelei Street for myself. That's the only way I ever will be able to."

One thing was definitely solved. The mystery of how only certain people knew about the street, and were headed there to get some special thing. They received a circular. It was as simple as that!

ALTHOUGH it didn't show on the surface, Clancy was on pins and needles all the next morning, fidgeting in a motionless, statuesque sort of way.

Nora did not show up. By four o'clock when it was time to report to the precinct station at the end of his day, he was convinced that she must

have found her way to Lorelei Street unaided.

But when he arrived home he discovered Nora peculiarly non-interested in going to CALVA RADIO.

"Oh, I'll get to it in a few days," she said in reply to his discreet questioning. "There's no time limit on the offer or they would have said so."

It was the same thing the next day. That night when he let himself go so far as to express his eagerness to get the new radio Nora came almost to the point of deciding to get the old one repaired and keep it.

On the third day at precisely ten o'clock in the morning Clancy found himself standing on the corner of Thirty-First and Baker Streets. His emotions and expectations had not been able to remain keyed up. He was his old, unemotional self.

He didn't even get excited when the short fat man appeared, walking toward him along Baker Street. He recognized idly that he had seen the man before, but couldn't remember where.

Even when the short fat man stopped to talk to him he couldn't place him. And he was to remember this later and decide that it must have been due to some sort of hypnotism.

They exchanged opinions on the weather, agreed with each other on the prospects for and against various ball teams, and were just touching on politics when Nora showed up.

Clancy was so abstracted that for a moment he wondered why she was there. He hadn't seen her until she stopped in front of him.

"Hello, Nora," he said. "What brings you on my beat? Oh, by the way, this is my friend—"

"Nicolas Calva," the short fat man supplied, holding out a soft pudgy hand that Nora decided felt like a potato pancake dipped in flour before it's put in the skillet. "You're Clancy's wife?" "Yes," Nora said. The name clicked in her mind. "Are you the owner of CALVA RADIO? I was just going there to see about your special sale on television sets."

The whole setup penetrated Clancy's mind. He remembered that he had seen Nicolas Calva when Miss Mae Lavender had asked for Lorelei Street. And now he was here again. He spoke up hastily.

"There ain't much doing on the beat this morning, Nora. I think I'll go along with you and look at the radio."

The short fat man had been about to lead the way. He paused, frowning at Clancy, as though he had not expected this development. Then he turned his head and looked out into the street intersection.

Clancy was watching his puffy features. He saw lines that might be a frown of concentration appear on Nicolas Calva's forehead. He saw the thick chest under the dark business suit become even thicker as the short fat man drew in a deep breath.

Then his attention was jerked into the street by the loud rending of metal as two cars came together.

One of the cars turned over, spilling its occupants into the street. The other seemed to come to a complete stop, then continue on for another fifteen or twenty feet, somehow defying gravity by staying a good foot and a half above the pavement and moving over onto its side in a deliberate movement.

Other cars from all four directions were stopped, as though at some signal they had cleared the intersection for this accident to happen.

Clancy's heart sank. He wouldn't be able to leave now. He'd have to stay and direct traffic, and collect the names of witnesses.

Witnesses! He pulled out the notepad he carried for just such an emergency and shoved it into Nicolas Calva's fat hand.

"Put your name and address down here, Mr. Calva," he ordered. "You're

He glanced briefly at the bold scrawl on the sheet. Then he was caught up in the mad whirl of action that ended an hour later with the wreckers hauling the two cars off the street

Miraculously no one had been seriously hurt, though three of them had gone to the hospital in the ambulances to be examined for the possibility of internal injuries.

With traffic normal again, Clancy looked around for Nora and Nicolas Calva. But of course they were not there. It was one of the very rare times that Clancy cursed out loud. His opportunity to visit Lorelei Street was gone.

It was almost as if Nicolas Calva had deliberately caused an accident to prevent him from going along with Nora!

NORA WAS not at home when he got there. Clancy hung up his hat and coat dispiritedly. Mike Nolan had not been too pleased with the way he had handled the accident. He not only had not obtained any signatures, but he had also lost his note book. He had completely forgotten about the note book until he was at the station making out his report. Then he remembered vividly that the last time he had seen it was when Nicolas Calva was scrawling his name and address.

He was tired and hungry. He wished Nora were home getting supper ready as she usually was. He started toward the refrigerator, changed his mind, and went toward the front room.

He paused in the doorway, surprised. The new radio was there where the old one had been. It was even more luxurious than it had ap-

"So they've brought it!" he mut-

He approached it cautiously, deciding that Nora must be next door telling the neighbors about it.

He swung one of its two doors open experimentally, revealing the television screen and the dizzy array of knobs

He ran his fingers over the knobs without twisting any of them. He would wait until Nora came home, and find out more about the new radio before touching it.

Taking his fingers away from the temptation of the radio, he gripped them together behind his back and went out on the front porch. If Nora happened to be in one of the houses across the street she would see him and come home.

"Good evening, Clancy," a familiar voice beyond the end of the porch said.

"Oh, hello, Jerome," Clancy said. "I couldn't see you at first, cutting the border on your knees like that."

"Nora not home yet?" the neighbor asked, getting stiffly to his feet.

"Oh she's been home all right," Clancy replied. "Our new radio is here. She would have had to be here for them to bring it in."

"I saw it come," Jerome said. "Just an hour ago. And I don't think she was here then."

"What makes you think that?" Clancy asked.

"Well," Jerome hesitated. "They used the key to get in. Of course, that was quite all right. Probably they made immediate delivery, and being a reputable firm Nora gave them the key rather than coming home before she wanted to. They took your old radio away with them."

"Yeah yeah," Clancy said, frowning, little alarm bells sounding in the

back of his mind. "Tell me, was one of these guys a short fat man?"

"How did you know?" Jerome

asked in surprise.

"I guess maybe Nora went to a show or something," Clancy said, ig-

noring the question. "Think I'll go fix me something to eat." "Why don't you come over and

have supper with us?" Jerome asked. "It's just about ready." And as Clancy hesitated, "Save you some dishes."

"Thanks," Clancy gave in. Jerome's wife was too talkative, but less uninviting than dirty dishes.

RY TEN o'clock Clancy began to be sure something had happened to Nora. He had had supper at Jerome's, then came home. In the hope that Nora might have been home and left a note, he passed a dismal hour searching the house for one, even getting down on hands and knees and searching under tables, the bedroom dresser, and even in the bathroom. But he searched without any real hope.

He was as sure as he had ever been sure of anything that Nora had never left Lorelei Street. His mind was basically unimaginative and logical. It had soaked up a certain logic from the mystery of Lorelei Street, and that logic whispered that Nora was still there-perhaps unable to find her way out just like people outside couldn't find their way in except at certain times.

There was something basically sinister about it. The short fat man, Nicolas Calva, had been there to take her to the street without having to give directions Clancy could hear. If it weren't absurd, it would appear that the fat man had also caused that accident to keep Clancy occupied when he expressed the intention of going with his wife.

And one thing Clancy was morally

certain of. Nora would never have given the keys to the house to anyone under any circumstances. She would have come with them instead, to make sure they didn't track in dirt.

But what could be tell his superiors in the police department if he reported that his wife was missing? The whole story coming from him would just get him locked up in psycho while they dug in the basement and in the back yard for the body. Maybe even a night at old Bailey blinking at a spotlight while guys took turns making you say something to senseless questions like, "Where did you ditch the corpse?"

At ten thirty he paused in front of the radio. It was the only clue, the only tangible thing in the whole business. He stuck out his lower lip stubbornly. Nora wouldn't like it, but he was going to turn it on and see what happened.

One knob had a plainly labeled ON and OFF in two positions. The white line on the knob pointed to OFF. Very carefully so as not to break anything he twisted it to the right. Two thirds of the way to the ON position something clicked audibly and the knob jumped the rest of the way under its own power.

He waited. Nothing happened.

Maybe it wasn't connected. He looked in back for the cord. It lay neatly along the wall and ended at the wall outlet. That was O.K., So the trouble must be that it wasn't tuned to any station. He went to the front of the cabinet again.

The television screen was lit up. A wrestling match was going on. Clancy grunted in a satisfied tone. Pulling his favorite chair into the middle of the room he sat down to watch.

But he couldn't enjoy it long. His thoughts kept returning to Nora. He missed her. Of course, wherever she was, she was all right. She was the type that would always be all right. Capable.

HIS ATTENTION drifted back to the wrestling match. One of the men was wearing brilliant red trunks. the other gold. Color television was great. Clancy recalled reading just the week before that it had been proven a success, and would be on regular broadcast in a couple of years.

He stared at the screen, slowly pondering the inconsistency between that news item and the fact of color television for a wrestling match. He dismissed the problem with a sigh. Too many things had been inconsistent lately. He must not have read the news item correctly.

The wrestler in the gold trunks won the fall. The announcer said it was intermission. The ring shrunk in the screen, bringing in a large section of the audience.

Suddenly Clancy sat up and leaned forward in his chair. There was Nora and the short fat man was with her. They had been sitting together and were rising to join the crowds heading toward the exit.

The scene was replaced by one of a radio like the one Clancy was looking into. A man started expounding on the merrits of the set. Clancy glared at him.

"Not only do these sets sell for the unheard of low price of one hundred and forty-nine ninety-five," he expounded, "but in addition we allow you full trade-in price on your old set. Just bring your old set with you, or we will pick it up on delivery of the new set. Call or come to three five Lorelei Street tonight. We're open until midnight. Three five Lorelei Street. Catch the H car to Division Street. walk two blocks east and half a block north. Before midnight."

He looked right at Clancy as he spoke, and Clancy, returning the stare, felt butterflies crawling in his stomach, because he knew that if he followed those directions he would find himself at last on that evanescent thoroughfare!

THE SIGN sticking out ten feet up the light pole said LORELEI ST.. The other sign, at right angles to it, said DIVISION ST., They were both well lit up by the street light. Other than the difference in street names on the two signs, there was one major difference between them. The one for Lorelei Street was a trifle blurred. Out of focus.

Clancy, standing on the sidewalk under the signs, dropped his eyes to the street itself, looking up it curiously. It was paved with porous blacktop. The blacktop began about a quarter of a block away, blending into the cracked and patched concrete that came to Division Street.

The blending of the blacktop and the concrete was not clearly defined. It would seem a quarter of a block away until Clancy tried to see exactly where the concrete left off. Then the blacktop would seem to come closer.

He lifted his eyes to the street sign quickly. For just an instant it read LEE ST., then it was innocently displaying the spelling of Lorelei. He looked away slowly, then jerked his eyes back to it, but it remained LORELEI.

He took his watch out of his pocket and held it up to the light. It was after eleven thirty. Sticking it back he turned into Lorelei Street without further hesitation.

The blacktop seemed to come to meet him. Before he had gone three steps the paving was blacktop.

He turned and looked back. As far as he could see a block and a half away the paving was new looking blacktop.

He switched his attention to the

store he was in front of. It was a bakery. The number on the door was three two.

Clancy looked across the street. There, a quarter of a block down, was the Calva Radio store. Across its front was a big sign proclaiming the big trade-in sale. He steeped off the sidewalk, crossing the street diagonally toward the store.

When he reached it he peeked inside. The place was crowded with people and radios. Yet there was no one outside on the sidewalks, and there were no cars in the street.

Clancy pressed his lips together firmly, the only outward sign of what might be going on under his expressionless exterior. Pushing through the entrance, he joined the milling crowd inside, working his way patiently toward the back, where he could see the top of a partition that would be the offices.

"Are you waited on?" a clerk asked. Clancy looked at him blankly. "No," he said gruffly. "Where's Mr. Calva?"

"He's out," the clerk said. "We expect him back almost any minute now, though." He glanced toward the front of the store. "Here he comes now, sir."

Clancy followed the clerk's gaze and saw the people parting in a way vaguely analogous to wheat perting with the passage of a concealed animal. Then Nicolas Calva's short squat figure emerged from the crowd, a pleased expression on his face.

"Hello Clancy," he said, the pleased expression increasing.

"Where's Nora?" Clancy asked without smiling.

"On her way home," Nicolas Calva answered. "I just saw her onto the streetcar from the wrestling match. I wouldn't take every customer to the wrestling matches, but she said she had always wanted to watch one, and that was the reason she was looking forward to getting a television set. So there was a match on tonight, and she was the wife of my friend Clancy. So I took her."

"Ain't that thoughtful of you," Clancy said. "To show you how grateful I am, I'm arresting you for conducting a confidence racket. Will you come to the station peaceable or must I muss you up a bit."

"Arresting me?" Nicolas Calva exclaimed incredulously. "A confidence racket? Are you being ridiculous, Clancy?"

"I don't think so," Clancy said stiffly. "Are you coming or do I have to drag you? I intend to be off Lorelei Street before midnight, and you with me."

Nicolas Calva turned three shades whiter. An inner struggle was going on in him. As Clancy made a threatening move toward him he held up a pudgy hand.

"All right, Clancy," he gave in. "I'll go peaceable. But you're going to regret this."

"I DON'T think so," Clancy said unemotionally. "Book him as a suspect in a confidence racket, Dave."

It was the tenth time Calva had warned Clancy he was going to regret arresting him.

"Right, Claucy," Dave, the desk sergeant, said. "Empty your pockets on the desk, Mr. Calva."

"I won't," Nicolas Calva said emphatically. "I want to call a lawyer."

"Empty his pockets for him, Clancy," Dave said quietly. "And don't object, Mr. Calva, or we'll make you strip down."

Clancy glanced briefly at each thing he brought to light, grinning in satisfaction at the array of business cards proclaiming Nicolas Calva to be owner or proprietor of a large variety of stores, all on Lorelei Street. He handed each to Dave, whose face brightened.

"This ties in with those two cases the newspapers ridiculed us so much on," he said. "We can get Miss Mae Lavender and Travers down here tomorrow morning and clinch this case."

Nicolas Calva opened his mouth to say something, then brought his lips together in a quiet sneer, and said nothing.

Clancy watched him as he was led through the varnished doors to the back of the station where the lockup was. His lips were quirked into a satisfied smile.

"Good night, Dave," he said.

He pulled out his watch and looked at it as he went toward the entrance. It was going on one o'clock.

When he reached home the lights were on. Nora was watching the television so intently she didn't hear him come in. He settled a heavy hand on her shoulder affectionately. She looked up at him, smiled briefly, then turned her eyes back to the television screen again.

Clancy saw that the images were the plain black and white now, a regular program. He watched until Nora reached up and patted his hand softly.

"Let's go to bed now," he said. "I'm going to have a hard day tomorrow." "All right, Clancy," Nora said. "I'll have lots of days to watch the tele-

"Yeah. Sure," Clancy said gruffly. "Come on, Nora."

vision."

CLANCY violated a self imposed rule of a lifetime and read the newspapers while on duty the next day. He had spent two hours closeted with Mike Nolan before going on his beat. He told a story that was as close to the truth as credibility would al-

low

The gist of his story had been that he had been present when the short fat man had taken Miss Mae Lavender in tow, and that he had talked to her later and learned of her buying the suit that had later vanished off her back. He hadn't said anything because he knew no one would believe him. Instead, he had kept looking until he had found Nicolas Calva, and when he accidentally ran into him that night while out taking a walk he had arrested him.

The newspapers said nothing of this private talk with Mike.

CALVA THE GREAT AR-RESTED, they bannered. Underneath in the center was a double column picture of the fat man's face with the eyes obviously touched up to look large and hypnotic. Under this was the story the police had handed out.

Michael Nolan, police captain, recognizing the handmork of a noted
hypnotist swindler in the recent mysterious occurrences that included the
near death by starvation of Mr. Travers while convinced he was no missing a meal, and the appearance of
Miss Mae Lavender in public in undress while convinced she was wearing a respectable business suit, quietby put his force to work on a citywide search for this criminal, which
had produced results in the form of
Calva himself the night belore.

This morning Mr. Travers and Miss Lavender identified Nicolas Calva in the police lineup as the man who had sold them groceries and a suit that didn't exist.

It went on at great length, saying nothing about Clancy, subtly implying that all the credit belonged to Mike. Clancy, reading this, put his tongue in his cheek and chewed on it, thinking of what Nicolas Calva had said about regretting arresting him.

WILL CALVA VANISH BEFORE TRIAL? the next day's paper

asked. A picture of him peering from behind the bars of his cell was under the headlines. The article under that, and continued on an inner page for three full columns, tried to answer the question. It told of cases of magicians who had vanished from more escape proof prisons than that of the fifth precinct. It described some of the possible methods Calva might use in an attempted escape. It described the special precautions that Michael Nolan was taking to prevent such an occurrence. And it left the reader, including Clancy, with the impression that Calva would be able to escape with ease in spite of all precautions.

CALVA TRIAL SET FOR JULY 14, the next day's paper shouted. Clancy got out his pocket calendar and did some figuring. The fourteenth was two weeks and three days away. Three weeks from when Nora had

bought the television.

He put the calendar away and paced his beat, a dark suspicion in his mind. Calva had said, "You will regret this!"

CALVA VANISHES IN COURT-ROOM! a red streak special screamed at noon of July fourteenth. Clancy read it without changing expression. He didn't bother to even pick the paper up off the pile and see what it said. He knew without reading it that all the tangible evidence had vanished at the same time.

He spent the rest of the afternoon trying to think of ways Calva could get revenge on him. He was sure revenge would come. Just as sure as he had been that he could go to Lorelei Street that fateful night when he arrested Calva.

When he went to the station to check off for the day there was a summons for him to appear in court next day. On the streetcar on the way home it suddenly occurred to him that the radio would be gone now. He made up his mind to get another.

The dirty white house that served as landmark for him to get out of his seat and start toward the car exit appeared. Absently Clancy pulled the bell cord and got up. He was the only one to get off tonight.

He crossed the street. His mind still on the television, he looked up at the

street sign:

Suddenly his mind flashed into startled attention. The sign said LORELEI ST. ! It should be Archer Street, the one he lived on. He looked both ways on Davis Street, the street the car tracks ran on. All the landmarks were familiar. It was Archer Street.

Or was it? Suddenly he was unsure of his memory. Something seemed to whisper that it had always been Lorelei Street. .

Of course it had! He looked up its smooth pavement with a glowing feeling inside him. He lived up that street-somewhere.

He took a quick step, then paused, perspiration dotting his forehead. Deep in his subconscious something was trying to hold him back. But he fought against it, and slowly he took two more steps. The blacktop paving of Lorelei Street was at his feet now. He took another step.

An impulse possessed him to cross the street to the other side. Half way across he was seized by a sudden nausea. It lasted only a moment, then was gone. He continued on across the street and up the sidewalk . . .

WITNESS IN CALVA KILLED, shrieked the papers the next day. In smaller caps under it was STRUCK BY AUTO HALF BLOCK FROM HOME. Under it was a two column wide picture of Clancy. But Clancy didn't get to see it.

Papers aren't delivered to Lorelei

Street.

The FIFTH CHILD

By August Derleth

There were only supposed to be four children in the painting. Who then was the fifth child that appeared miraculously?...

OW THIS picture I'm telling you about," explained Hannibal Corscott, "my uncle was a little queer about that. I remember seeing it a long time ago, when I was a kid. It's a picture of four kids—two boys and two girls—playing in a circle around a big old tree that looks to be deep in some woods. It's autumn; the leaves are all colored,—rich yellow, brown, sienna, not much red, only a little. The kids have the color in their clothes. They're small kids—oh, about nine, ten, eleven years old. He was crazy about that picture."

He laughed silkily.

"I wonder, if he went off, that he didn't take it with him. The reason he liked the picture wasn't that it was so good; it was a good job, though; no, it went back farther than that. When Uncle Jason was a boy, well-say twelve or so .-- something like that, he was in love with a girl. You know how young people talk, and they were planning on getting married, and he used to say he wanted two kids and she said, no, four. Well, one day they were going along Madison Avenue, passing the show-windows of some art association, when they saw that picture. 'Look,' she cried, 'there they are-our

As he stared at the painting st seemed to him that suddenly an extra child had appeared around the base of the tree—a girl...





four kids.' Well, later he bought the picture. Something had happened. I don't know, but I think she died or went off, and he never looked at another woman. Some men are like that, you know.

"Now this picture, Inspector, had a great deal of meaning for him. It belonged to something important in his life—I guess you can see how that would be so. He made a lot of it. You'll see it in a few minutes."

"The picture, however, seems to have nothing to do with your uncle's disappearance," said Inspector Gryce.

"Now that's a matter I'm not prepared to make a statement about, and that's a fact," said Corscott. "Those four kids in that picture—my uncle got it into his head that they were what his kids might have been, or some such notion. He lived too much alone; he got lonely. My uncle was a little queer; I've said that. If you could understand how he lived—but then, even I don't know exactly how he lived; I didn't see him so very often. He was a fairly handsome fellow, even at his age, but sedentary, sedentary: a solitary...."

IT WAS ON a morning in May when Jason Corscott first noticed the alteration in the picture. An hallucination, he thought. The illusion was of someone looking out just momentarily from behind the great old tree—as if a fifth child were concealed there, waiting his turn to come forth and join in the circle around the tree. Or was it a girl? For one brief moment he considered this question before he dismissed the hallucination from his mind.

At seventy, he was austere, almost forbidding in the face he presented to the world. He had made a modest success of his career, but he had long felt that his retirement had been ill-advised. He was lonely. He missed the

steady flow of people in the office, though he had no question of his nephew's competence. People could speak of him as a person of some consequence in the financial world, no Morgan, to be sure, but nevertheless one of the soundest figures on the Exchange.

The austerity vanished in the privacy of his apartment. Here he was, in reality, as so many men and women are, when alone, entirely himself. Here he sloughed off all the masks he wore to protect himself from the world, and became someone markedly different. To tell the truth, he favored an aspect of himself few people suspected, the arrested youth in his early teens who had loved Evelyn Howe, and who had never got over her defection, her going away finally, her marrying another man. To the idyl of their love he returned again and again; to its symbol, the picture of the frolicking children on the wall, he turned his eyes repeatedly during his waking hours. And with each year of age, he looked back ever more fondly to that halcvon time when Evelyn and he and all the world were young.

But now, in a subtle way, something had altered. Up to vesterday, Evelyn had still lived somewhere in the world. Ceylon. Far away, but still, she was alive somewhere, and the tenuous bond that had been renewed from time to time in little chance notes at Christmas and birthdays, was forever severed. "Mrs. Thomas Bainbridge, the former Evelyn Howe, died today at her plantation in Cevlon-" He had not read beyond that; nothing could add to or diminish the fact that she was dead, gone out of his world, so that the sight of the picture on the wall, the picture of their four children who had never been born and were destined to remain forever the creatures of an artist's imagination, should stir him to hallucination.

For that, certainly, it was. There were the four of them—the two boys, the two girls—the one in the purple shirt, the one in the blue dress, the one in yellow; oh, yes, all were there, unchanged, in a world where nothing ever changed, and their shouts and their joyous laughter might ring out forever.

But at this moment, at the instant of his dismissal of his hallucination, he saw once more what appeared to be the head of another child looking out from behind the trunk of the tree. He went directly to the mantel, over which the picture hung, and peered intently at it. How extraordinary that he should not have noticed it before! Still, the child's head—a girl's—was so placed as to blend with a branch swinging low and also seem to be an outgrowth of the tree trunk, Yet he had always had the conviction that the trunk was symmetrical.

HE PULLED over a hassock and stood on it in order to scrutinize the picture more carefully. What else might he have missed? The extra child was there, beyond question, just turning her head to look out from behind the tree: beyond her, beyond the four frolicking children, the woods seemed to stretch limitlessly toward a place where the sun shone even more brightly, a glade similar to this one in which the children played, but somehow larger, more significant. Instead of being enclosed within a framewhether the obvious wooden border or the frame of woods-the picture seemed to have gained in depth and meaning; it was as if the discovery of this extra child had added a kind of revelation to the picture.

But there was also another factor, Corscott thought as he went down the elevator afterward; the children were no longer four, the children Evelyn had marked as their own in those magic years of their youth. By all standards, the picture should have lost some of its meaning to him; yet it did not. If anything, this discovery so many years after the picture had been bought to hang over the mantel enhanced it in his eyes. Secretly he fancied that this one, this extra child, was the unplanned one, the unpredicted, unforeseen child come to remake their dream.

It was difficult, in his preoccupation with the picture, to remember that Evelyn had died, shattering the bond which had been so strong between them for

PERHAPS because he glanced at the picture each time he passed it, he was not aware of increasing change for some days. May passed into June; the summer grew hot, and his associates, few in number, were getting ready to go up the coast to the seashore. One of his oldest friends stopped in one evening to bid Corscott goodbye.

"Tell me, Joel," said Corscott in the course of their conversation, "how do you explain hallucinations? You're a doctor: you encounter these things."

Dr. Matthews shrugged. "There are all kinds of hallucinations, Jason."

"Well, I don't mean the kind that come with liquor or day-dreams nothing of that sort. I mean something you see which ought not to be there."

"Have you been having them, Jason?" the doctor asked with a hint of anxiety in his voice.

"I'm beginning to think so. Come here."

He took him over to the picture. "Oh, yes, this picture. I've seen this before, Jason."

"Well, look at it. Don't you see anything different about it?"

"Not a thing, no."

"How many children do you see?"

"Good heavens, Jason! How intense you sound!"

"I mean it. Count them, will you?"
"Why, there are five—four playing, and another coming out from around the tree."

Corscott swallowed. "But, you know, I was convinced there were only four children there. So was Evelyn. We saw them quite clearly. Now this extra laughter..."

Dr. Matthews looked at him professionally. "Look here, Jason. Why dan't you run up to Maine with me? Do you good. You need to get out of the city once in a while. You lock yourself up here too much."

"No, it isn't that, Joel. Just stand hand on one arm of the doctor, who had begun to move away. "I've had that picture for fifty years, you know. I never saw that extra child until a few days ago. And the dimensions seem to have altered—a subtle thing; I am hard put to it to explain it—as if to invite me to look into another world beyond that frame. I mean, you seem to see a country beyond the children, and yet part of their lives, an integral part, a place of sunshine and light and laughter..."

"Without a stock market," added the doctor dryly.

"Yes," agreed Corscott with a small laugh. "Without that and a great many other things. But what I wanted to say is that I noticed this extra child just a few days ago, a week or ten days; I couldn't tell you any longer which day it was. She was just turning her head to look out from behind the tree."

"She would appear to be making ready to run out," said the doctor. "See, she's getting ready to toss her hair back out of her face so that she can join the others. I'd hardly describe her as just turning to look out from behind the tree." Corscott coughed. "That's what I mean," he said, 'exactly. But the other day, you know, I am quite certain—believe me, I really am certain—there was nothing more than a part of her head showing. Do you see what I mean?"

MATTHEWS looked at him with more care than before. "Yes, I see. Really an extraordinary hallucination, when you think of it. But then, you've always thought a lot of this picture, Jason; you've had it on your mind a great deal, perhaps because of that youthful romance of yours."

"She's dead, you know,"

"Yes, I saw it in the papers." He considered for a moment, turning away from the picture. "I could give some advice, but I don't know whether you'd take it or not."

"What is it?"

"Why don't you sell this picture or put it away for a while?"

"No," said Corscott quietly. "I think it means a little too much in my life."

"That's just it. That's the entire basis for your hallucinations, Jason. A kind of wishful identification with the world of this picture which has come in your mind to represent the world of your adolescence. This is, in fact, a kind of arrested development; you never looked at a woman after Evelyn Howe, did you? No. When she went away..."

"Oh, come, Joel, that's over and done with. A long time ago."

"In a sense nothing a man does is ever over and done with. It leaves a mark on him and his world. And this picture is the world somehow you never knew—the world of Evelyn and the four children—love, romance, ideals—a world of childhood and youth divorced from the business world in which you spent your life." He took his old friend by his shoulders. "Come along with me. We'll rot in the sunlight and swim out to sea. Believe me, Jason, you need that kind of relaxation. You're growing farther and farther away from life."

"No. I have my own life."

"Inside, yes. A dream, an hallucination."

"We were talking of hallucinations, Joel," said Corscott, smiling. "After all, your world might as well be an hallucination as mine."

"You're philosophical today."
"And there are quite possibly planes

of time and space with which mankind is not yet familiar."

"Take case Yau'll become a spirite

"Take care. You'll become a spiritualist and take to seances."

"No, never."

"Promise me something at least," urged Matthews.

"If I can."

"Don't look at that picture for a week or so. Cover it up. Do something about it. But don't look at it."

"Very well. I won't."

"I'll look in when I get back. If you change your mind, you have my address. Just follow me up. There's plenty of room for you, and we'll vegetate."

"Thanks. But I'll probably stay here. My roots are down too deep."

DURING the week he kept the picture covered, he was distribuingly aware of a kind of life beneath the cloth. This was, he felt certain, another hallucination, this feeling of standing on the portal of another world, of looking into a world that might have been his own. If I were a child again, he caught himself thinking repeatedly, I would like to be there. To be the age he was when Evelyn and he had discovered the picture—so young, in love, their first love, his only love!

The sense of throbbing life persisted from beneath the covering cloth with an extraordinary vitality. But he refused to yield to his impulse to remove the cloth before the promised week was up. He had, in fact, been in receipt of a brief letter from his old friend cautioning him jokingly against dwelling upon the picture and warning him, with equal facetiousness, of the serious consequences of hallucinations. "After all," Matthews had written, "every dreamer reaches a point at which he no longer knows where reality begins and where it ends. And he asks himself quite seriously whether the welcome dream he has is the real world or whether the world in which he lives is just a bad dream."

The conviction of life beneath the cloth haunted him day after day. He could not take his mind from the picture, but he confided to no one else anything of what troubled him. Yet he was not so much aware of being troubled as he was of a kind of anxiety, as if-however absurd it was-the extra child might run out from behind the tree, out beyond the circle of frolicking children, out of his sight beyond the boundaries of that world caught within that frame, before he could lift the cloth. It was important that she should not; it was important that he see her face to face.

He restrained his eagerness until the Monday a week after he had last seen Joel Matthews. Then he waited until evening to lift the cloth, so that the sunlight of the picture might meet the soft evening glow of his apartment. His eyes sought at once for the fifth child, the extra girl.

There she was, free of the tree, her arms extended as if to join the circle of the four frolicking children. And yet, she did not seem to be looking at the children at all; she seemed to be looking directly ahead, out of the picture, at him. A fresh, beautiful girl, thirteen or fourteen, he thought, perhaps a little older than the others, with something so familiar about her that he felt a pang of nostalgic pain.

Like Evelyn, he thought, even to the dress

He turned up the lights, pulled up the hassock, and mounted it, leaning over the martel. He stared, His mouth went dry. The extra girl was in the likeness of that Evelyn Howe he had known and loved more than fifty years ago, and, seeing her so, standing in that sunlit glade waiting to resume a time of joy and laughter, he was overwhelmed in the pent-up rush of emotion which had been too long locked away. All the love withheld, all the affection he had longed to lavish on someone came pushing up like a tidal wave, engulfing him.

He could almost hear the shouts and cries of the children. He could almost feel Evelyn's impatience where she stood with her arms extended to him. waiting. The scene invited him.

He put his hands on the frame of the picture. His fingers reached beyond, into the picture, into space. The frame dissolved, vanished. The room around him blacked, swam in a mist of dark-

He climbed up the mantel, over the frame...

66 JOW THERE it is," said Hannibal Corscott. "Just as he always had it, over the mantel. He used to sit by the fireplace and look up at it and dream. Of his four children that he never had, no doubt,"

"I would hardly think of your uncle as a dreamer, Mr. Corscott."

"Ah, who would? He was a financial wizard. In his way, of course. No Hetty Green, no Morgan. And perhaps just as well. He was reasonably content. Or was he? I wonder. Now just take a look at that picture."

"I thought you said there were four children-two boys and two girls. There are six-three boys and three

oirls."

"Yes, there are, aren't there? I saw the picture first when I was quite young. There were four children. And what do you make of that spot over to the left?".

"It looks like an old man sleeping in the shade."

"Sleeping or dead, yes. He wasn't there, either. But of course you can say that children don't see these things. Perhaps they don't. Perhaps children see just what they want to see. But I know I didn't see it this way. There were four children, and nobody else in the picture. What do you think of it?"

Inspector Gryce laughed brittlely. "I should say that someone certainly had an hallucination."

"Yes. But whose hallucination? His or ours? I leave that for you, I find it impossible to answer."

LOOK FAST FOR MOLEC

* By MILTON MATTHEW *

IN SPITE of all the world's magnificent A scientific advances, in spite of the atomic bomb, the electron microscope and God knows what other gadgetry, nobody has ever really gotten an optical glimpse into the molecular much less the atomic world.

If you pick up any book on chemistry or physics you'll see plenty of pretty dia-grams of molecules and drawings of atoms, but these are merely representations, pure schematics of the system.

No one has ever seen a molcule-much less an atom or an electron!

But we're coming closer—so close, in fact, that the idea is breath-taking. First there was the electron microscope which very clearly shows the pattern of super-molecules, which are simply large aggre-gates of molecules made up of atoms. But still we saw only the shadowy outlines of the thousands of individual molecules. We did not see the molecule alone.

But now it's happened. Dr. Erwin Muel-ler of the Kaiser Wilhelm Institute, using about twenty four dollars worth of ma-terials—plus his brain, has built a "field electron microscope" which very clearly shows the outlines of some medium-sized

molecules!

The operation is simple. Inside a vacuum tube, a powerful electric field sucks electrons from a tungsten filament and draws them toward a fluorescent screen about four inches away where they create a pat-tern of greenish light, practically just like the cathode ray tube in a television set. So far, nothing new.

But Dr. Mueller placed a specimen of an

organic chemical called phthalocyanine be-tween the screen and the tungsten filament. Naturally this chemical cast a "shadow" on the screen. Now phthalocyanine is considered a small molecule, being made of a mere fifty-eight atoms. Or-dinarily this is too few to cast a very clear shadow, but in the field electron microscope it cast a very clear distinguishable picture, much like that of a four-leaf clover which theory had previously predicted!

The field electron microscope requires refinement—which will come. It will not replace the electron microscope because it is designed for the entirely different purpose of showing individual molecules. The electron microscope goes for bigger things. Dr. Mueller's invention opens up however an entirely new approach to the study of the atomic world. It may be possible to reach down and see the individual configuration of a single molecule-or maybe (this is really wishing!) a single atom!

ARMOR IS REVIVE

* By LESLIE PHELPS *

TT USED to be you could say "as outdated as a suit of armor", and be right. But not any longer. For armor is coming back in one form or another. The atomic energy experimenters use it every

day, for example. Naturally it's a far cry from today's simplified armor to the elaborate complicated masterpieces of the armorers of the fourteen, fifteen and sixteenth centuries. They built complete suits of steel ranging from an eighth to three-eighths of an inch thick, perfectly tailored to fit the individual with joints and linkages that defy du-plication today. If you visit a museum today and examine some of this armor you'll discover that a man wearing it could move as freely as one wearing an ordinary suit today, so cleverly were the joints and connections articulated.

Such armor, developing from chain mail through breast plates to complete suits, went out of use with the coming of gunpowder. Armor thick enough to stop rifle balls could not even be lifted much less worn by a man.

But armor had a come-back. During the first World War, the French introduced the steel helmet, followed by all the war-ring powers. The Germans experimented a bit with body armor by nothing came of

The Second World War saw again the use of helmets. Later on American bomber crews were given body armor of a modified form to enable them to better resist

the flying flak that entered their planes. This armor was of steel-aluminum plates, overlapping and covering vital portions of the trunk. It served more than one man

quite usefully.

With the coming of possible radioactive warfare, men must be shielded against tiny bullets of radiation-which still require thick suits of armor to resist them. Lead is a major ingredient. Consequently, the newer forms of "armor", if we may call it that, are usually heavy cloth materials in which is embedded large amounts of lead. Where even greater radiation intensity is expected, solid lead plates must be used.

Studies of body wounds of soldiers however, indicates that in a future war it is quite probable that it will be desirable to give each soldier a certain amount of personal armor in addition to his helmet. Such armor, like "flak armor", need not be heavy or massive because it is not intended to resist direct hits of heavy projectiles, but merely to ward off spent and glanc-ing blows, debris and wreckage which is so often hurled through the air.

And the ultimate, of course, will come with the rocketeers. The space-suit is generally considered as an armor, though probably the earliest models will be of some sort of fabric.

Armor is far from dead. Industry finds use for it in things ranging from shoes, to gauntlets and helmets. Goggles too are armor. The man of the future will need protection, but he won't need a squire to put on or take off his armor!

READER'S PAGE

BUSTING OVER, HE SAYS!

Dear Mr. Hamling:

Ah, Toffee! Thou brash, beautiful,
Ah, Toffee! Thou brash, beautiful,
Ah, Toffee! Thou brash, beautiful,
Babe, you have at long last returned!

But you have been enjoyed more by yours
truly than those about Mr. Myers' wonderful "dream-gir!". Now, in a novel
length, Myers and Toffee both shine to
the full extent of their enjoyment-inducing
shilly. I was in the perfect mood when
I said down to read "The Shades or condiI said down to read "The Shades or condiI said from George Malcolm-Smith's
"Thorne Smith's "Night Life of the Gods".
Anide from George Malcolm-Smith's
"The Grass Is Always Greener," no story
has been more delightfully reminiscent of
Master Smith than Myeri novel. The air
of mild insanity underlying every word of
the story was a refreshing relief three
which abound nowadays. Say, those Blemish twins turned out to be nasty little

which about nowagays. Say, loses emissible twins turned out to be masty little creatures, didn't they?

Mack Reynolds is developing into an excellent new writer. At least his ideas are novel. The other stories are hardly worth mentioning, but "Luvver" was quite

"There's a problem that's been bothering me for some time, and maybe some FA readers have ideas on the subject. Now that fantasy and seience fiction are becoming more popular than ever before, why se it that there is no real fantasy being written! If meterrily, dream-like proce which Abraham there is none of that sort of fantasy being written. Maybe the "fashion of the times" has progressed beyond this type; if it has, in my opinion it, ahould, vo back!

in my opinion it should to back!

Jones was good on the cover and inside,
but aren't you overworking him? How
about St. John or Hinton?

As assistant editor of FAN-FARE I shall add my voice to that of Paul Ganley in requesting subscribers and good material for the zine. This in one mag (fan, that is) that has great possibilities for development (and the delemination to fulfill these prospects)—and I say this in all modesty (1)

Robert E. Briney 561 West Western Avenue Muskegon, Michigan You've got a good point about the fantasy, Bob. Like you we'd like nothing more than to find a writer—or group of writers—who could do the Merritt type of story, But getting somebody to replace or equal a master is no easy tack. We've done it with Charles Myers in the Thorne Smith tradition—a fact we're sniphyl proud of And, as any writer who could turn out fantasy in the fine tradition of Merritt. Let's go one step further—let's make a request. Writers and would-be writers, if you have the talent, get to work. Then send us the story. The deor's not only open, it's off on the other nide—if you've got what it is takes

TOPS ALL YEAR

Dear Mr. Hamling:
FANTASTIC ADVENTURES hasn't
FANTASTIC ADVENTURES hasn't
published a bad issue all year. "The
Usurpers", "The Dreaming Jewels", "World
to the property of the property of the
now this great Toffee story, On the other
hand, AMAZING hasn't published a good
issue in Lord knows how many months.
Why is that There are times when I
skip most of an issue of AS, just reading
column. Oh, well Kouse" and the letter
column. Oh, well Kouse" and the letter

Mr. Calvin Thomas Beck is probably inter right now because I subtracted some twenty years from his age in placing him in teen-age group. Til sall your fault, you at the Queens SFL Conclave, that you weren't 14? After all, you did say so (I suppose to rib the many young letterwitters) in PLANET STORIES some

months back.

The red lettering on yellow background was reminiscent of a happier day at FA. I like that yellow background. the last one I can remember (though I'm probably of the property of the property of the probably strating "The Return of Jongo" by Williams. I like 'em. Cover fine. the two men reminded me of Rod Ruth's covers. The stories, good, on the whole, with the Toffee story a rib-tickling riot. Glad to see the property of the p

The letter column: apparently the pretense on Roger Graham's identity is gone, for I see three letters, including mine, call Rog Phillips by his real name. Book-lengths and the new semi-slick paper are appreciated. More of both, please. Other ideas: back cover paintings, Paul Illos, Rod Ruth, Bill Terry and Krupa on covers, and slightly trimmed edges. Less fillers, more letters, and the same fine grade of editorials. Hope you'll try to improve AMAZING, too. Thanks.

Bob Silverberg 760 Montgomery Street Brooklyn 13, New York

Thanks for the words of praise, Bob, and as for AS, you'll find some big news on the editorial page of this issueEd.

THAT GREAT JUNE ISSUE

Sirs:

The June FANTASTIC on the whole was a great issue even starting with Jones' cover which was the worst part of the whole magazine. I rate the stories as follows:

1) "Shades of Toffee"-the first and only Toffee story I ever finished and more or less enjoyed.
2) "If Tomorrow Be Lost"—a great new

slant on an old idea. "The Mechanical Genius"-another 3)

good one. 4) "The Man Who Would Not Burn"-

good. 5) "Luvver"—all right.

This issue was the first I ever read which did not have at least one stinkeroo in it. The shorts were great as usual. Why not have more of them? As for the Why not have more of them? As for the "Reader's Page", it's getting longer. How about cutting some of those junky ads out and giving the space to the "Reader's Page". And as for W. Paul Ganley, he should be ashamed to stick his nose into the RP again. And please, how about republishing some of the Burroughs and Heinlien stories? And also please get a new excuse for keeping FA down to 162 pages!

Anthony Lubowe 760 Grand Concourse Bronx 51, New York

Hey, why does everybody pick on poor Paul? As for the page size, we don't have a good excuse handy—but we'll think of onel

THE OBVIOUS ANSWER

Gentlemen:

You desire comments on the "Toffee" story in the June FA. Very well, there is one very obvious answer. The story is a cheap imitation of the style and subject matter of one of the late Thorne Smith's stories—or did you know?

J. P. Priest Fairfax Avenue Nashville, Tenn.

No we didn't-and don't. Pray tell us more Ed.

YOUNG IN BODY, BUT OH THAT MIND!

Sirs:

In your June edition of FANTASTIC I was reading through the letter section and a horrible doubt was planted in my mind. It was close to the end of Bob Silverberg's letter when a faint trace of panie hit me in the chest and left an

panic hit me in the chest and left an agonizing, empty feeling there. It is a special to the control of the con a stf magazine, it was with the assurance that it was an adult publication, despite the cheap thrill-fiction guff which is linked

My favorite brand of science fiction is the abstract, soul-stirring tale. I have discovered that this is considered "corny". Are my tastes childish, puerile? Are the majority of stf fans merely youngsters still wet behind the proverbial ears?

There There are two sides to every story. You could look at it with this angle: these teen-agers have an overly developed mentality, a superior intellect (at this point I blush deep crimson).

with science fiction.

What is your opinion? Just what age is the average fan? I may have exaggerated the situation. It's just that my over-all picture of fandom included an absolute

minimum of teen-agers.

Although not quite as cocksure as Silverberg, I will now display effrontery enough to actually criticize your magazine, FANTASTIC ADVENTURES. First off, I will say that you have shown me the best and most convincing proof of ghoests or spiritualism that I have ever seen. I am referring to Charles Myers and Toffee. It is obvious that the late Thorne Smith is now writing under the pen-name of Charles F. Myers. It is true that old Thorne is not quite up to his original standard with death of the converse the converse that the converse t best and most convincing proof of ghosts living, but his death must have upset him. I have read quite a bit of Thorne Smith and can recognize his work blindfolded. The rather loose use of the word "fairly and the aristocratic name of Marc Pills-worth typify a Thorne Smith story. Not only that, but the basic plot of a slightly inhibited semi-millionaire gone mad with a beautiful girl has been used by Smith on many occasions. There are very few Smith books without a court episode so well portrayed in this latest Toffee novel. And that "sitting on stomach" scene could have easily appeared in a Thorne Smith book, you know.

Now let's view this Charlie Myers thing with all the cynicism of a dried lemon. Myers is heavily imitating Thorne Smith. Perhaps Myers even did a little ghost writing for Smith at one time or another. Ouch! This knocks the founda-tions out of my picture of the late but illustrious Thorne Smith. Suppose I propose a compromise between the un-bounded imagination of the dreamer and

bounded imagination of the dreamer and the attitude of the confirmed cynic: "The hand of Charles Myers writes. Aeross the void of time and space, an entity guides that hand, so subtly that the hand thinks it is creating an original product. And throughout the heavens a gigantic laughter booms, reverberates, causing the nearby clouds to quake. The robust laughter erupts once more, the unmistakable laughter of Thorne Smith. laughter which will never die in the hearts millions."

of millions."

I hope that this novel does not end the Toffee series. I have enjoyed each story

I have read, as many others must have. The paper in your June issue seemed smoother textured and finer. Perhaps this is a subconscious manifestation springing from my desire to see FA and AS in "slick" form?

gradual change in editorial policy was the initialed mention in a letter of two of your competitors. No doubt under your old policy, this section would have been expurgated. Stf publications should assume a spirit of friendly competition and a general attitude of cooperation to sublimate science fiction, that is to change some authors' efforts at bawdy, Buck Rogers-type adventure stories, into something higher. This would help the progress of science fiction immediately.

Let me give you my sincere and hum-ble thanks in case you should print this letter. It may seem a bit paradoxical for me to desire this teen-ager's letter published when I have previously expressed horror as to teen-agers usurping your letter column, but I earnestly have an unas-suaged hunger for information concerning the question of age and fandom.

Once again, I thank you for hearing me

through.

Earl Newlin 103 Peck Agene San Antonio 10, Texas

There is no known average age for a stf fan, Earl. We know readers who are grade schoolers, and others who are nearing a centennial. But since you want something more specific, we'll give you our personal opinion. All in all we think there are more wouthful readers than those in advanced years. By youthful, if you want it further pinned down, we'd probably say between the ages of fifteen and thirty. ... As to Myers, all we can say is every

WE SAW HER FIRST!

Dear Editor:

May I once again use your sacred sanctum as a drooling parlor? In the June issue nothing could top "The Shades of

May I state now that I think Bob Jones is one of the best stf cover artists in the business? I may? Thank you.

I think the best part of the Toffee story was in the dining room, when Marc was trying to get some food, and especially the brawl. Honestly, how do you expect us to read the story when we're laughing so hard the tears come to our eyes?

On to other business. Mack Reynolds is very good. Is he a new author or a pen-name? Or the real name of some wellknown pen-name? Or a house name? Whoever he is, I've yet to read a story by him

which isn't good.

Lohrman is good, to. I think his best story was "Let the Gods Decide". This story was also pretty good, though not as good as Reynolds.

The short-short was OK. Sheldon's and Grant's stories were pretty good, too.

I like Henry—or Enoch—Sharp. Also Jones on the inside. He does Toffee well. Why not give her to him as a perma-nent assignment? Or better still, give her

to me! Where is Chester S. Geier? I haven't seen hide nor hair of him for quite a

while.

As a closing note, how about more stuff from Krepps, Myers, Reynolds, Neville, Worth, and authors who contribute to other mags than AS and FA.

Well, till next issue,

Terry Carr 134 Cambridge St. San Francisco 12, Cal.

Mack Reynolds is going to hate you, Terry. Imagine that—a pen-name! ... You'll be seeing more stories by your favorites in

HE WON'T MISS US AGAIN!

Dear Sirs:

I am what you might call a new reader of your FA and AS fiction magazines and I want to take this opportunity to say that the story "The Shades of Toffee" by Charles F. Myers in your June issue of FA was absolutely terrific! I certainly got plenty of laughs out of it. I also enjoyed all the other stories in the magazine. I especially enjoy stories about other planets and space ships. Let's have more of them.

I guess I didn't know what I was missing when I didn't start reading your magazines long ago, because the more I read

Phillip J. Lazzio 406 Maxwell St. Lake Geneva, Wisc.

Welcome into the fold, Phil. And by all means, keep the letters coming ... Ed.

A FEW FAULTS, BUT WHAT THE HECK!

Dear Sir:

Gerald and Cecil Blemish are undoubt-

edly the two most hilarious characters that FANTASTIC ADVENTURES has featured since I've been reading it. It was certainly a relief to get away from the flashing rays, gory fights, and unmasked villains of most sit stories and delve into some pure, comic fantary. Not are not enjoyable—they are, but they do get a little monotonous. Please give us more "Toffee" or something similar.

I hate to put this gripe in here, but I, and lots of other fans, want a longer letter column in AS and FA. All the other good at and fantasy mags have long letter columns. Why can't you?

And how about a fanzine review or

And how about a fanzine review or some other feature of interest to fans. A "meet the author" feature would be

You already have a "we read FA too fast" culb. Now, I want to start a new one. This one will be the WRFATSS (we read FA too slow society). I'll be the first member and acting chairman. We are now ready for new members. Come on you other people who just can't read an FA in less than five hours—beef.

Gee, I envy all the fans in cities where there are other fans. Although Wilmington is fairly large there seem to be no fans around. If this letter gets published I'd like to make a request for any Wilmington fans to phone me. The number is 28627. Thanks.

Mack Reynolds seems to have hit the pages of stf mags real fast and stuck. I've read five stories by him in the last two months. The latest, "Luvver" is the best yet.

Have my old and faithful eyes deceived me or is FA printed on a higher grade of paper this issue? Certainly does look like it. Keep up the improvement.

The cover on the June issue just doesn't look like Jones. I don't believe I like it as well as the usual thing.

Well, I'll close with the assurance that I'll always buy FA even if it doesn't have a thirty-page letter column. Bok covers, Finlay, Calle, Bok, and Cartier illos, slick paper, and trimmed edges.

Tom Covington 315 Dawson Street Wilmington, N.C.

You're right about the paper in FA (and AS) being smoother. Just one more of the improvements we're giving you. As to slick and trimmed edges—who knows? ... Ed.

HE'S BEEN IMPRESSED

Siva.

I'll confess that I was decidedly prejudiced against the new Toffee novel before reading it, but having completed it, I'll admit it was the best story you've run since "The Dreaming Jewels". Usually I'm dead set against stories (especially fantasy) with sex in the main theme, but "The Shades of Toffee" was definitely funny without being in bad taste. More, it was good fantasy and extremely interesting reading.

I think Myers would be a much better writer if hed stick to his own style, and not try to imitate Thorne Smith, whose type of sex-humor-fantasy simply cannot be paralleled. The Smithish courtroom seem of the Toffce yarn was decidedly inferior to the rest. Anyway, I hope you infrouent does,

I can hardly wait to read your Leiber novel. Why don't you try a serial novel once in a while? I'm sure your readers would welcome a book-length novel by Williamson, Van Vogt, DeCamp, or any of

the other top sf authors.

Getting back to FA's June issue, I didn't like any of the other stories, except "Luver". Mack Reynolds seems to make a specialty out of introducing new ideas. How about a longer story by him?

Sharp contributed a good inside illo for "Luver", but I didn't like any of the other pies, or the cover, for that matter. Inn't there any way you can buy pictures through the AMAZING New York office, and so get pictures by the top of the contribution of the contribu

I may have suggested this before, but why don't you award original pies to the writers of the best letters every issue, as voted by the readers. In the event that you did, I'd vote for J. Blyler, this issue. The number of fans who can and do read the sumber of the state of the sumber of the but of the sumber of the sumber

There must be a better use for the pages occupied by those "future fables"!

Morton D. Paley 1455 Townsend Avenue New York 52, N. Y.

Speaking of Virgil Finlay, he's got some nice work coming up soon. How did you like his interior for Geier's story, last month? . We object to the word intetion. But of course, every man is entitled to his opinion. We may disagree with you, but we like to have your frank comments. As to serials, why? We give you the not in one issue. Isn't that better than splitting it up?.

STILL IN THE MIDDLE

Sirs:

I understand that you have back issues for sale at thirty cents apiece. How far back do they go and are all issues of both of your magazines available? Also, do you have back issues of the two

quarterly reissues?

The best story in the ish was, of course, "The Shades of Toffee". About time Myers turned out a full-length story about the irrepressible redhead of the dreams of Marc Pillsworth. Now all you lack is J. W. Pelkie turning out some more of the Toka stories. Although you will still be a long way from first on my list, you will gradually work yourself up to the top five.

When are you going to bring back
Edmond Hamilton? He did a lot of stories that are worthy of being called classics in the old days. One of his best was "The Quest in Time" in the June 1942 FAN-TASTIC ADVENTURES. Just getting him would put you at about seventh place in my list of more than fifteen prozines that I read. Of course, to make your mags first and second, you would have to bring Nelson Bond back and he has quit the

Bob Silverberg: What's the matter with the Lefty Feep series? I have read only a couple myself, but they seem to be wonderful. Bloch must have put all of his talents to work in turning out those

When are you going to bring back the policy of back over paintings? I hope you haven't run out of subjects. If that is so, why not reprint some of the better series such as the cities of other worlds and the airships of other worlds. and the airsnips of other worlds. Iou probably would please a good many of your fans who didn't start reading AS and FA until a couple of years ago. At the most they would have seen only the crumby

they would have seen only the crumby ones you were featuring at the last. So far you have published at least ten. So far you have you have you have you have been to the seen to be able to be able to the seen that the seen that you have you hav

He has had seven stories in the first four issues of RAP's new mag published so far with three in the first ish alone. I hope you will get more stories from John D. MacDonald. But from now on feature them in AMAZING STORIES. After all, his stuff is mostly stf, not fantasy. Eve the you do print both types nowadays.

Don't get so discouraged when you see this. Just remember that it is doublespaced on odd-sized paper and typed on one side only. It won't take too long to read it.

I'd like to advise everybody to get hold of a copy of Ganley's FAN-FARE. He tells me that the third ish will be mimeo'd instead of hektoed as the first two. Thereinstead of hektoed as the life; two. Incre-fore he should be able to print enough ishes to satisfy a deluge beyond his wildest dreams. Take out subs for it tho, so that he will be able to continue using it. He may have to revert back to his hektograph. Only 65c a year, 15c for single copies, (Remember this plug, Paul.

in case this thing gets printed.)

As a closing I want to make a request for pen-pals from anywhere and every-

where. Any age or sex. Particularly like to get in touch with those interested in Nelson Bond. By the time this missive appears I will be 17 plus a month or so. You can relax, now, Ed, and take life easy. Maybe the next letter will be merely

a poison pen letter of only one page after these four.

Robert P. Hoskins Lyons Falls, N. Y.

P.S. Wot's this 2 P.M. to 4 P.M. business? Personally I go 7:30 to 9 P.M. At least I did on the latest ish. Very easy reading. Now I'll really let you rest.

Speaking of pen-pals, any age or sex, you mean, Bob-all three?.....Ed.

TOO EASY TO PLEASE?

Dear Ed:

I haven't bothered you much with witty (or otherwise) letters—tho I've been a fan for years. No, I'm not going to make with sugary phrases concerning your mag. If a thing is good—it's good, that's all! And your mag is (and always was) good. Incidentally, Mr. Hamling, catch a stray orchid for a job that even the most severe critic would appreciate. The main reason for this missive is a gripe against these ever complaining fans. For instance; a letter by Wm. E. Davies. So the story doesn't match the cover, huh? Tch-tch! Mr. Hamling, you will have to be patient. Poor Bill Davies doesn't know how complicated a job editing can be. Drive Einstein nuts! Wonder what Bill would do without S-F? And Jerry Copher—shame on you, Jerry, picking on poor Paul Ganley like that! Your letter got in, didn't Gamey like that four letter got in, which it? Seems to me that if fandom upheld S-F a little more, the whole she-bang would be better off. Sure, criticize, and criticize plenty—that makes a better mag. But not the type mentioned above. This merely gives your hard-working editor an analysis bedealed 1 think 15 it assets. unnecessary headache. I think FA is swell; I think AS is swell; and I think all S-F and everything connected with it is swell. Or am I too easy to please? By the way, thanks for Conrad's "The Mental Assassins". This was very nicely handled. See ya later.

> Earl "Plaster" Parris 348 Chestnut Street Lewes, Delaware

Thanks for the orchid, Earl. Believe us, it is something of a job to try and please every stf taste. But we wouldn't really want to change things—keeps us on our toes. That's what the forum's for....Ed.

NO MORE TEARS TO SHED

Dear Ed:

Hope this gets to you in time since I wish to let everyone know how much I feel like raving over the June ish of FA. Why do I wish to rave? Well, who wouldn't after reading Charles F. Myers "The Shades of Toffee"!

When Thorne Smith passed away a few years ago, perhaps there wasn't a dry eye in the world amongst mose of us who had the pleasure of reading some of his inimitable satirical fantasies, like "Rain in the Doorway", "Night Life of the Gods" and "Skin and Bones" to name a few. At that time. I thought we had the answer as far as an appropriate replace-ment for the late Smith was concerned in the person of Mr. Myers. However, I the person of Mr. Myers. However, I doubt if I was the only St'Pantary connoisseur who became sorely vexed and undoubtedly rather irched to find that the very capable Charles Myers' talents were dropped after several "Toffee" efforts. It is understood that at the present price rates given to prospective authors, editors are literally going out nights, with a candle, hoping almost futilety to find "the" author who can pen several novels per year and interest all readers instead of bore them. Charles F. Myers' is definitely "the" author, and it would be a mistake not to recognize this and allow enough slack in the old editorial rope to leave this writer give as full vent as possible to whatever writing ability he has.

Being 'twas obvious which was the best tale in the June ish, the others fall in order of preference as follows: "The Mcchanical Genius", by Gilbert

Grant: excellent theme; finely realistic with an unusual "surprise" ending, "If Tomorrow Be Lost", by Bob Ray:

"classical" short-short, but still too short to hit the ole peruser's spot. not at all what I'd recommend over for a fanzine. May have been in "style" 15 years ago, but is a bit too overdone today, and usually the form of "hack" fans rave over to the point of calling down Cuthbertius, spirit of stories dead and rejected upon the editors that so callously "distill" such tails...and the latter word ain't a

misprint.
"Luvver", by Mack Reynolds: fair filler, but too mushy and gushy in parts, or as a whole. This form of varn was rather monotonously evident during the "duration" or war years of AMAZING and FA when stories of

AMAZING and FA when stories or merit were few and far between. "The Man Who Would Not Burn", by Paul Lohrman: rather typical of the hack which is to blame for helping to keep SF 'zines in the pulpy-pulp category. Stories like this were the expired recently, though I hear they're planning a comeback with new types of material and format, which they sure could use.

All in all, a much better-than-average ish of FA. In a sense, inasmuch as such wonderful presentation as Myers' "Shades of Toffee" was given to us, somehow it would be to your credit if avoid-

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ance of lesser material were made since they somehow detract from the essence and higher standing of anything high that is standing alongside of them in one issue.

Illos, I'm sorry to say, are as usual, mediocre. With the exception of Bob Jones, the other brush-pushers had better be left to the detective fan trade or "Two-tiet to the detective fan trade or "Low daye (and not so long ago) when you had wonderful back-cover illos by Paul, as well as interiors also by him, along with Finlay, the unique Maryarian, classical Finlay, the unique Maryarian, classical to the pusher of the pusher with the pusher brugar? Why can't we have em all back againt we have em all back againt we have em all back againt.

all the state of t

To answer J. Blyer Esk's apparent daze anent an earlier statement I made in these columns that Van Vogt's "Slam" was not quite up to par with Mr. Grahams "Involuntary Immortals" due that "Slam" was one of our little contemporary classics but was unavoidably, promiseuously verbose and detailed in a few parts, undoubtedly due to the fact that it had to be "expanded" and rewritten for the "hard-cover" reador. The original "twen buckenass superior to the one

Ere I ring down the curtain on m'latest epistle, I'd like to put a small plug thru

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for our new fanzine publication, SCIENCE AND SCIENCE FANTASY FICTION REVIEW, the "Walter Winchell" part of fandom which speaks straight from the shoulder without cutting corners. In brief, contributors with fast, alive and moving material, and news or events in relation to interesting current events in the field of science, science-fiction and fandom, between the contributors where the contributors were created in covering that "gap" in STFanzines by having a large list of contributors rather than aubscribers...something "arotond-the interested in being commercial core not interested in being commercial core."

Calvin Thos. Beck, Pres. AMERICAN SCIENCE-FANTASY SOCIETY P. O. Box 877 Grand Central Annex.

New York, N. Y.

No comment necessary re the quality of silvers' work. However you do raise one point that merits clarification. We hold no editorial "rope" around the throats of any writer. The reason you see only a few years a year by a favorite authorite the point of the point of the fact that the men writes novel and carefully. This does not mean that good stories are only written slowly, it is simply a matter of an author writing na he is best suited. Some write fast, some slow. Some of the fast writers are quite capable some of the fast writers are quite capable come of the past writers are quite capable of your control of the point of the point

CRAIG BROWNING REPLIES

Dear Bill:

I'd like to take this chance to reply to Bob Poorman's letter of last month. talked over the theoretical angle of the story with a noted scientist before using it. The following two statements are conceded to be true according to present scientific knowledge. (1) Electrons have attained speeds well over half the speed of light relative to stationary objects such as the ground, when shot from the various forms of electron accelerators. Thus, it is possible for two electrons to approach each other with an initial relative velocity greater than that of light. (2) The mass of any particle is only its mass relative to some frame of reference, and also its charge is a charge only to some frame of reference. Thus, the charge of each electron relative to the Earth as a frame of reference would be one thing, while its charge relative to the other electron would have to be computed without reference to

some arbitrary reference frame such as the Earth.

Therefore, from Einstein's equation for the mass of an electron in any frame, my assertion that the mass of each electron relative to the other would be an imaginary quantity is correct. Taking each electron as being stationary relative to itself, with the field of the other electron acting on it to set it in motion (in other words, accelerate it in some way) there is no way of determining just what effect each would have on the other. They might not repel each other at all! In fact, strictly from the mathematics, any acceleration an imaginary force would have on a real mass would be an imaginary acceleration, which could be an acceleration at right angles to the line of force, in which case it would be in an indeterminate direction contained in one plane (thus all directions in that plane, dissipating the electron as a wave front), or it could be interpreted as a direction at right angles to all directions, thus in a fourth space dimension.

In other words, so far as I have been able to determine, anything could happen. It's questionable that the two electrons would repel each other. It's probable they would have an imaginary attraction for each other!

Your statement, "If one electron was stationary and the other moving...the cataclysm described in Spawn of Darkness would be highly probable," in effect agrees with what you attempt to refute, since each electron is stationary relative to itself. If you meant stationary relative to the Earth, you are introducing absolute space, since the action of each on the other is independent of the Earth.

Confining the argument to whether there is a technical discrepancy, I believe I am right (and have the expert opinion of a recognized scientist to back me), when I assert that it is not impossible for two electrons to collide at a relative speed greater than that of light, and that what greater than that of light, and that what would happen is indeterminate; i.e., anyone's guess. In nature probably all that would happen is that both would be annihilated to produce a cosmic particle. But who knows? Maybe a genii would

Craig Browning Chicago, Ill.

There you are, Mr. Poorman, Anything to add? ... And along these lines, we'd like to encourage reader and author exchanges of ideas. Our writers are only too willing to unswer any criticism of technical points in their stories. And more so, they're anxious to stick as close to fact or plausible theory as possible, so if you find or suspect any error, let us know

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A NEW FRANKENSTEIN?

* By LYNN STANDISH *

To TLONG ago we reported on the astonishing advances of a British neurologist whose hobby—as well as physical science avocation—was the creation of or robots. We described the operation of the products of his skill with a cold chill in our control of the control of the cuently the grim as well as placed to the tentialities these things suggest.

The neurologist you may recall constructed small me tal animals, little bigger than footballs compounded of photocells, electric motors, switches, wires and batteries. Using wheels for feet, these ingenious "creatures" (you can't call them machines) employing all the power of has to thousand billion cells) scuttle around the home of the scientist apeing the activity of flesh-and-hood animals!

The scientist built into his animals the primary need for food (electric energy), the secondary need for suitable environment, (light surroundings of a certain intensity) and the equipment to achieve these arms (mobility). And the weird the environment of the

Further reports explain that other animals are under construction and that they will be endowed with three-cell brains giving them considerably greater powers. The scientist points out that eventually he may build into the metal beasts self-repair facilities and possibly reproductive

capacity!
The major point however has to do with the present animals—called, incidentally, "Elmer" and "Elsie." When you

watch them, you do not think in terms of machines. You think instead in terms of flesh and blood, or these mechanical robots so closely imitate their living counterparts that the illusion that they possess

life is amazingly strong.

This may partially be due to their shape. They look in a vague sort of way like a pair of inverted metallic bowls, similar at the pair of inverted metallic bowls, similar to tortoises without heads. The only projection marring their surfaces is the opening for the photo-cell receptor. They possess a tactile sense in that their shells are supported at one point by a spring mechasimport of the projection of the projection of the project of

In addition the animals do not move in a straight line, but rather in a whirling cycloidal path, further heightening the illusion of livingness. This means also that the ease with which they can evade barriers is increased. Thus to all intents and purposes the animals behave like one-

celled microscopic organisms.

The promise this incredible experiment holds for the future is tremendous. Robots are nothing new nor are they understanding the second of the

THE RADIOACTIVE RATS

★ By JOHN WESTON ★

TTS INTERESTING to note how conscious the public is for information on radioactivity. And the response to any gadgets or devices using or demonstrating it is gratifying. It shows that Americans are still on the ball when anything new comes up.

This is perfectly demonstrated by the enormous interest shown in Geiger-Mueller counters and all the other paraphernalia associated with radioactive ore deposits. The minute it got out that the government was interested three or four years ago in

acquiring radioactive ore deposits, there was a run on scientific houses for anything that would serve as a detector. As a result of this demand by the insatiable numbers of prospectors, it is possible to the property refined equipment for the property of the property o

Museums are taking advantage of the infinite possibilities in radioactives to construct active, moving, live demonstrations of the subject. The Geiger counter

is now as familiar as a wristwatch-and maybe eventually, a lot more important.

A number of public exhibits at schools and museums employ the ingenious and interesting principle of radioactive detection as applied to animals. In one case a number of froge housed in a glass box radioactive minerals. Hanging from a bom suspended over the cage is a Geiger counter connected to a light and a bell. When the counter is brought very near a radioactive ring; the counter rings and a radioactive frog, the counter rings and a register of the counter of the

A similar system employing rats has also been used though here the emphasis is rather grim. Should an atomic war come, with the breakdown of sanitary facilities, it is likely that we'll have more than our full share of the unpleasant little beasts—also throughly radioactivel

the beatts—assection outputy reaccusive supports the common of the special section of the s

There is an abundance of educational childrens' toys which are not really toys in the conventional sense. These "kits" are actually full-fledged atomic laboratories in themselves, adequate for experiments which would ordinarily be restricted

to the college level.

This tremendous interest in radioactives is a healthy sign. It shows that not only are science-fictionists aware of the Atomic Age but also that John Q. Public is clicking on all six too!

THE CIRCULAR PARADOX * By CAL WEBB *

TTS ALWAYS been very popular to dislike mathematics. If you ask nine out of ten school kids about they're feelings, they'll tell you they hate it. And most adults have a weak-in-the-knees feeling when anyone mentions mathematics. Except ammg students and scientists there's a grim feeling that mathematics is a concection of the devil and should be left strictly to the nate.

Why is this? What makes people so afraid of this subject? Why is the average person, who's using numbers all day long and who thinks counting money is a pleas-

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ure, so afraid to come to grips with the fountainhead of all science and the backbone of progress?
Well, there is no simple answer; usually

the fear of mathematics is compounded of equal parts of poor teaching and rigid thinking, the latter a job most people are surprisingly anxious to avoid.

Mathematical thinking doesn't differ from any other kind basically. It merely demands complete absorbing attention with the elimination of all extraneous detail. And the human mind, with its tendency to romanticize everything, to cover it with a magic halo, likes to avoid rigorousness. Mathematics is symbolic reasoning. There are no ifs and buts; you're right or you're

That's why the subject is so rich in paradoxes and apparent contradictions. Unless you pay strict attention to detail, you can't resolve a problem—and above all, beware of common sense!

Consider the following: it's a gem of a paradox and yet when it's explained it seems the most obvious thing in the world. The hearer is inclined to say, "of course that's right—why didn't I see that!"

Imagine a couple of wooden rollers a foot in circumference. On top of them imagine a slab or board. Now the question is, if the rollers revolve through one revolution, how far does the slab move? Automatically we tend to give the answer-one foot, the circumference of the rollers. But that's wrong! The slab moves two feet!

To resolve the contradiction you have to divide the movement into two parts. Imagine the rollers supported at their centers. Then one revolution of the rollers will move the slab forward one foot, Next imagine the slab removed and the rollers on the ground. Then one revolution will move the rollers ahead one foot. If the two motions are now combined it is clear that the total movement of the slab will be two feet.

The Lord only knows how many drinks have been paid for with this one! Some say there are clever people in the world who practically exist on the betting gains they make from thoughtless suckers who fail to realize the analytical thinking needed in mathematical puzzles ...

ROCKET THEORY

* By LEE OWENS &

T A CASUAL glance a rocket looks A T A CASUAL glance a rocket looks like the simplest method of propelling man or beast through space. It looks deceptively simple and the average on-looker often fails to realize the theoretical sub-tleties which lie behind rocket design. Building a rocket is not just a matter of sticking a couple of rocket tubes on the end of a cylinder. There is considerably more to the matter than that.

The best way to get an insight into an obvious—yet subtle—point on rocket de-sign, is to examine an ordinary sky-rocket, of the variety used around the "glorious Fourth."

Instinctively one thinks that the long stick to which the rocket itself is at-tached is there for the purpose of easily launching it by sticking it in the ground. That's part of the reason—but the major

reason is far different.

A fundamental principle of rocket design, with which one must automatically start any sort of building, is this: the point at which the thrusting force of the rocket is applied, must lie ahead of the center of gravity of the rocket! This sim-ple fact is important. If the center of thrust were not arranged ahead of the center of gravity, the rocket would have no stability and would simply tumble end over end! The most understandable com-parison is that of moving any long slender object-say, a board. It's easy to pull the board with one hand, but try pushing it from one end without a guide on the other, It's impossible to make it go where you want it to. In the same way, the thrusting force of the rocket "pulls", in a way, the rocket rather than shoves it.

In the skyrocket the stick is for the purpose of bringing the center of gravity in back of the thrust-point of the rocket chamber-and that's all there is to it.

The problem of steering a rocket involves similar considerations. Here, the separate steering rockets are located to either side of the main driving rocket and their center of thrusts are so arranged as to be in a line at right angles with the center of thrust of the main rocket. This permits them to exert maximum torque of the rocket itself.

Other methods of steering using vanes of graphite in the rocket stream, etc., are extremely crude and incapable of refinement. No modern or future rockets of any size will use such make-shift methods, though under the pressure of the hurry of war-demands, the Germans were forced to use that system, the first thing at

The control of rocketry by electronic devices is far past the experimental stage as the military and naval releases testify. We already have perfectly satisfactory guided missiles more than capable of doing a perfect job, of homing correctly

on their assigned targets.

Rocket theory is no longer "theory." It's cold hard fact, being applied every day, and now it's possible to go out as easily and buy a book on rocket design, as it is to buy one on aircraft design-well, not quite-but it won't be long! And just wait until all the standard American home experimenters want to get into the act. Then watch your hats!-and heads!

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RABIATION KILLER

→ By MAX LONG **→**

THAT GRIM sign, "abandon hope, all ye who enter here," which hung over the entrance to Dante's Inferno, could have just as logically be hung over the en-trance to any modern hospital—if you were suffering from radiation burns, For radiation in any form is an insidious omni-potent killer.

Until the advent of Hiroshima the chief trouble from radiation was among those who worked with x-ray machines; doctors, technicians and the like. Very often severe burns from such apparatus induced the wild cells of cancer to begin growing.
And medicine knew of absolutely no pre-

Then with the coming of the atomic bomb, whose burst scatters intense x-radiation far and wide, it was felt that this effect alone would produce more casualties than the explosion itself. And the tragedy was that there was no way at all of treating radiation effects. The burns, the ghastly seared flesh could be conventionally treated but the mutated cells, blasted by projectiles of x-ray quanta could not be

The atomic age ushered in to the field of medicine what appeared to be an insoluble problem. And the problem is still with ns

But recently a discovery has been hit on which—judging from the laboratory

on when—judging from the haddratory work already done—appears to offer great promise. And the answer lies naturally enough in the "wonder drugs."

Doctors have discovered that animals blasted by powerfu. x-rays, can be nursed back to relative health in some eighty per cent of the cases by the famous auricomy-

Thousands of animals ranging from rats through cats to dogs, were exposed to lethal doses of x-rays, in effect given the same treatment that an atomic bomb would give them. Radiation sickness came quickly-a matter of days or at most a few weeks. The animals broke out into ghastly sores, became weak, the white blood cells disintergrating visibly beneath the micro-scope. To all practical intents and purposes, these animals were dead.

But then, the ingenious experimenters gave the animals, orally, daily injections of auroemycin. The results were astonish-ing. In eighty per cent of the cases the animals recovered!

As a consequence, the health authorities, cheered by this splendid news, are working madly to exploit every aspect of the promise of drug therapy in heating radiation. The sign, "abandon hope..." can be torn down. The promise is being fulfilled.

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